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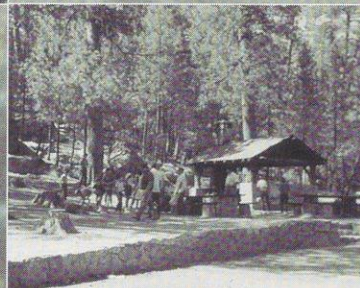
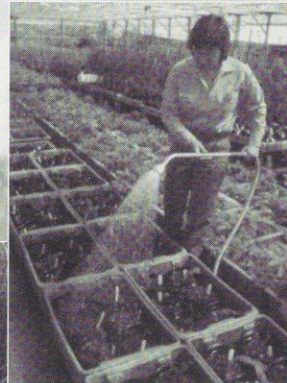


Forest Service

# Report of the Forest Service

## Fiscal Year 1996

Collaborative Stewardship.....



.....working with people to promote the health of the land.



# USDA Forest Service

The Forest Service, U.S. Department of Agriculture, provides leadership in the management, protection, and use of the Nation's forests and rangelands. The agency takes an ecological approach to the implementation of multiple use management, providing sustained yields of renewable resources such as water, forage, wildlife, wood, and recreation. The Forest Service has embraced ecosystem management as its operating philosophy and is committed to the preservation of wilderness, biodiversity, and landscape beauty as well as the protection of the basic resources of soil, water, and air quality.

The Forest Service is responsible for the 191.6-million-acre National Forest System, with its 155 national forests and 20 grasslands in 44 States, Puerto Rico, and the Virgin Islands. In addition, the agency works with State land management organizations to help private landowners apply good natural resource management practices on their lands. The International Forestry program of the Forest Service enables the agency to share its technical expertise and managerial skills with other nations. The Research program of the Forest Service conducts extensive research to enhance and protect productivity on all of America's forests and rangelands, with special attention to long-term natural resource issues of national and international scope.

Key laws guiding Forest Service programs and activities are:

- ◆ Multiple-Use Sustained-Yield Act of 1960.
- ◆ Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974, as amended.
- ◆ National Forest Management Act (NFMA) of 1976.
- ◆ Forest and Rangeland Renewable Resources Research Act of 1978, as amended.
- ◆ Cooperative Forestry Assistance Act of 1978.
- ◆ Chief Financial Officer's Act of 1990.
- ◆ Food, Agriculture, Conservation, and Trade Act of 1990 (Farm Bill).
- ◆ International Forestry Cooperation Act of 1990.
- ◆ Government Performance and Results Act of 1993.

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# REPORT of the FOREST SERVICE

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*Fiscal Year 1996*





## Selected FY 1996 Statistics

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<b>National Forest System</b>	191.6 Million Acres
Recreation Use	859.3 Million Visits
Trail System	133,087 Miles
National Scenic Byways	8,000 Miles
National Wild and Scenic Rivers System	4,348 Miles Within National Forests
Insect and Disease Suppression	1.2 Million Acres
Wilderness	34.7 Million Acres
Watershed Improvements	66,314 Acres
Wildlife and Fish Habitat Restored/Enhanced	166,611 Acres
Reforestation	357,512 Acres
Livestock Grazing Authorized	9.2 Million Head Months
Grazing Allotments Administered to Standard	4,733 Allotments
Energy Operations Processed	493 Operations
Bonded Non-energy Operations Processed	1,744 Operations
Timber Volume Offered	4.0 Billion Board Feet
Timber Harvested	3.7 Billion Board Feet
Road System	380,218 Miles
Landline Boundary System	253,822 Miles
 <b>Woodland Owners Assisted</b>	 214,517
 <b>Research Accomplishments</b>	 3,005 (Includes books, papers, articles, reports, audio-visual materials, and other documents.)
 <b>Human Resource Programs</b>	 105,388 Persons Served

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## Selected FY 1996 Statistics

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## Overview

## National Forest System

## About the Forest Service

## Mission

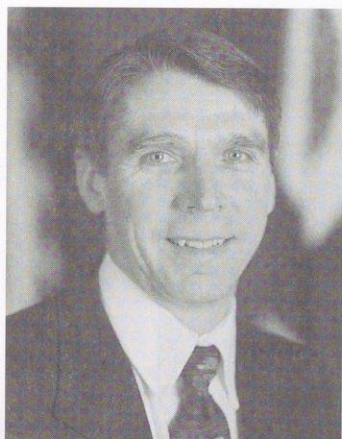
## Wild and Scenic Rivers, National Historic Trails, and the Forest Service

## The 1995 RPA Program

## Working for Sustainable Forest Resources







## Chief's Message

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The Forest Service was created nearly 100 years ago to conserve our Nation's forests. Today's public forests and grasslands provide sustainable supplies of water, quality recreation areas, energy and minerals, healthy fish and wildlife habitats, timber, and many other products and values. The Forest Service mission represented by the phrase, "Caring for the Land and Serving People," reflects our commitment to working in collaboration with others to sustain the health, biological diversity and productivity of the Nation's lands and water.

Our first priority is to protect and restore the health of the land. Failing this, nothing else we do would really matter in the long run. Assuring healthy forest, range, and aquatic ecosystems begins and ends by working with people and by learning to live within the limits of the land. I call this commitment to healthy ecosystems and working with people on the land "collaborative stewardship."

In practicing collaborative stewardship, we will be guided by our long-term strategic plan. Our overarching goal is to ensure sustainable resource management. This goal is based on the recognition that the health of the environment and the economic and social health of human communities are inextricably linked. Our strategic plan describes long-term goals and policy and program guidance that supports our commitment to sustainable resource management.

Our strategic plans, budgets, and priorities must focus on the health of the land. This is our report on what we accomplished in fiscal year 1996. Beginning this year, I have identified the following as priorities for the agency: improving water quality and quantity, protecting and restoring riparian areas, protecting and restoring forest and rangeland ecosystems, increasing partnerships, and promoting environmentally responsible recreation. Our ability to meet these priorities will depend on how well we work with the people who use and care about the land while serving their changing needs. The most important measure of our stewardship is the condition of the land and resources.

As the new Chief of the Forest Service, I look forward to building on past successes and renewing our commitment to ensuring the health, diversity, and productivity of our natural resources for the present and future generations.

MIKE DOMBECK  
Chief







# OVERVIEW

## ABOUT THE FOREST SERVICE

The USDA Forest Service has responsibility for the 191.6 million acres of national forests and grasslands within the National Forest System, which comprises the largest area managed by one agency in the United States. By providing technical and/or financial assistance to nonindustrial private forest landowners and to other Federal agencies and State and local governments, the agency also contributes to the sound management of over 500 million additional acres of forest land. Furthermore, the Forest Service conducts an internationally renowned forestry research program, providing the scientific basis for sustainable management of our Nation's forests and rangelands. Through international assistance and scientific exchange activities, the agency helps promote sustainable forest management throughout the world.

## MISSION

The essence of the Forest Service mission is embodied in the statement "Caring for the Land and Serving People." We envision the Forest Service as an efficient, productive, multicultural, and multidisciplinary organization that is recognized for national and international leadership in natural resource conservation.

*...maintain and enhance the quality of the environment to meet current and future human needs.*

We follow our stewardship and service ethics and accomplish our mission through the development and practice of ecosystem management—the means by which the Forest Service is helping the Nation achieve the goal of sustainability. Simply stated, ecosystem management integrates ecological, economic, and social factors to maintain and enhance the quality of the environment to meet current and future human needs.

The Chief of the Forest Service reports to the Under Secretary for Natural Resources and Environment, U.S. Department of Agriculture. The Chief oversees five Deputy areas. Two Deputy areas (National Forest System and State and Private Forestry) administer programs that provide a broad array of benefits and services to the general public and other customers. These Deputy areas have primary responsibilities associated with the restoration and protection of forest and rangeland ecosystems, and for meeting people's needs and values within the limitations of maintaining ecosystem sustainability, health, and diversity. The Research Deputy area contributes to the protection and restoration of forests and rangelands, nationally and internationally, by providing scientific information and new technology. Research also contributes by taking a scientific approach to understanding and better serving people's needs and values. Two additional Deputy areas (Administration 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 creating and maintaining an atmosphere where people are respected, trusted, and valued and where expertise and professionalism are rewarded for achieving negotiated objectives. Additionally, Law Enforcement and Investigations reports directly to the Chief through its Director, as does the Public Affairs Office.



## FOREST SERVICE STRATEGIC PLANNING AND THIS REPORT

The USDA Forest Service strategic planning process is conducted consistent with the provisions of the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA) and the Government Performance and Results Act of 1993 (GPRA). Both acts require the development of a strategic plan with long-term goals and strategies for achieving them. The Forest Service was designated a pilot agency under GPRA for fiscal years 1994-97 and has developed strategic plans under RPA since 1976. A single strategic planning process that meets the requirements of both acts and the needs of the agency is being developed and implemented.

The RPA statute also requires a resource assessment, which forms a significant information base that is considered, along with public participation and other sources of information, in the development of the strategic plan. The RPA Assessment, completed every 10 years and updated every 5, reports on the status and projected trends of the Nation's natural resources on all forests and rangelands. The last RPA Assessment was completed in 1989 and updated in 1993; the next will be completed in 1999.

The RPA Program provides the Secretary of Agriculture's broad guidance for the agency in relation to one set of long-term goals over a 50-year timeframe, updated every 5 years. Implementation of GPRA focuses on strategic goals within a 5-year timeframe, tiered to the RPA long-term goals. Annual performance plans contain annual goals and performance indicators used to measure progress in achieving the GPRA goals. Accomplishments are monitored and reported each year in the "Report of the Forest Service," a document that meets RPA/GPRA requirements.

This report also incorporates some requirements of the Chief Financial Officer's (CFO) Act of 1990. The Forest Service is required by the CFO Act to develop financial statements reporting on the agency's financial position and results of operations during the fiscal year. The financial results and selected highlights of program accomplishments are reported in a separate annual CFO report. Figure 1 displays the agency's performance measures and accomplishments for FY 1995 and FY 1996.

## THE DRAFT 1995 RPA PROGRAM

Public comments on the RPA draft program are formally requested every 5 years. These comments are analyzed and used to establish and revise the agency's strategic goals and objectives. The primary outcomes of Forest Service implementation of the strategic goals will be healthy ecosystems; vital communities; sustainable levels of products and services; and an effective, multidisciplinary, multicultural organization.

### *Managing for Sustainable Forest Resources*

*Ensuring sustainable forest resources to meet the needs of people*

Ensuring sustainable forests is the ultimate goal of the agency's strategic plan. Managing for sustainable forest resources recognizes the linkage of the environment to the economic and social needs of human communities. The Forest Service is taking leadership in determining how the United States will meet the President's commitment to achieve the goal of sustainability by the year 2000.



## *The RPA Program In Context with Other Planning*

The RPA Program provides broad, national-level guidance for Forest Service planning and program and policy development at all organizational levels. These other efforts will consider the goals and priorities expressed in the RPA Program, and develop planning and program direction and specific policies that are consistent with the strategic guidance and that contribute to achievement of the long-term goals. For example, such efforts include annual budgeting, forest land and resource management planning, research work planning, and policy development for various program areas (recreation, wildlife, range, cooperative forestry, research, etc.).

### *Next Steps In Finalizing the Draft Program*

The Draft 1995 RPA Program is currently being revised for delivery to the 105th Congress as the Secretary's Recommended RPA Program, along with the President's Statement of Policy. The Recommended RPA Program will reflect key policy decisions made prior to its submission to the Secretary and delivery to Congress.

### *Content of the Draft Program*

The Draft 1995 RPA Program includes the agency's strategic goals, priority management actions to help achieve these goals, and projected effects and implications associated with the program. The program is focused on attaining sustainable forest management through the "Course to the Future," which includes these goals:

- **Restore and protect ecosystems**—This strategic goal has two areas of emphasis. The first emphasizes deteriorated ecosystems that are in critical need of restoration while the second emphasizes protecting all ecosystems now and into the future. The strategic objectives for these two areas of emphasis are identical.
- **Provide multiple benefits for people** within the limitations of maintaining ecosystem health and diversity. Forest and rangeland management activities focus on meeting people's needs for uses, values, products, and services.
- **Ensure organizational effectiveness** by creating and maintaining an atmosphere where people are respected, trusted, and valued and where expertise and professionalism are rewarded. The workforce will be multicultural and multidisciplinary. Forest Service employees will be empowered to carry out the agency's mission and be accountable for achieving negotiated objectives.

### *Measures of Performance Supporting the RPA Strategic Goals*

The measures of performance included in the following table represent program accomplishment highlights for FY 1996. These measures document program accomplishments as well as progress towards achieving the RPA strategic goals in support of the agency's mission. Some program activities and indicators may be relevant to more than one RPA strategic goal. For instance, knowledge generated through research, inventories, and analysis to advance the "ensure organizational effectiveness" RPA strategic goal, provides the overall guidance for planning and on-the-ground natural resource management in pursuit of the other RPA strategic goals. In Figure 1, the indicators are organized by RPA strategic goal.



Figure 1.

## FY 1996 MEASURES OF PERFORMANCE BY STRATEGIC GOAL

	<u>Accomplishments</u>	
	1995	1996
<b>Restore and protect ecosystems</b>		
Wildlife habitat restored/enhanced (acres) .....	108,435	104,683
Inland fish streams restored/enhanced (miles) .....	864	1,121
Anadromous fish streams restored/enhanced (miles) .....	531	631
Terrestrial threatened and endangered species habitat restored/enhanced (acres) .....	75,666	53,900
Watershed improvements (acres) 1/ .....	35,500	66,314
Reforestation (plant/seed/site prep) (acres) 1/ .....	387,000	357,512
Timber stand improvement (rel/thin/etc) (acres) 1/ .....	273,300	258,764
Abandoned mine sites reclaimed (sites) .....	--	117
Pest suppression activities (million acres) .....	3.3	1.2
Federal/State rural tree planting (acres) .....	734,122	760,742
NFS lands treated for fuels management (acres) .....	541,351	616,163
Landowners enrolled in stewardship program (#) .....	18,300	15,303
<b>Provide multiple benefits for people within the capabilities of ecosystems</b>		
Road construction (miles) 2/ .....	468	463
Road reconstruction (miles) 2/ .....	2,400	2,853
Land purchased (acres) .....	87,332	56,333
Land exchange (acquired acres) .....	98,407	65,848
Land line location (miles) .....	1,837	1,424
Energy operations processed (operations) 3/ .....	991	493
Bonded non-energy operations processed (operations) 3/ .....	5,331	1,744
Timber volume offered (billion board feet) .....	4.0	4.0
Timber volume harvested (billion board feet) .....	3.9	3.7
Total harvest treatments (acres) .....	479,028	473,127
Wildlife structures completed (structures) .....	5,844	4,008
Head months of permitted livestock grazing (million head months) .....	8.6	9.2
Recreational use (million recreational visitor days) .....	345.1	341.2
Recreation trails available (excluding wilderness) (miles) .....	66,446	89,466
<b>Ensure organizational effectiveness</b>		
Urban communities provided assistance (communities) .....	7,258	8,079
Rural communities provided assistance (communities) .....	1,600	1,583
Research communication items (#) 4/ .....	3,021	3,005
International forestry communication items (#) 4/ .....	900	191
Employment/skills training provided (persons) .....	107,081	105,388
Job Corps students hosted (#) .....	8,747	9,060
Law enforcement incidents handled (incidents) .....	138,475	126,203
Coop. law enforcement agreements negotiated (agreements) .....	710	785

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

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

3/ In 1996, the unit of measure changed from plans to operations. Accomplishments reported are comparable.

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



## PERFORMANCE HIGHLIGHTS AS GUIDED BY THE STRATEGIC PLAN GOALS

The goals in the agency's strategic plan provided the basis for developing program objectives and performance measures for FY 1996, including those addressed in the FY 1996 GPRA Performance Plan. Highlights of major issues, initiatives, and accomplishments are described below for each of the strategic goals.

### ***Strategic Goal #1: Restore and Protect Ecosystems***

#### **Protecting, Maintaining, and Restoring Forest Health**

Caring for the health of the Nation's forested ecosystems is the highest priority of the Forest Service. Although America's forests are generally in a healthy condition, areas of concern include ecosystems that are highly susceptible to drought, pest epidemics, and extensive wildfires, and where wildfire threatens communities. Overstocked forests are increasingly susceptible to deteriorating conditions.

#### ***Restoring and protecting forest land health through research and technical assistance***

The agency addresses its goal to restore and protect forest health for present and future generations through technical assistance, monitoring, developing new scientific knowledge from research, and prevention and suppression activities for all forest lands, including the national forests, other Federal lands, tribal lands, and State and private lands.

Some of the actions the Forest Service took to address forest health concerns in FY 1996 were:

- Established the "Forest Health Reporting Framework for America's Forests" to facilitate timely reporting on forest health to State and Federal officials, and to the public, using the most current and sound information available.
- The Forest Health Monitoring Program expanded its network of permanent observation plots to include the State of Idaho. Forty percent of forested land in the contiguous United States is now monitored by the program. This 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. Results in FY 1996 showed that over 95 percent of tree crowns measured were in good or better condition. However, there are regions with unhealthy forests. Some of the greatest problems are due to the invasion of exotic pests and to the overly dense stocking of some forests resulting from past fire exclusion.
- Detection and evaluation surveys were completed on 661 million acres of forest land. Survey findings and technical advice on suppression needs and available alternatives were provided to managers of affected lands.
- Gypsy moth, southern pine beetle, dwarf mistletoes, and other insect and disease prevention and suppression activities were completed on 1.2 million acres of forest land.



- Technical assistance was provided to other countries to control pests, such as the Hemlock Wooley Adelgid and the Asian Gypsy Moth, that also threaten U.S. forests.
- Fuels reduction treatments (including prescribed burning to reduce concentrations of combustible materials like tree debris and understory growth, and mechanical treatments) were conducted on 599,482 acres of NFS and adjacent lands. An additional 17,681 acres were treated using contributed funding. A new communications strategy entitled "Fire 21" was established to improve the forest ecosystem through the reintroduction of fire and to make wildland firefighting safer and less costly.

### **Measuring Progress in Sustainable Forest Management**

The Draft 1995 RPA Program represents a commitment to the sustainability of ecosystems by ensuring their health, biological diversity, and productivity. During the past 3 years, the Forest Service has been a key player in the "Montreal Process" Working Group on the Conservation and Management of Temperate and Boreal Forests. Along with a dozen other countries, the agency has agreed on a set of seven criteria that characterize sustainable forest management at a national level. These criteria can be measured by the use of 67 indicators that were identified in a collaborative process among all of the countries. The list of criteria and indicators was endorsed in the Santiago Declaration in February 1995. The "Montreal Process" has parallels in other parts of the world, including the "Tarapotu Process" for the Neotropics and a "Dry Zone Africa Initiative."

Forest Service Research has taken the leadership role in determining the United States' capability to measure the sustainability indicators identified in the Santiago Agreement. In 1996, the Forest Service compiled the current state of knowledge of the criteria and indicators in "A Report to Facilitate Discussion of Indicators of Sustainable Forest Management." The Forest Service Forest Health Monitoring program is now using the seven sustainability criteria to frame its national assessments of forest health.

### **Vegetation Management To Maintain Healthy Forests and Provide Other Benefits**

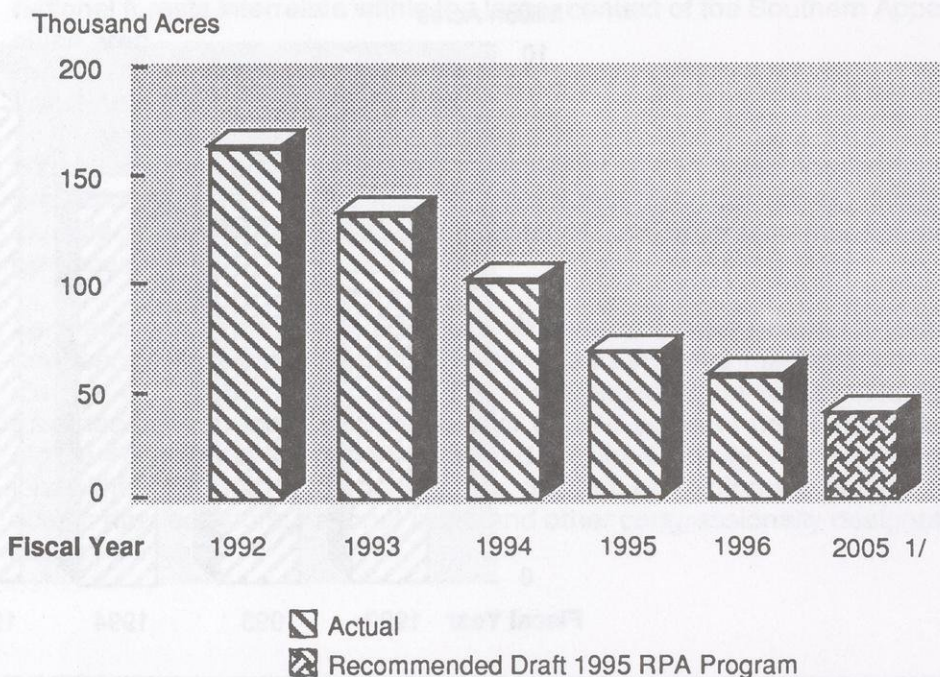
#### *Ensuring the health and productivity of NFS lands*

A total of 357,512 acres of NFS lands were reforested, primarily using genetically improved seedlings. Reforestation practices 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 258,764 acres, compared to 273,300 acres in FY 1995. 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. The increasing amount of intermediate harvest methods also contributes to a reduced need for reforestation.

Total clearcut acreage declined from 67,889 acres in FY 1995 to 56,617 acres in FY 1996. The use of clearcutting as a standard commercial harvest method has declined over the past few years, as shown in figure 2. Total harvest treatments were 473,127 acres, compared with 479,028 acres in FY 1995. This is the result of shifting away from regeneration harvests, especially clearcut acres. 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.



Figure 2.  
Clearcut Harvests



1/ Based on Draft 1995 RPA Program Projections.

Harvest treatments also continue to decline, reflecting a reduced timber sale program. Since 1989, various legislative and judicial directives have been implemented, particularly those associated with the protection of threatened and endangered species and the maintenance of associated old-growth habitat. These coupled with the implementation of ecosystem management reduced timber output as other project objectives were emphasized.

In FY 1996, range improvement management activities resulted in an additional 1 million acres achieving forest plan rangeland vegetation health objectives.

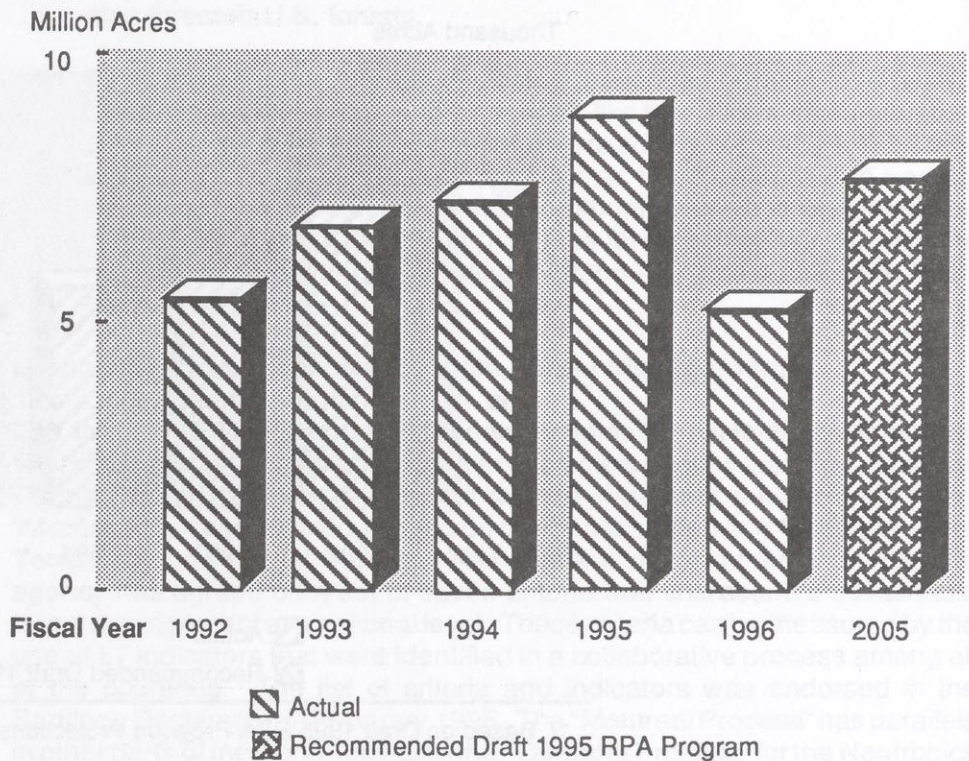
#### **Landowner Assistance To Provide for Healthy Ecosystems and Vital Communities:**

##### ***Providing technical and financial assistance to private forest landowners***

The Forest Stewardship Program (FSP) and Stewardship Incentive Program (SIP) provide technical and financial assistance to nonindustrial private forest landowners to develop and implement multiresource management plans to better manage, protect, and use their natural resources. The acreage of land enrolled under the FSP by the end of FY 1996 was about 2.1 million acres. An additional 3.2 million acres were enrolled in forest resource management plans (figure 3). In FY 1996, assistance to nonindustrial private forest landowners through Federal/State cooperation led to the development of multiresource management plans for over 214,000 landowners and to tree planting on 760,742 acres, 26,620 acres more than in FY 1995.



Figure 3.  
State and Private Forestry Multiresource Plans 1/



1/ Includes acres funded by forest resource management and stewardship.

### Integrating Information from Ecological Assessments

The Sierra Nevada Ecosystem Project (SNEP) Report to Congress was completed and delivered on June 7, 1996. SNEP completed an assessment of Sierra Nevada ecosystems, including ecological, social, and economic conditions; and projected and evaluated future trends under different possible management strategies. SNEP reports will be used as a source of information in the development of forest land management plans and in establishing research priorities.

*Ecological assessments provide valuable information for land management planning.*

The Interior Columbia River Basin Ecosystem Management Project has assembled the available aquatic, landscape ecology, terrestrial species, economic, and social data available for the interior Columbia River Basin into a 170-layer Geographic Information System (GIS). Using this data base, scientists were able to give project managers an assessment of current conditions within the basin. The same data base is being used to analyze management alternatives to be presented in environmental impact statements. The data base is also being made available to other users, allowing a common data base on which to base discussion of natural resource policies.

The Southern Appalachian Assessment, completed in 1996, was prepared by the Forest Service in cooperation with other Federal and State agencies that are members of the Southern Appalachian Man and the Biosphere (SAMAB) Cooperative. The assessment assembled and analyzed broad-scale biological, physical, social, and economic data to facilitate better, more ecologically based forest-level resource analysis and management. It will be



used by both Federal and State land managers, as well as the public. The assessment supports the revision of forest land management plans by describing how the lands, resources, people, and management of the national forests interrelate within the larger context of the Southern Appalachian area.

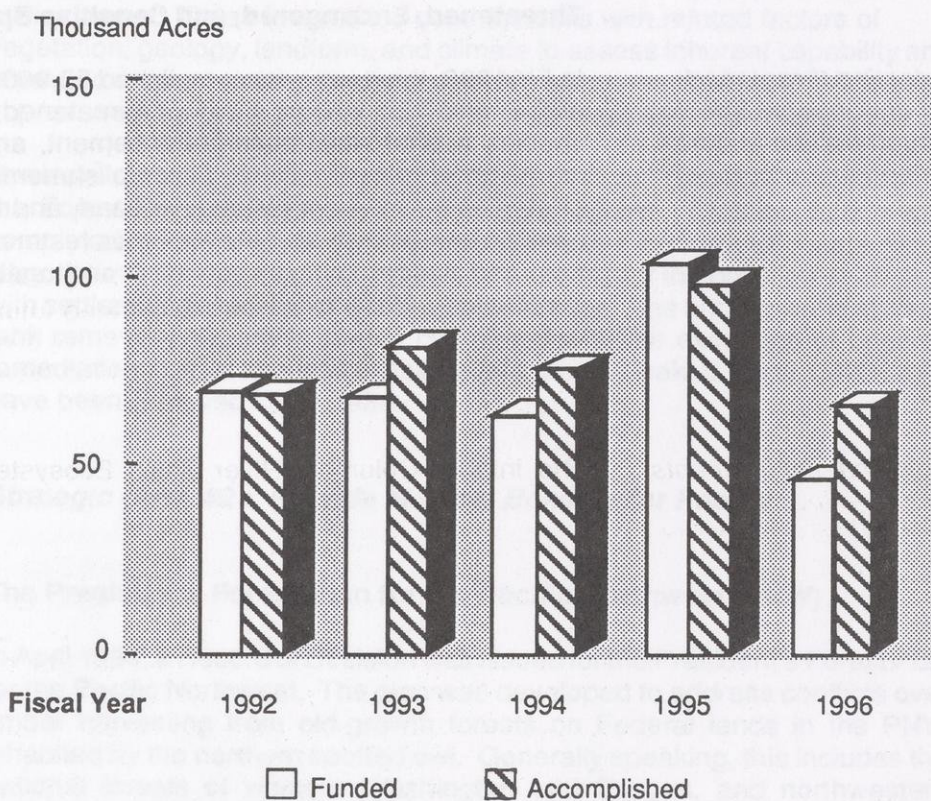
### Land Acquisition and Exchange

FY 1996 funding provided for the acquisition of 40,051 acres needed for the protection of critical wildlife habitat, cultural and historical values, congressionally designated areas, outdoor recreation, and other land management purposes.

*Land acquisitions and exchanges protect resources and improve management efficiency.*

Land exchanges between NFS and other ownerships are needed to protect key resources, eliminate conflicting uses, and improve management efficiency. In FY 1996, the Forest Service completed equal-value exchanges involving 32,691 acres of NFS land for 65,848 acres of non-Federal land (figure 4). 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.

Figure 4.  
Land Exchange Accomplishments





## Forest Legacy Program

The Forest Legacy Program protects crucial private forests from conversion to nonforest uses. The purchase of conservation easements is the most commonly used method to keep forests from being converted to other uses. In FY 1996, nine cases were completed to conserve 10,445 acres of forest land.

## Restoration of Habitat

In FY 1996, the Forest Service accomplished 104,683 acres of wildlife habitat restorations/enhancements and constructed 4,008 habitat improvement structures. Key accomplishments included prescribed burning, constructing nesting structures, restoring open meadows and aspen stands, restoring wetlands and waterfowl habitat, and providing enhanced opportunities for viewing, photographing and learning about native animals, plants and fish—the fastest growing forms of nature-related recreation.

In 1996, the Forest Service restored or enhanced 6,518 lake acres and 1,121 stream miles of inland fish habitat, and an additional 1,333 lake acres and 631 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

In FY 1996, the agency accomplished 53,900 terrestrial acres, 177 aquatic acres, and 129 stream miles of threatened, endangered, and sensitive species habitat restoration/enhancement, and constructed 1,682 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.

*Protecting threatened and endangered species through habitat restoration and enhancement*

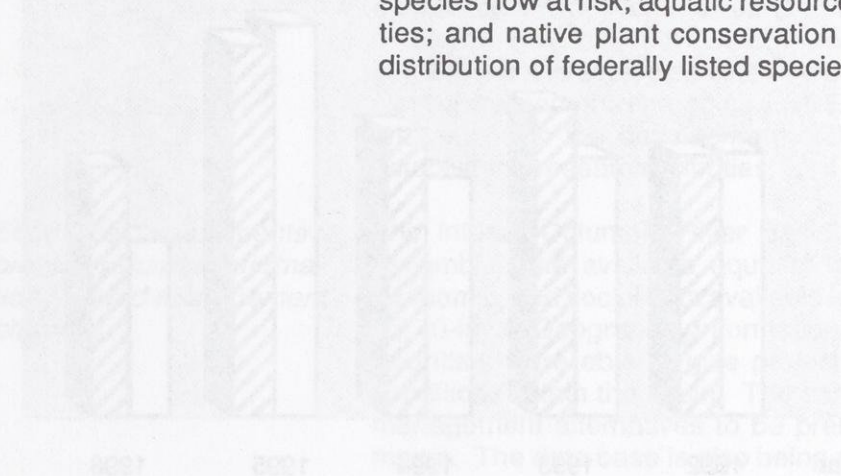
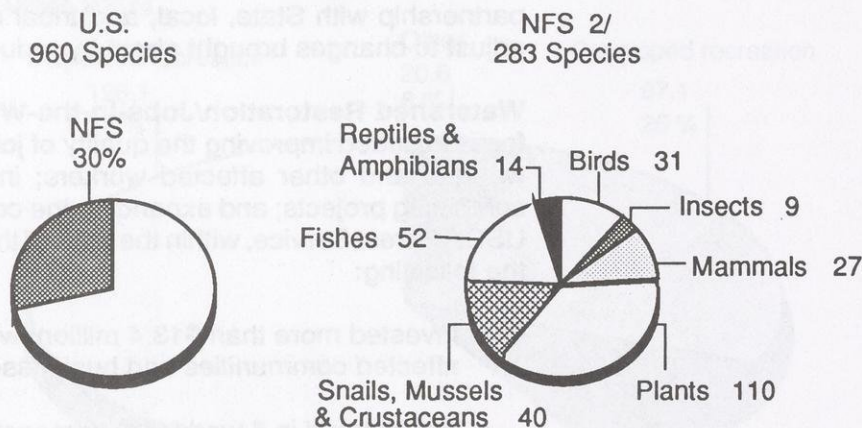




Figure 5.  
Species Federally Listed as Endangered or Threatened—  
FY 1996 1/



1/ These species include all varieties of life—from mammals to plants to mussels.

2/ No change in numbers of species listed on NFS lands, mainly due to moratorium.

### Protecting Soil and Water Resources

During FY 1996, soil resource inventories were accomplished on about 7.1 million acres. These inventories combine soils with related factors of vegetation, geology, landform, and climate to assess inherent capability and predicted response of the land to potential management actions. Watershed improvements were completed on over 66,300 acres of NFS lands.

*Significant progress was made in cleaning up hazardous waste sites.*

**Environmental Compliance Projects**—Significant progress was made in the Forest Service hazardous waste site program. Cleanup action was completed or initiated at 92 abandoned/inactive hazardous waste sites. Negotiations are ongoing with parties responsible for the pollution at 25 sites with settlements reached on the cleanup of 2 sites. The underground storage tank removal program is almost completed with the exception of ongoing remediation work at about 34 sites where tanks had leaked. Over 1,600 tanks have been removed since 1988.

### Strategic Goal #2 : Provide Multiple Benefits for People

#### The President's Forest Plan for the Pacific Northwest (PNW)

In April 1994, a Record of Decision was issued for the President's Forest Plan for the Pacific Northwest. The plan was developed to address conflicts over timber harvesting from old-growth forests on Federal lands in the PNW inhabited by the northern spotted owl. Generally speaking, this includes the national forests of western Washington and Oregon, and northwestern California. The plan also focuses on protecting key watersheds for at-risk anadromous fish species, revising individual forest plans to include ecosystem- and landscape-level analyses, and adopting experimental management approaches and adaptive management techniques.



*Balancing ecosystem health and human economic needs*

The PNW initiative balances the needs of forest ecosystems and the needs of human economic systems. The economic side of the PNW Forest Plan seeks a sustainable future for the communities, workers, and businesses within the range of the northern spotted owl. Federal agencies work in partnership with State, local, and tribal representatives to help the region adjust to changes brought about by reduced timber harvest levels.

**Watershed Restoration/Jobs-In-the-Woods**—Fiscal year 1996 program focus included improving the quality of jobs for previously trained displaced workers and other affected workers; increasing the duration of jobs by combining projects; and expanding the complexity of work. Specifically, the USDA Forest Service, within the area of the PNW Forest Plan, accomplished the following:

- Invested more than \$13.4 million, with over 80 percent awarded to affected communities and businesses.
- Participated in 6 workforce demonstration projects within Oregon and California that recruited and trained approximately 60 displaced workers.
- Employed over 700 displaced workers.
- Obtained a public interest waiver that allowed procurement actions to be directed to affected communities within the area of the PNW Forest Plan.
- A total of 679 million board feet (MMBF) of timber were harvested in FY 1996, compared to 493 MMBF in 1995.

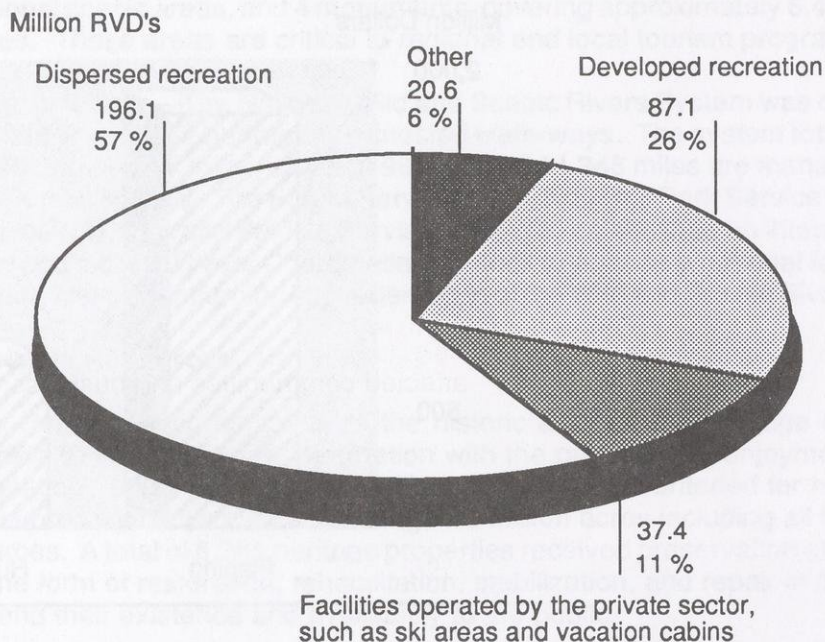
Forest Service research provided scientific information and new technologies to support the PNW Forest Plan. Major accomplishments include development of data bases for analyzing the effects of land-use activities; evaluation of frameworks for the conduct of watershed analysis; reporting results of research on the effects of land management on watershed processes; and development of a number of models that relate performance of biophysical systems to land management activities.

### **Recreational Use of the National Forests**

In FY 1996, NFS lands experienced an estimated 341.2 recreation visitor days (RVD's) (figure 6). (An RVD is 12 hours of visitation accumulated by one person or a combination of people.) During FY 1996, recreation seasonal capacity available was 213.4 million persons at one time per day (PAOT-days). (PAOT-days are calculated by multiplying the site capacity times the number of days per year that the site is open to the public.)



Figure 6.

**FY 1996 Recreation Visitor Days (RVD's) by Activity**

*NFS lands experienced over 341 million RVD's.*

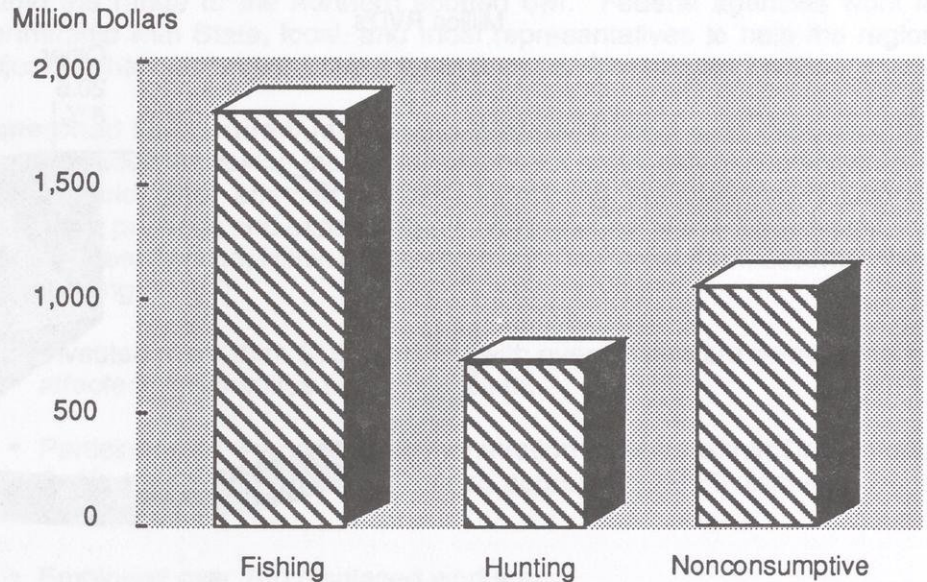
The Forest Service manages over 23,000 developed facilities, including campgrounds, trailheads, boat ramps, picnic areas, and visitor centers, in addition to housing privately owned facilities on NFS lands. These facilities can accommodate approximately 2.1 million PAOT's. In FY 1996, public use of developed recreation sites represented 87.1 million visits.

The National Wilderness Preservation System (NWPS) contains 412 units of national wilderness in 38 States and includes 34.7 million acres of NFS lands. Recreation use in wilderness areas accounted for 14.5 million RVD's in FY 1996. At the end of FY 1996, there were 26,610 miles of trail available for use in wilderness areas.

Over 86 million activity days were spent hunting, fishing, and viewing wildlife and fish on national forests and grasslands in FY 1996. This resulted in expenditures of \$4.3 billion in local communities and over 139,000 full-time-equivalent jobs. These wildlife- and fish-related recreation opportunities resulted in \$3.58 billion in net public benefits (figure 7).



Figure 7.  
FY 1996 Wildlife and Fisheries Benefits



In FY 1996, the Forest Service, along with other agencies, began implementation of a National Recreation Reservation Service (NRRS) that provides an easy, innovative way for the public to reserve Federal recreation facilities. NRRS will provide simple, consistent "one-stop" shopping for our customers; provide several means of customer access (phone, Internet, FAX, etc.); streamline and modernize business practices and handling of funds; reduce workload and operating costs for those with local reservation systems; and simplify and expedite the collection of user fees.

**Accessibility**—In FY 1996, the Forest Service implemented use of a "Decision Tool For Federal Land Management Agencies" document to use in balancing legal mandates when addressing access to the NWPS, in cooperation with the Bureau of Land Management (BLM), the National Council on Disability, and Wilderness Inquiry, Inc.

*Providing vital trail information to all trail users*

The agency completed training and implemented a Universal Trails Project that provides vital trail information for all trail users, regardless of age or ability. The project 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 role 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.

**Scenic Byways**—The National Forest Scenic Byways Program identifies routes that traverse scenic corridors with outstanding aesthetic, cultural, or historical values, and provides for increased rural tourism development. In FY 1996, the program included 133 national scenic byways within NFS lands, covering nearly 8,000 miles in 35 States.



*Special recreation areas are critical to regional and local tourism.*

**Congressionally Designated Areas**—The Forest Service manages 51 legislatively established special recreation areas totaling more than 8.4 million acres. Included in that total are 19 national recreation areas, 7 national scenic areas, and 4 monuments, covering approximately 6.4 million acres. These areas are critical to regional and local tourism programs.

**Scenic Rivers**—The National Wild and Scenic Rivers System was created in 1968 to assure a heritage of protected waterways. The system totals 154 rivers and 10,815 miles, of which 96 rivers and 4,348 miles are managed by the Forest Service. The Forest Service, BLM, National Park Service (NPS), and the U.S. Fish and Wildlife Service (USFWS) established an interagency Wild and Scenic Rivers Coordinating Council to provide a national forum to identify issues concerning implementation of the Wild and Scenic Rivers Act.

### 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 1996, about 50,000 acres were inventoried for heritage resources with appropriated funding; 1.3 million acres including all funding sources. A total of 8,761 heritage properties received preservation attention in the form of 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 1996, 545 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 1996, approximately 2,200 volunteers contributed over 80,000 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 44 person-years to work on Forest Service projects, approximating a \$1 million savings to the agency.

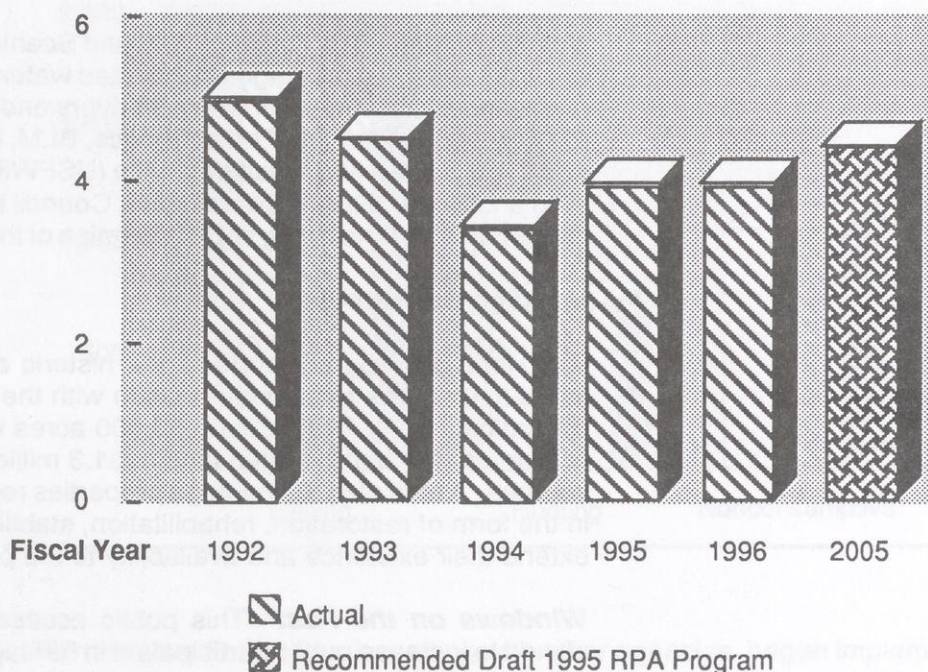
### Wood Fiber Production

In FY 1996, the Forest Service offered 4.0 billion board feet (BBF) of timber for sale and sold 3.4 BBF from NFS lands (figure 8). Salvage volume accounted for 1.9 BBF of the amount offered. Volume harvested on 473,127 acres of NFS land was 3.7 BBF.



Figure 8.  
Total Timber Offered

Billion Board Feet



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. Providing a continuing supply of forest products while complying with applicable laws and regulations provides goods and employment that benefit the public.

### Forage Production

*Emphasizing restoration and long-term health of rangelands*

In FY 1996, analysis processes were initiated on 2,485 grazing allotments. Work was completed and decisions implemented for 562 allotments. The program continues to reflect an ecosystem perspective emphasizing restoration and long-term health of rangelands. The agency permitted use of forage for 9.2 million head months of privately owned livestock on NFS lands.

In FY 1996, new emphasis was placed on the management and control of noxious weeds by developing and implementing a strategy and treating noxious weeds on 67,174 acres. The Forest Service, as the designated lead agency for noxious weed activities within USDA, coordinated the development of the USDA 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 new partnership, "Pulling Together," was initiated between the Department of the Interior, the National Fish and Wildlife



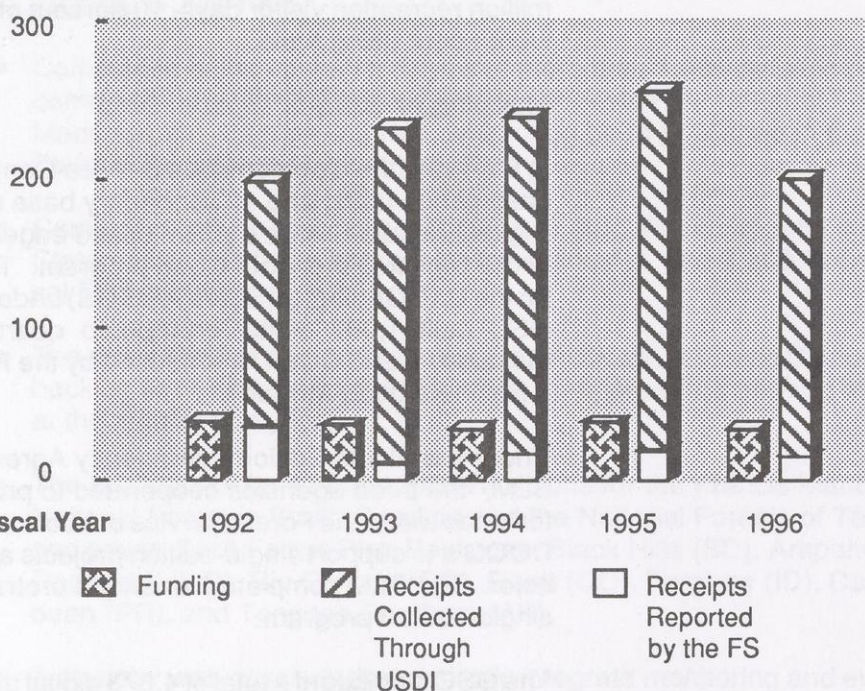
Foundation, and USDA to leverage Federal funds through cost-share challenges to neighbors and partners. This new program will encourage the formation of local partnerships to prevent and manage noxious weeds by group consensus across jurisdictional boundaries in a cost-efficient manner, to restore ecosystem health and biodiversity, and to ensure future productive use of the natural resources present.

### Minerals Production

The value of minerals produced from national forest land operations in FY 1996 is estimated at \$3.5 billion. The Minerals and Geology Management (M&GM) program, funded at \$35 million in FY 1996, returned \$200 million to the Treasury (figure 9).

Figure 9.  
Minerals—Funding and Receipts

Million 1996 Dollars



During FY 1996, 10 million barrels of oil, 300 million cubic feet of gas, 115 million tons of coal (the two largest coal mines in the country are within NFS lands), 140 million pounds of lead (55 percent of the domestic lead production), and over 5.5 million tons of phosphate were produced from NFS lands.

### Restoring and Sustaining Strong, Diversified Rural Economies

In FY 1996, 1,583 rural communities received direct technical and financial assistance. Within that total, 297 rural communities in California, Oregon, and Washington were assisted via the economic adjustment portion of the President's Forest Plan for the Pacific Northwest. The plan also focused on improving the quality of jobs for displaced timber workers under the Jobs-in-the-Woods program.

*Provided technical and financial assistance to 1,583 rural communities*



*Forest Service roads provide access to recreation sites.*

## **Providing Access to the National Forests**

Most of the road system required to meet public and administrative needs is currently in place, and emphasis is on managing existing facilities. Removal will occur in those cases where the facility can no longer be maintained to standard, facilities are considered unnecessary and costly, or when removal is necessary to protect or restore the ecosystem. In FY 1996, 1,675 miles of road were obliterated and the land restored for resource production, 2,853 miles of existing road were reconstructed, and about 463 miles of new road were constructed. The primary use of roads remaining in the transportation system will be to support recreational access. During FY 1996, 25 new bridges were constructed and 55 were reconstructed to provide safe access to NFS resources.

A total of 69,507 miles of trails were maintained on NFS lands in FY 1996, compared to 66,193 miles in FY 1995. Additionally, 2,150 miles of trails were constructed or reconstructed. Of that total, 454 miles were contributed by partners and volunteers. At the end of FY 1996, there were 116,076 miles of trails available for use on NFS lands, including wilderness trails. About 33.1 million recreation visitor days, 10 percent of all recreation use on NFS lands, were spent using trails.

## **Mapping and Digital Spatial Data**

In FY 1996, the Geometronics Service Center (GSC) updated 1,162 primary base series maps and 40 secondary base series maps. The GSC built 686 Digital Elevation Models (DEM's) and edgematched 1,036 DEM's in support of the Digital Orthophoto Quad program. They also produced 1,489 DEM's for the U.S. Geological Survey (USGS) under an interagency agreement. The GSC built 1,087 digital orthophoto quarter quadrangles (DOQQ's) and mosaiced 1,223 DOQQ's produced by the Forest Service and USGS into full 7.5-minute quad format.

Under the Single Edition Interagency Agreement with the USGS and the BLM, the three agencies cooperated to produce primary base series maps for lands within the Forest Service area of interest. In FY 1996, the USGS built DOQQ's to support single-edition projects and printed single-edition maps in color. The BLM completed amended protraction diagrams in support of the single-edition program.

The GSC distributed a total of 4,673 digital data files to other agencies and the public and 17,272 files to other Forest Service units. The GSC provided training and technical support in use of its data products to Forest Service Geometronics and GIS users.

## **Remote Sensing**

Resource aerial photography contracts completed in FY 1996 covered 42,630 square miles. Thirty-three resource aerial photography contracts were completed and accepted in FY 1996.



**Developing information  
for forest-level  
decisionmaking**

Ecosystem Planning, Inventory and Monitoring ensures organizational effectiveness through the forest planning process in which relevant information is gathered and analyzed, and used to develop a desired future condition for the forest. This desired future condition is presented in forest plans, which provide the overall guidance for on-the-ground natural resource management in pursuit of the other RPA strategic goals of "restoring and protecting ecosystems," and "providing multiple benefits for people within the capabilities of ecosystems."

Accomplishments supporting an ecosystem approach include:

- The completion and release of three ecoregional assessments: Interior Columbia River Basin, Sierra Nevada, and Southern Appalachian. A "Lessons Learned" Workshop, designed as an adaptive learning approach to ecoregional assessments, was held in Albuquerque, New Mexico, in July 1996.
- Completion of the content analysis of more than 1,000 detailed public comments on the proposed regulations to revise the National Forest Management Act planning rule, which had been published in the Federal Register on April 13, 1995.
- Completion of approximately 100 Draft or Final Environmental Impact Statements, 5,200 Environmental Assessments, and 9,800 Categorical Exclusions.
- The processing of about 121 Forest Plan Appeals, reducing the current backlog to 14 at the end of FY 1996 as compared to a backlog of 123 at the start of that year.
- The issuance of final Forest Plan Revisions for the Francis Marion National Forest in South Carolina and the National Forests of Texas, and seven Draft Forest Plan Revisions: Black Hills (SD), Arapaho-Roosevelt (CO), Rio Grande (CO), Routt (CO), Targhee (ID), Caribbean (PR), and Tongass-Chatham (AK).
- A strategy was developed to vertically integrate monitoring and evaluation through institutionalizing standard documentation and multilevel reporting. In FY 1996, for the first time, each region prepared a "State of the Region" evaluation report that built on monitoring and evaluation conducted on individual national forests.
- Cooperation with other agency efforts by leading a multiagency team on monitoring and evaluation as part of the December 1995 Ecological Stewardship Workshop in Arizona. The Forest Service also participated in a Federal Government-wide research and monitoring framework initiative sponsored by the White House's Committee on Environment and Natural Resources.



## Providing Scientific Information and New Technologies

The agency provides the scientific information and new technologies needed to manage and sustain the natural resources of the Nation's 1.6 billion acres of forests and rangelands. In FY 1996, the agency completed 3,005 research accomplishments, including books, papers, reports, and audiovisual materials.

### Research on Protecting Ecosystems

#### *Conducting research to promote forest health*

Forest health continued as a major research priority in FY 1996. Blister rust, a serious disease of sugar pine, is causing this species to decline in Western States. The discovery of a gene resistant to the rust has led to a strategy for increasing the frequency of this gene in sugar pine stands, thus making the stands less susceptible to the disease. Publication of "Dwarf Mistletoe: Biology, Pathology, and Systematics," USDA Handbook 709, summarizes four decades of worldwide research. Handbook 709 provides the scientific information needed by forest managers to control mistletoe damage to valuable timber yet maintain biodiversity.

Protecting and maintaining healthy forest ecosystems also protects endangered and threatened species. Five small mammals are the main food source for the threatened Mexican spotted owl. The abundance of each of these mammals was found to be separately controlled by changes in forests caused by diseases and other disturbances. This information helps forest managers make trade-offs between protecting forests for timber and other values, while providing adequate food supplies for the owl. In California, populations of the threatened marbled murrelet were discovered to be sustainable in unharvested forest stands that are smaller than previously thought necessary. Also, most murrelets were found to prefer a narrow band of coastal forest. This new knowledge will help forest managers monitor murrelet populations accurately and will allow more flexibility in forest management practices. In intensively managed southern pine forests, investigations showed that mature hardwood tree species must be left in a zone at least 50 meters wide along streams to sustain populations of reptiles, amphibians, songbirds, squirrels, deer, and turkey. Analysis of stream flow measurements made over the past 50 years in the Pacific Northwest showed that logging road construction created higher peak flood flows than in nonroaded areas and this condition lasted longer after logging than previously thought. This new knowledge will help protect fish habitat by improving road design.

Air and water pollution is detrimental to ecosystems and people. Urban southern California depends on water from mountain streams. Research found that these streams are polluted by nitrogen compounds from polluted air. Ozone in smog damages forests downwind of most major cities. Ponderosa and Jeffrey pine forests in the Western United States are very susceptible to ozone damage. A new guide, "Evaluating Ozone Air Pollution Effects on Pines in the Western United States," PSW-GTR-155, will assist forest managers in evaluating ozone injury. Chlorine compounds used in making paper from wood are pollutants when released in air and water. Forest Service scientists, working collaboratively with scientists from the paper industries, developed a chlorine-free process that is now being tested on a larger scale. Emission of formaldehyde from particleboard and plywood pollutes indoor air. Forest products scientists from the Forest Service worked with industrial and public health scientists in providing information to regulatory agencies, manufacturers, and consumers on how to prevent air pollution in buildings from formaldehyde.



A growing problem, especially in the arid West, is destruction of homes by wildfires as more homes are being built within forests and brushlands. A method of testing the flammability of landscape vegetation was developed. The test is now being used to compile information on flammability for a homeowners' guide on selecting landscape vegetation.

### **Research on Restoring Deteriorated Ecosystems**

#### *Using fire to promote forest restoration*

Ecosystem health has deteriorated in some forests because wildfires have not been allowed to fulfill their natural role in the ecosystem. Intensive use of some forests has also contributed to deterioration. The publication "The Use of Fire in Forest Restoration," INT-GTR-341, provides information on how to restore ecosystem health and prevent catastrophic wildfires. In restoring watersheds, closure and obliteration of roads may be necessary. Mathematical models were developed to evaluate the obliteration process in order to minimize erosion.

Guidelines for land management planning were produced to protect and restore habitat needed by the threatened Pacific salmon. The Forest Service's National Model Urban Rivers Restoration Project has focused on the Chicago River. The project's research findings were used to implement an action plan and demonstration projects to improve recreational and environmental values along the Chicago River, and to develop national guidelines for urban rivers.

### **Research on Providing Multiple Benefits to People**

Forests benefit people in many ways, from products extracted from the forest to recreation within it. Mushrooms are critical organisms in forest ecosystems because they are essential in nutrient cycling and as a food for small mammals. Recently, mushrooms have become a \$40 million-a-year commodity in Pacific Northwest forests. The publication "Managing Forest Ecosystems to Conserve Fungus Diversity and Sustain Wild Mushroom Harvest," PNW-GTR-371, provides knowledge needed to manage this forest product. Wildlife is central to the "Alaska Experience." Researchers determined that in-State expenditures for wildlife recreation by Alaska residents and nonresident hunters amounts to \$220 million annually. Research showed, also, that people are recreating in wilderness areas with more and more frequency. Because of the impact visitors have on wilderness, the results may indicate a need to review the adequacy of existing wilderness protection regulations.

Wood decks are extremely popular in the United States and many are built every year. The new manual "Wood Decks: Materials, Construction, and Finishing" (Forest Products Society) helps both builders and consumers design, build, and maintain these outdoor structures for greater durability, safety, and enjoyment.

Each year, the United States Postal Service trashes tons of undeliverable mail. Forest Service scientists are working with industry partners to develop technologies to convert this liability into an asset by recycling undeliverable mail into useful paper products.

An advisory system was developed that aids in formulating silvicultural prescriptions for management of aspen in the North Central States. The system, based on 50 years of aspen research, uses an interactive model that



gives insight into the consequences of alternative silvicultural systems for stand structure, productivity, and ecosystem sustainability. Information on processing options for small-diameter logs was developed. With this information landowners can calculate how to maximize returns, make thinning of densely packed, small-diameter stands feasible, and improve forest health. Information on forest inventories for 45 States is now available on the Internet (<http://www.srsfia.msState.edu/script/ew.htm>).

### **Inventory and Monitoring in Support of Sustainable Management**

Forest Inventory and Analysis (FIA) data, collected and analyzed consistently across all landownerships, helps place lands managed by the agency in proper context within the overall forest landscape. For example, using FIA data, land managers can identify rare resources located on NFS lands, and place an appropriate value on them. This is important for establishing protection priorities in developing forest plans.

In FY 1996, forest inventory was conducted on 44 million acres of forest land across all ownerships, and 90 reports were prepared relating to status and trends of the resources inventoried.

### **International Forestry Cooperation**

#### *Promoting international and domestic sustainable forest management*

To meet its global leadership responsibility, the agency promotes sustainable forest management both domestically and internationally. The RPA Program Assessment reflects the new internationally developed criteria of sustainable forest management. The goal of this work is to explore and assist in critical forest management problems affecting the United States and collaborating countries alike. Working closely with the State Department, the Forest Service has been successful in incorporating U.S. perspectives into all the documents and agreements that are being generated.

In FY 1996, the agency engaged in 664 international forestry-related partnerships, compared to 240 in FY 1995. A total of 191 international forestry communication items (books, papers, reports, audiovisual materials, etc.) were produced during the year.

### **Partnerships**

The Forest Service continues to increase its use of partnerships and other collaborative approaches to planning and management that engage a wider array of stakeholders and achieve shared goals, including greater efficiency in government. Some examples in 1996 were:

**Southern Appalachian Man and the Biosphere (SAMAB) Cooperative and the Southern Appalachian Assessment**—The SAMAB Cooperative, which produced the Southern Appalachian Assessment described earlier in this report, demonstrates the potential productivity resulting from greater collaboration between agencies, and between government and the private sector. Eleven Federal agencies, including the Forest Service, USFWS, NPS, and the Tennessee Valley Authority, worked with the natural resource departments of Georgia, North Carolina, and Tennessee to develop the assessment. It addresses broad-scale issues of resource conservation and economic development across a region covering over 37 million acres. Also involved from the private sector were corporations, academic institutions, nonprofit public interest organizations, economic development groups, and individuals. Together they gathered and analyzed information about the land,



air, water, and people of the region applicable to natural resources management. This cooperation significantly expanded the scope and depth of analysis that might have been achieved by separate efforts. It also avoided duplicating work that might have been necessary if each agency had acted independently. It resulted in creating improved working relationships among all the participants, which will continue to pay dividends as the agencies conduct their planning and management activities utilizing the results of the assessment.

**Partnerships In Wildlife, Fish, and Rare Plants Programs**—The Forest Service accomplished a significant share of wildlife, fish, and rare plant work through partnerships with over 3,300 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 program. In FY 1996, over \$17 million in Federal funds were matched by partners' contributions for a total of \$40 million to accomplish 2,135 partnership projects on the national forests and grasslands.

**Partnerships In Recreation Programs**—In FY 1996, the agency formed approximately 1,500 partnerships to accomplish recreation objectives. As one example, the Forest Service, in partnership with the National Environmental Education Training Foundation and other agencies, held the first "National Public Lands Day," a unique event predominantly funded by the private sector. Several thousand people volunteered their time to rebuild recreation facilities, interpretive sites, and trails. At the Forest Service sites, private sector funds provided a \$6 match for every appropriated dollar. If the value of volunteer labor is included, the ratio would be \$11 for every appropriated dollar.

Sixty 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 Partnership program, the national forests provided downhill skiing opportunities to approximately 32 million people in 1996. Partnering with the National Ski Areas Association, the Forest Service increased access to ski areas for people of all ages, cultures, and abilities and increased the public's understanding of how ecosystems work through conservation education programs at resorts such as Ski-Cology and Ski With The Ranger programs.

The agency and The Walt Disney Company explored avenues to share training and expertise in universal access and partnership possibilities for preparation for the 2002 Winter Olympics. The 2002 winter games will be held in Salt Lake City, Utah, on the Wasatch-Cache National Forest.

The following strategies will bring together private investors and public land managers to provide customer service through collaborative efforts:

In FY 1996, the agency established 48 "Demo" projects and began active implementation of 4 projects.

**Public/Private Ventures (PPV)**—This initiative provides opportunities for joint public and private-sector investment in recreation facilities and services on NFS lands. Agency direction to manage the PPV initiative was completed in FY 1996, and pilot projects were approved in early FY 1997.



**Partnerships in Wilderness**—The Arthur Carhart National Wilderness Training Center continued to expand its interagency training role in support of the Forest Service and the following Department of the Interior agencies: NPS, USFWS, and BLM. Each of the Department of the Interior agencies has placed a representative at the center and is contributing financially. In FY 1996, the center trained 258 people and registered 113 new participants for the Wilderness Distance Education Program at the University of Montana. A Wilderness Education and Training Needs Assessment Survey covering the FS, NPS, USFWS, and BLM was completed and results will drive future education and training needs. Progress was made in editing wilderness correspondence courses and placing other courses on the Internet.

**Building a Framework for Ecological Stewardship**—The Forest Service cosponsored the December 1995 Ecological Stewardship Workshop in Tucson, Arizona, which, for the first time, involved collaboration with private foundations in co-funding a Federal initiative for developing reference information to support land managers. The workshop brought together scientists and land managers from dozens of Federal agencies, private foundations, universities, corporations, conservation organizations, and others, to build a framework within which the ecological stewardship of Federal lands and waters can be implemented. A reference document will be finalized during 1997 and related information is available on the Forest Service Internet Server at: <http://www.fs.fed.us/eco/workshop.htm>.

*Provided technical and financial assistance to 8,079 urban communities*

**Urban and Community Forestry (U&CF) Outreach**—The Forest Service, working with communities and private organizations, helps establish, improve, expand and protect trees, parks, and forested areas in urban and other community areas. Technical and financial assistance are provided for tree planting, care, and protection. Public outreach and education remain key features of this program and directly assist the agency in reaching environmental justice and equity goals. In FY 1996, 8,079 communities received assistance through this program and planted 4,200,000 trees; 48,232 volunteer organizations participated in U&CF-sponsored projects; 1,597 matching Federal grants, totalling \$ 7,373,836, were awarded to participating communities; and Federal grants generated \$12,366,306 in matching financial and in-kind contributions from the public.

### **Financing Recreational Services**

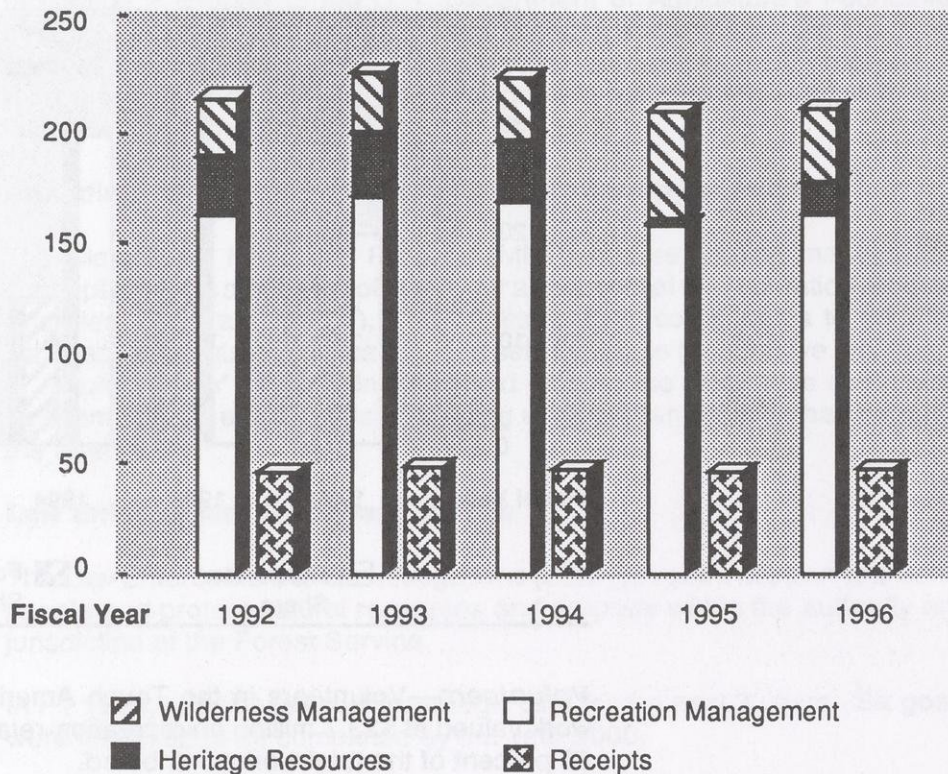
In FY 1996, recreation receipts totaled \$47.5 million, a 1-percent increase over FY 1995. Campgrounds and other facilities generated \$10 million compared with \$9.5 million in FY 1995. The fees recovered represent 22.5 percent of the total recreation use appropriation of \$211.1 million (figure 10).



Figure 10.

**Recreation—Funding and Receipts**

Million Dollars Actual



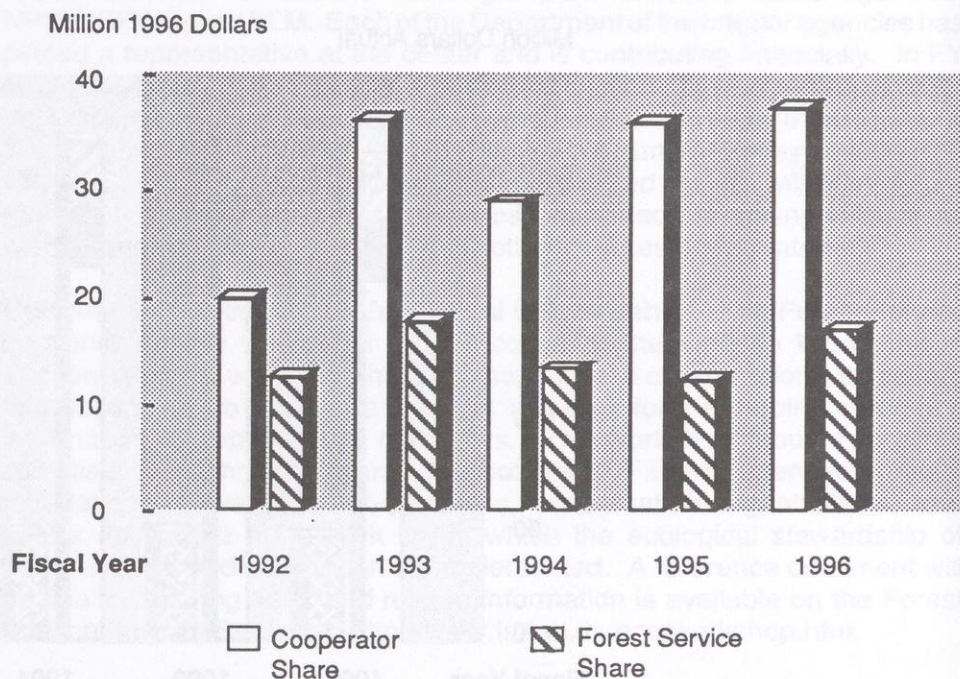
### *Implemented the Recreation Fee Demonstration Project*

The Recreation Fee Demonstration Project, authorized by the Omnibus Consolidated Rescissions and Appropriations Act of 1996, gives the Forest Service demonstration (demo) authority to collect and retain recreation use fees. Demo projects will test different methods to establish, collect, and reinvest recreation use fees. In FY 1996, the agency established 48 demo projects and began active implementation of 4 projects. The remaining projects will begin implementation in FY 1997.

**Challenge Cost-Share**—In FY 1996, total recreation appropriated funding for the challenge cost-share program was \$16.9 million, up from \$12 million in FY 1995 (figure 11). The challenge cost-share (CCS) program, including agency and contributed funds, totaled \$54.4 million. In addition, a new challenge cost-share cooperative venture was initiated. Recreation funding totalling \$1 million was leveraged by the National Forest Foundation, providing a total of \$2.5 million in improvements to trails, recreation facilities, and wildlife and fish management projects.



Figure 11.  
Recreation Use—Challenge Cost-Share Funding



**Volunteers**—Volunteers in the Touch America Project (TAP) contributed work valued at \$23.7 million on recreation-related projects. This represents 68 percent of the total work contributed.

#### Expanding Opportunities for Participation in Human Resource Programs

*Offered employment and training to 105,388 persons*

The Forest Service hosts a variety of programs that add value to the agency and program participants by providing work, volunteerism, training, and educational opportunities to the unemployed, underemployed, elderly, youth, and others with special needs. During FY 1996, Forest Service human resource programs offered employment and training to 105,388 persons, including many women and minorities. For an investment of \$121.5 million, \$121.3 million in accomplishments were returned from all programs. The participants constructed and improved campgrounds, trails, office buildings, fences, and roads; planted trees; fought fires; improved timber stands; and provided office support and other services.

One of these programs is the Job Corps, which is a residential, educational, and training program for the Nation's disadvantaged youth aged 16-24. The purpose of the program is to provide the skills necessary to get and hold a good job at a living wage. Last year, 9,060 students participated in the Forest Service's Job Corps program and contributed approximately \$21.5 million in conservation work on national forest lands. The youth learn trades such as basic forestry, urban forestry, heavy equipment operation and maintenance, cement and brick masonry, auto mechanics, carpentry, welding, culinary arts, plastering, and painting. Over 77 percent of the students who graduated last year were placed in jobs with an average starting wage of \$6.30 per hour.



### *Emphasizing financial management and accountability*

An agency-wide, multiyear effort to improve Forest Service financial health was initiated in FY 1996 by emphasizing financial management and accountability. The objective is to improve the financial and accounting records while facilitating a change to the U.S. Department of Agriculture's Foundation Financial Information System. Complementing these efforts are the development and implementation of managerial accounting tools, such as All Resources Reporting for the NFS, to provide full cost information to help improve governmental efficiency.

### **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 to prioritize work, assists in budget allocation, and sets the stage for effective monitoring of results. In FY 1996, training of field units in the MMP was completed. Refinement of the process is continuing while implementation has begun at the forest level.

### **Law Enforcement and Investigations**

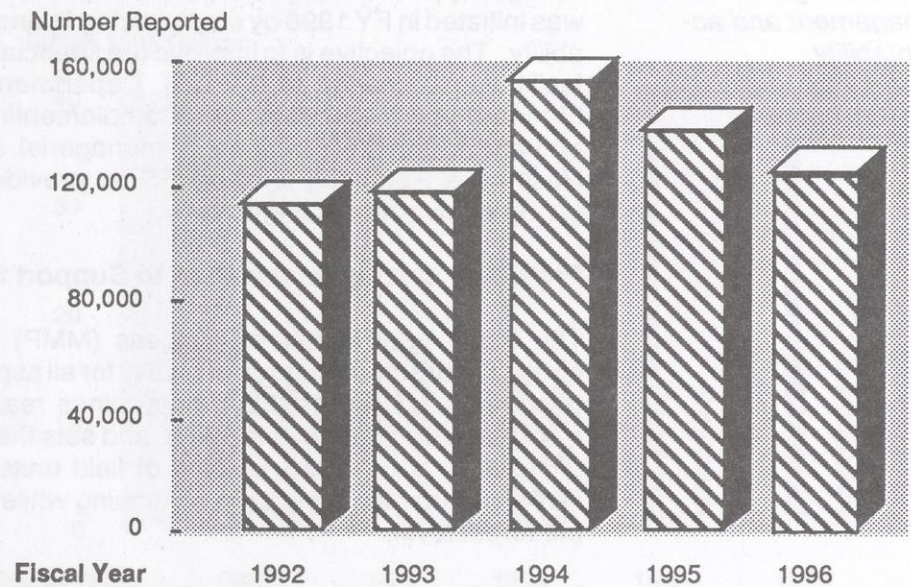
The Law Enforcement and Investigations (LE&I) program mission is to serve people and protect natural resources and property within the authority and jurisdiction of the Forest Service.

In FY 1996, LE&I developed a strategic plan for the next 3 years. Six goals were identified to be completed by the year 2000.

During FY 1996, a total of 126,203 incidents or violations were handled on NFS lands by uniformed Law Enforcement Officers, a reduction of 12,272 when compared to 138,475 in FY 1995 (figure 12). Out of that total, 7,856 were felony-level violations and 25,273 were misdemeanor-level violations, representing an increase of 2,977 felonies and 2,160 misdemeanor cases when compared to FY 1995.



Figure 12.  
Law Enforcement Incidents and Violations



Special Agents conducted approximately 1,160 investigations on felony and serious misdemeanor crimes for both resource violations and internal/hotline complaints.

These violations resulted in over \$9.2 million in damages to and losses of NFS property and resources. Violations/investigations included timber theft, archeological resource damage and theft of artifacts, arson, occupancy and use violations, and illegal drugs.

During calendar year (CY) 1996, approximately 318,550 cannabis plants were eradicated from 6,152 sites on NFS lands. A total of 3,482 individuals were arrested in connection with illicit controlled substance protection and distribution on NFS lands, compared to 2,095 in CY 1995. Drug enforcement efforts resulted in the seizure of over \$2.2 million worth of assets. The number of firearms seized, physical assaults, and boobytraps found increased over 1995 totals.

In FY 1996, the funding of 561 regular cooperative law enforcement agreements allowed the Forest Service to work closely with State and local law enforcement agencies and with other Federal agencies. Another 224 drug control agreements were negotiated to cooperate in combating illegal drug activities on NFS lands. The combined total of 785 agreements for FY 1996 exceeded FY 1995 by 75.

#### Employee Satisfaction—Continuous Improvement Process

In FY 1996, the Forest Service conducted the Continuous Improvement Process employee survey to assess organizational effectiveness in key areas related to the work environment. Survey results are used for action plans and other improvement efforts at various levels of the agency. The Forest Service will track change or improvement over time through the use of subsequent surveys. The FY 1996 survey questionnaires were made available to 40,862 employees Servicewide. The number of questionnaires returned was 23,435, or 58 percent.

*Conducted CIP survey to assess organizational effectiveness*



This survey represents a forthright commitment by the agency's leadership to acknowledge both its strengths and opportunities for improvement. The agency will continue to take a critical but positive look at where we are now, and will seek ways to keep improving. As a result, the Forest Service will be better able to meet customer needs through enhanced employee performance and efficient organizational processes.

### External Relationships

*Providing timely and valuable information through PAO*

Through the Public Affairs Office, the agency continues to provide timely and valuable information to internal and external audiences, including Congress, employees, the Administration, stakeholder groups, and the media. The agency provides the Secretary of Agriculture and the White House with briefing papers, internal news and media summaries, and other informational items. The effectiveness of such information is evaluated periodically, helping to ensure that the information distributed meets the needs of customers.

In FY 1996, the agency produced over 1,200 communication items including videos, brochures, and publications. The agency began communication with the film industry to develop a memorandum of understanding, which will streamline processes for filming on the national forests.

The Forest Service continued to implement its strategic communications plan in support of the Draft 1995 RPA program and other core programs of the agency. Through the communications plan, the agency builds understanding by listening to the public and employees, sharing information about our programs, and facilitating dialogue among all interested groups.

During FY 1996, in meeting the spirit of Executive Order 12898 on Environmental Justice, the Forest Service adjusted its public involvement programs to ensure that agency information is accessible to all citizens, including low-income and minority individuals and other under-represented groups. In FY 1996, the agency began conducting environmental justice and public involvement training for employees.

The agency participated in the Interagency Federal Advisory Committee Task Force, which seeks to improve coordination among Federal agencies in their application of the Federal Advisory Committee Act (FACA), and to facilitate communication with interested citizens. The Forest Service worked with the General Services Administration (GSA) to conduct training sessions on FACA for Federal employees. The agency continued to work with the Department of Justice, GSA, and USDA's Office of the General Counsel to ensure guidelines related to FACA reflect the latest information available.

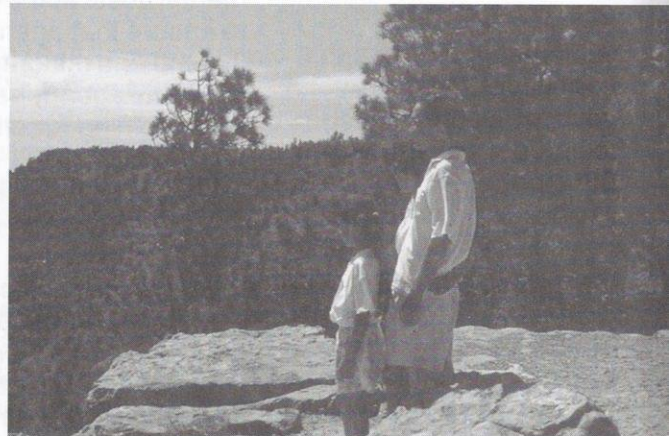
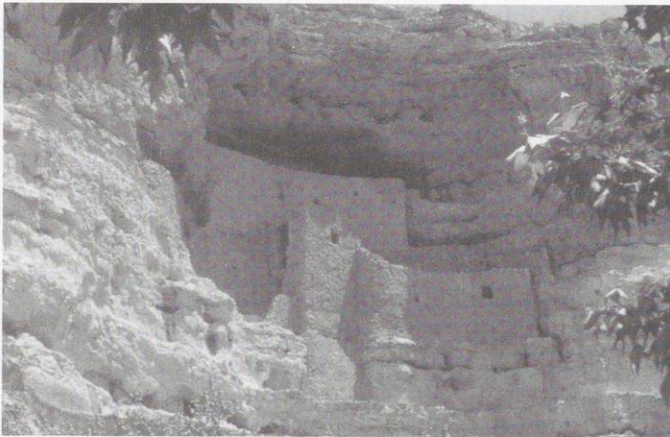
In FY 1996, the Forest Service Worldwide Web page was maintained and another 20 administrative units were placed on the Internet. The web site provided information about the agency's administrative and natural resources management activities, receiving approximately 300,000 visits a month.



This survey represents a continuing commitment by the agency's leadership to a strategic planning process and a commitment for improvement. The agency will continue to take a critical but positive look at where we are now, and will seek ways to keep improving. As a result, the Forest Service will be better able to meet customer needs through enhanced employee performance and efficient organizational processes.

000.001

The agency's strategic plan, which the agency continues to provide, may and should be used by a wide range of internal and external audiences, including Congress, the public, the media, the private sector, stakeholder groups, and the media. The agency's strategic plan is a living document that is updated as needed. The agency's strategic plan is a living document that is updated as needed. The agency's strategic plan is a living document that is updated as needed.





## GPRA Appendix

**Introduction:** This report is the first of a series of reports produced by the Forest Service as one of the pilot agencies for the implementation of the Government Performance and Results Act (GPRA) of 1993. This GPRA report measures fiscal year (FY) 1996 performance and focuses on the performance outcomes of the program activities.

**Report Linkages:** The content of this report links the FY 1996 GPRA annual performance goal and indicators to the appropriate result areas of the FY 1996 President's Budget, the Draft FY 1997 Resources Planning Act (RPA) and the Draft FY 1997 Forest Management Plan (FMP), and the FY 1996 Report of the Forest Service.

**Strategic Planning:** The Forest Service's strategic planning process provides a framework for the Forest Service's performance goals and objectives. The Forest Service's strategic planning process is linked to the Draft 1995 RPA and the Draft 1997 FMP.

# Forest Service FY 1996 Government Performance and Results Act (GPRA) Performance Report

**Report and Project:** The Forest Service's strategic planning process provides a framework for the Forest Service's performance goals and objectives. The Forest Service's strategic planning process is linked to the Draft 1995 RPA and the Draft 1997 FMP.

**Performance Indicators:** The Forest Service's strategic planning process provides a framework for the Forest Service's performance goals and objectives. The Forest Service's strategic planning process is linked to the Draft 1995 RPA and the Draft 1997 FMP.

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## **Fiscal Year 1996 Government Performance and Results Act (GPRA) Performance Report**

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## INTRODUCTION

**Pilot Agency:** This is the third GPRA performance report produced by the Forest Service as one of the pilot agencies for the implementation of the Government Performance and Results Act (GPRA) of 1993. This GPRA report measures fiscal year (FY) 1996 performance and focuses on the performance outcome of the program activities.

**Report Linkages:** The content of this report links the FY 1996 GPRA annual performance goals and indicators to the appropriation mainheads of the FY 1996 President's Budget, the Draft FY 1995 Resources Planning Act (RPA) Program strategic goals, the Chief Financial Officer's (CFO) Report, and the FY 1996 Report of the Forest Service.

**Strategic Planning:** The Forest Service is guided by strategic direction provided in compliance with the Forest and Rangeland Renewable Resources Planning Act of 1974 and the GPRA. The annual performance goals addressed in this report are linked to the Draft 1995 RPA Program strategic goals:

- Restore and Protect Ecosystems
- Provide Multiple Benefits for People Within the Capabilities of Ecosystems
- Ensure Organizational Effectiveness

### Outcome analysis:

1) An assessment of the results as set forth by the performance indicators included in the FY 1996 GPRA Performance Plan was conducted to determine if the performance goals were successfully achieved. Whenever applicable, a visual and/or a brief descriptive analysis of the program's accomplishment trend is included.

2) Whenever a performance goal was not met, an explanation is included.

3) Whenever indicators were added, modified, or dropped after the publication of the FY 1996 GPRA Performance Plan, it has been addressed in this report.

4) Whenever actual FY 1996 performance data was not available or preliminary data is included, it is noted.

**Lessons Learned: Application to FY 1997 Performance Plan**—GPRA requires agencies to "...evaluate the performance plan for the current fiscal year relative to the performance achieved towards the performance goals in the fiscal year covered by the report..." Looking at the pilot GPRA efforts as an iterative process, the agency has incorporated the lessons learned from previous pilot documents into each new GPRA plan and report.

Upon their review of the Forest Service FY 1996 GPRA Performance Plan, the Office of Inspector General (OIG) noted the need to address customer service and the lack of a summary indicating the resources needed to complete the goals. They also noted the lack of milestones or activity schedules to complete the tasks. These weaknesses were addressed in the development of the FY 1997 GPRA Plan and continue to be in the forefront as we advance in the planning and implementation of the GPRA.

In the FY 1997 GPRA Performance Plan, the performance indicators were more closely linked to the annual goals by including benchmarks and trends. The plan in general is more responsive to OIG's comments with regard to customer service goals and indicators.

Progress was made in integrating the plan into the budget cycle. As part of the formulation of the Agency Request, the Forest Service used the RPA strategic goals and the FY 1996 budget emphases to frame budget emphases for FY 1997. Staffs developed GPRA goals tiered down from the budget emphases.

**Role of External Stakeholders:** Consistent with the spirit of the GPRA, the development of this performance report has been viewed as being an "inherently governmental function." No external stakeholders were directly involved in the development of this report.



## MANAGEMENT OF THE NATIONAL FORESTS GOALS/INDICATORS

### Vegetation Management

**Program Description and Relevance to Strategic Goal(s)**—Harvest treatments, reforestation, timber stand improvement (TSI) and fuels (e.g., tree debris and understory growth) management activities are relevant to the strategic goal of “restoring and protecting ecosystems,” by improving and maintaining forest health through vegetation management.

**Annual Goal**—Maintain healthy forested ecosystems.

The following indicators were identified to assess progress toward achievement of this goal.

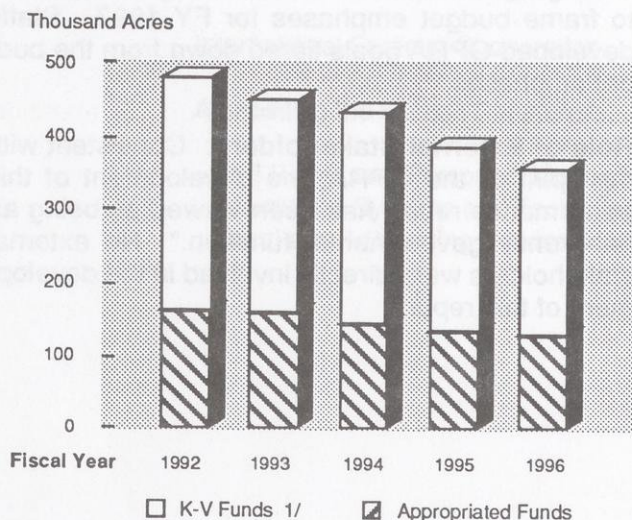
Performance Indicators:	Planned GPRA	Planned MAR 1/	Outputs
Fuels management (acres) 2/	550,000	574,568	599,482
Reforestation (acres)	310,000	310,324	357,512
Timber stand improvement (acres)	334,000	240,951	258,764
Harvest treatments (acres)	550,000	3/	473,127

1/ MAR = Management Attainment Report; planned MAR indicators reflect final funding level.

2/ Also reported under F&AM, page 42. An additional 165,803 fuel treatment acres were accomplished with brush disposal funds.

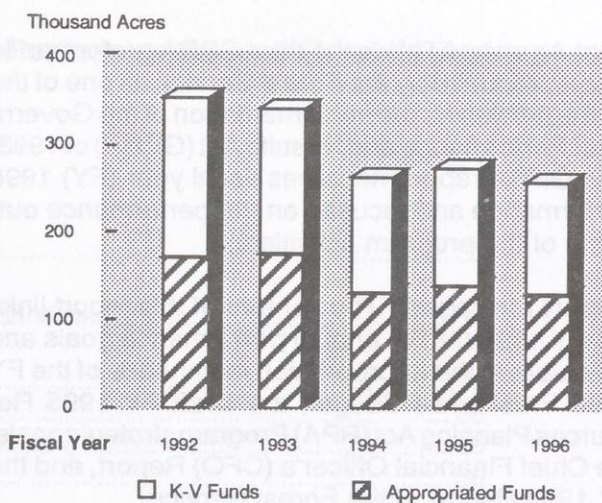
3/ Not included in MAR.

GPRA Figure 1.  
Acres Reforested

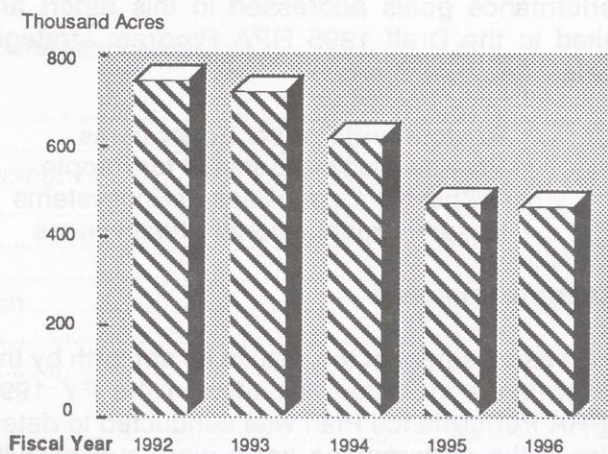


1/ The Knutson-Vandenberg Act (KV) as amended, authorizes use of portion of timber sale receipts for reforestation, timber stand improvement, and improvement of other resources on timber sale areas.

GPRA Figure 2.  
Acres Receiving TSI Treatments



GPRA Figure 3.  
Harvest Treatments



**Outcome Analysis:** Based on the outputs, the annual goal was successfully achieved. Aggressive restoration and vegetation management practices continue to ensure that National Forest System (NFS) lands remain productive to provide for healthy ecosystems and to meet stated management objectives.

Reforestation, TSI, and harvest treatment trends reflect the effects of a reduced timber sale program. Since 1989, various legislative and judicial directives have been implemented, particularly those associated with the protection of threatened and endangered species (TES) and the maintenance of associated old-growth habitat. This has resulted in decreased timber outputs as sales were cancelled or redesigned. The implementation of ecosystem



management has also reduced timber output as other management objectives were emphasized. Harvest treatments are expected to continue in the future at the levels experienced in FY 1995 and 1996.

### **Rangeland Management**

**Program Description and Relevance to Strategic Goal(s)**—This program is relevant to the strategic goals of 1) “restoring and protecting ecosystems” by improving and maintaining the health of rangeland ecosystems, and 2) “providing multiple benefits within the capabilities of ecosystems” by allowing privately owned livestock to graze under permit on NFS lands. Completion of structural and nonstructural range improvements is consistent with attaining both strategic goals. All program elements are carried out cooperatively with private permittees as well as other Federal and State agencies.

**Annual Goal**—Maintain healthy rangeland ecosystems.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Rangeland meeting forest plan objectives (acres)	1/	1.0 million
Rangeland brought to forest plan management standards (acres)	1/	1.4 million

1/ Information not provided.

**Outcome Analysis:** The outputs achieved under each of the indicators are consistent with the annual and strategic goals. The cumulative effects of rangeland acres meeting forest plan objectives over time are considered successes toward restoring and maintaining healthy rangeland ecosystems.

Management activities to achieve rangeland vegetation objectives are conducted in compliance with applicable forest plan standards and guidelines. At the end of FY 1996, about 29 million acres of rangeland were meeting forest plan objectives. A total of 24.9 million acres not meeting forest plan objectives were being managed in accordance with forest plan standards and guidelines. There are about 23.5 million acres requiring additional evaluation or the application of improved management according to forest plan standards and guidelines.

### **Ecosystem Planning, Inventory, and Monitoring**

**Program Description and Relevance to Strategic Goal(s)**—The Ecosystem Planning, Inventory, and Monitoring (EPIM) Program is related primarily to the strategic goal of “ensuring organizational effectiveness.” The EPIM Program ensures organizational effectiveness through the forest planning and amendment process, in which relevant information is gathered and analyzed through inventory, monitoring, and assessment. The knowledge generated through this process is presented as forest plans. These plans, in turn, provide the overall guidance for on-the-ground natural resource management in pursuit of the other RPA strategic goals of 1) “restoring and protecting ecosystems,” and 2) “providing multiple benefits for people within the capabilities of ecosystems.”

**Annual Goal #1**—Develop integrated inventories and assessments, and monitoring and evaluation that provide analysis, mapping, and computer-generated products used in decisionmaking above the project level.

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Complete strategic model for integrated ecosystem management	1 model	1

**Outcome Analysis:** In November 1996, a Natural Resource Information Strategy (NRIS) was completed and presented to the Ecosystem Management Corporate Team, which is made up of Washington Office Program Directors. The NRIS model will provide an integrating framework for effective use of natural resource information within the Forest Service. The report focuses on actions to be undertaken in FY 1997.



**Annual Goal #2**—Provide land management planning guidance and direction.

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Complete revision of forest plan regulations	review regs	accomplished

**Outcome Analysis:** A content analysis was completed of more than 1,000 detailed public comments on the proposed regulations to revise the National Forest Management Act planning rule, which had been published in the Federal Register on April 13, 1995. Appropriate changes were incorporated and a final rule prepared during FY 1996 for USDA review and clearance.

**Annual Goal #3**—Maximize opportunities in monitoring and evaluation. Initiate a process for integrated monitoring and evaluation at various landscape scales (integrate information vertically and horizontally). For example, monitoring and evaluation information can be aggregated upward from the project or watershed level to the forest plan level to the subregion to ecoregion level, or broken down into smaller areas and shared across resource areas and with other natural resource agencies. It can also be linked horizontally, watershed to watershed or forest to forest.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Develop strategy for vertical and horizontal integration of monitoring and evaluation information	1 strategy	1
Integrate monitoring and evaluation information with resource inventory information and other agency efforts	integrate information	accomplished

**Outcome Analysis:** Vertical integration of monitoring and evaluation was achieved through institutionalizing standard documentation and multilevel reporting. Horizontal integration among Forest Service regions was achieved through enhanced regional coordinating networks. Tighter internal integration was achieved by establishing and charter-

ing the Inventory and Monitoring Institute in Ft. Collins, Colorado. The Institute's mission is "To facilitate and support the collection and management of compatible, scientifically reliable resource information at national, regional, and national forest planning levels to support natural resource management."

Additionally, the Forest Service cooperated with other agency efforts by leading a multiagency author team on monitoring and evaluation as part of the December 1995 Ecological Stewardship Workshop in Arizona. And, the Forest Service participated in a Federal Government-wide research and monitoring framework initiative sponsored by the White House's Committee on Environment and Natural Resources.

**Annual Goal #4**—Implement action in conformance with the tasks outlined by the Inventory and Monitoring Task Team (i.e., quality assurance, standards/definitions, and sampling protocols). National forests annually monitor and evaluate forest plans to determine adequacy to guide the management of the national forests for the next year.

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Forest monitoring and evaluation annual reports completed	123 reports	123

**Outcome Analysis:** The nature of monitoring and evaluation reports required in FY 1996 was modified from 123 individual national forest reports to 9 regional summary reports. These regional summary reports covered 123 national forests, compared to 78 in FY 1995. These first regional summary reports help ensure organizational effectiveness by providing a baseline against which comparisons can be made in future years.

### ***Watershed and Air Management***

**Program Description and Relevance to Strategic Goal(s)**—This program is relevant to the strategic goal of "restoring and protecting ecosystems" by protecting and enhancing soil, water, and air.

**Annual Goal #1**—Using a watershed approach and ecosystem management principles, improve watershed condition on the national forests and grasslands.



Program goal benchmarks: Move toward 50 percent of watersheds in Condition Class I by the year 2005. Complete watershed assessments by the year 2000; and restore 500,000 acres, or reclaim about 25,000 abandoned/restored mine sites by the year 2005.

The following indicators were identified to assess progress toward achievement of the annual goal.

Performance Indicators:	Planned GPRA	Planned MAR	Outputs
a) Watersheds in Condition Class I (Regimen Attainment) (%)	a) 32	a) --	a) 40
b) Watersheds in Condition Class III (Investment Emphasis) (%)	b) --	b) --	b) 20
Completed watershed assessments (#)	10	--	212
Treatment on abandoned/inactive 1/ mine sites:			
a) acres	a) 10,000	a) --	a) 512.7
b) sites	b) --	b) --	b) 117
Acres treated to improve soil and water resources (thousand acres)	2/	16.8	25.4
Soil resource inventoried (million acres)	2/	7.5	7.1
PSD permit applications reviewed (#) 3/	2/	31	44

1/ All funding sources.

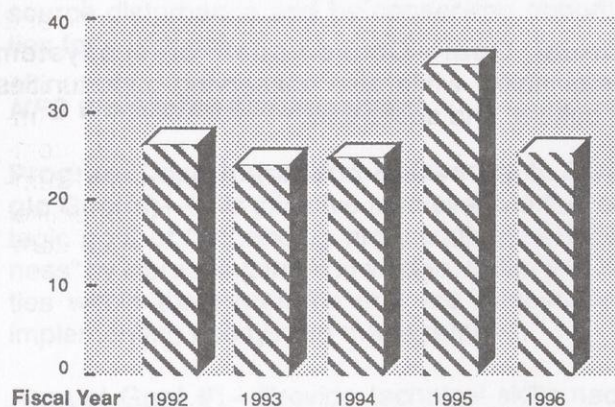
2/ New indicator implemented in FY 1996.

3/ PSD = Prevention of Significant Deterioration (of air quality).

GPRA Figure 4.

#### Acres Treated to Improve Soil and Water Resources

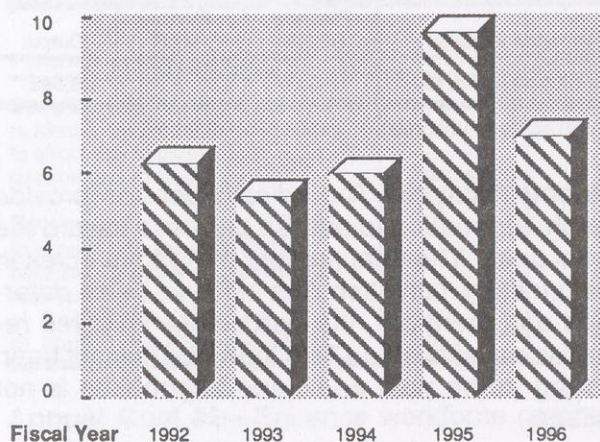
Thousand Acres



GPRA Figure 5.

#### Soil Resources Inventoried

Million Acres



**Outcome Analysis:** Cost efficiency of improvement techniques resulted in a greater number of acres treated to improve soil and water resources than were planned. Prevention of Significant Deterioration (PSD) permit applications reviewed are partially a function of the number of applications received. The expected number of applications was less than the actual number received.

Indicator trends largely reflect fund availability. Acreage of both land treated to improve soil and water resources and soil/ecological inventories remained approximately constant except for a substantial increase in FY 1995. As emphasis has increased on treating abandoned or inactive mine sites, the number of sites and acres treated has increased through time. In addition, increases in the percentage of high-quality watersheds (Class I) and the number of watershed assessments completed reflect substantial improvement.

**Annual Goal #2**—Restore wetland and riparian area functions and values, including soil productivity, stream channel stability, fish and wildlife habitat, and natural vegetation.

Program goal benchmarks: Restore 10 percent of those riparian areas in unsatisfactory condition; 75 percent by the year 2000, and the balance by the year 2005.



The following indicator was identified to assess progress toward achievement of the annual goal.

Performance Indicator:	Planned GPRA	Planned MAR	Output
Riparian acres restored	10% 1/	--	8,595

1/ Total acreage unknown.

**Outcome Analysis:** The indicator does not provide enough information to assess progress toward the annual goal. The total number of riparian acres in unsatisfactory condition has not yet been determined and therefore, the percentage of acres restored is not available. This indicator has not been reported in the past and trend information is not available.

### Real Estate Management

**Program Description and Relevance to Strategic Goal(s)**—This program is relevant to the strategic goal of “providing multiple benefits for people within the capabilities of ecosystems” by developing and perpetuating the land base of the NFS estate.

**Annual Goal**—The public's title and interests in the NFS are fairly and effectively protected and managed. Land uses are authorized and administered to protect environmental and resource values, and public health and safety, with fairness and equity for the user and the public. NFS lands are arranged to best meet the public interest and further ecosystem management objectives. Accurate information is readily available about the location, title, and interests in lands included in the NFS. Public lands are identifiable and accessible.

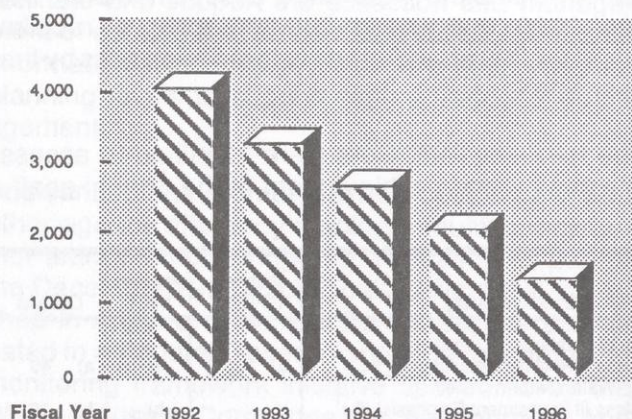
The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Planned MAR	Outputs
Land use activities authorized (permits)	72,000	--	1/
Land use activities administered to standard (permits) 2/	30,000	16,449	24,713
Boundaries legally and physically identified (miles) 2/	1,720	864	1,424
Landownership Admin. (cases) 2/	225	0	263
Forests reporting accurate infrastructure data (%)	40	N/A	1/
Heritage experiences provided (#)	130	N/A	1,318

1/ Information not collected.

2/ All funding sources.

GPRA Figure 6.  
National Forest System Boundaries  
Surveyed 1/



1/ Includes all funding sources.

**Outcome Analysis:** The outputs reported do not provide enough information to determine progress toward achievement of the annual goal. Future performance plans will be modified to facilitate data collection and program performance analysis.

### Wildlife and Fisheries Management

**Program Description and Relevance to Strategic Goal(s)**—This program is relevant to the strategic goal of “providing multiple benefits for people within the capabilities of ecosystems” by following a sustainable, ecological approach to manage 1) wildlife, 2) inland fish, 3) anadromous fish, and 4) threatened, endangered, and sensitive species.

**Annual Goal**—Conservation of ecosystem sustainability while also conserving opportunities for cultural and social use.



The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Planned MAR	Outputs
Terrestrial/aquatic (acres) protected	23,000	1/	1/
Aquatic stream of habitat protected (miles)	2,325	1/	1/
Terrestrial habitat restored/enhanced (acres) 2/	177,700	165,864	158,600
Hunting, fishing, and Nature Watch activity days (MM days)	87.5	--	86.1
Head months (HM's) of livestock grazing permitted	8.9	--	9.2
Inland streams enhanced/restored (miles)	3/	1,305	1,121
Anadromous streams enhanced/restored (miles)	3/	439	631

1/ After the FY 1996 GPRA Performance Plan was published, it was decided not to include these indicators in the MAR, thus data was not collected.

2/ Includes wildlife acres and TES terrestrial acres.

3/ Indicators added in lieu of those covered by footnote 1.

**Outcome Analysis:** Based on the cumulative effects of the outputs, the annual goal was successfully achieved. The primary focus of the indicators addressing habitat restoration and/or enhancement is to mitigate the impact caused by other resource uses. In FY 1996, the program focused on ecosystem sustainability by minimizing the impact of resource disturbance and by conserving opportunities for social use.

### NFS Workforce Enhancement

**Program Description and Relevance to Strategic Goal(s)**—This initiative is relevant to the strategic goal of “enhancing organizational effectiveness” by increasing the knowledge, skills, and abilities within the workforce that are necessary for implementing ecosystem management.

**Annual Goal #1**—Provide technical skills necessary to effectively implement the agency's mission and strategic agenda.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Complete NFS needs assessment to identify workforce mix necessary to effectively implement the agency's mission and strategic agenda	1 assessment	1
Develop and implement a NFS plan to provide needed skills that is consistent with agency reinvention/restructuring goals		
a) Staffing plan developed	a) 1	a) 1
b) Staffing plan implemented	b) 1	b) 0

### Annual Goal #2—Enhance workforce competencies in ecosystem management.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Implement NFS national framework of knowledge, skills, and abilities as well as training strategies in ecosystem management (person-years/fund)	1	1/
Develop and implement a NFS certification program by area of technical expertise (program)	1	2/

1/ No data until Training Integrated Personnel System (TIPS) is implemented in 1997.

2/ Draft completed.

**Outcome Analysis:** Goal 1 was partially achieved. The needs assessment was completed and staffing plans developed for each regional office based upon that region's specific needs. The staffing plans are being considered by each region as they finalize organizations based upon available funds and distribution of skills between regional office and forests.

Goal 2 was partially achieved. The national framework has been completed in draft form, and is being used to develop training strategies to meet strategic goals. At the present time, person-years and funds expended for ecosystem management training cannot be accurately determined. Time and funds expended will be available from the TIPS when it is implemented in 1997. A “Blueprint for Employee Development” is being developed to define the competencies required for technical and leadership positions as well as core competencies required of



all employees. Once competencies are defined, certification procedures can be developed to validate them. The goal to develop and implement a certification program in FY 1996 was not realistic. The process will take 3 or 4 years at the current rate.

### Recreation

**Program Description and Relevance to Strategic Goal(s)**—The Recreation Program Meaningful Measures Process (MMP) initiative is relevant to the strategic goal of “ensuring organizational effectiveness” by measuring the percent of recreation use and capacity offered to standard.

**Annual Goal**—Implement Meaningful Measures Process.

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Identify MMP standards and begin implementation	1/	1/

1/ Training of field units in MMP completed.

**Outcome Analysis:** The components of the annual goal planned for FY 1996 were successfully achieved. The MMP refinement and implementation at forest level continues while other components are intended to be completed in FY 1997-98 with FY 1999 being the first year of full implementation. Meaningful Measures for Quality Recreation Management 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 to prioritize work, assists in budget allocation, and sets the stage for effective monitoring of results. The concept uses and is closely linked with the Infrastructure corporate data system.

### LAW ENFORCEMENT AND INVESTIGATIONS (LE&I)

**Program Description and Relevance to Strategic Goal(s)**—This program is relevant to the strategic goal of “ensuring organizational effectiveness” by fulfilling its stewardship responsibilities on NFS lands.

**Annual Goal #1**—Implement national management and oversight in the investigation of civil and criminal activities and internal and Whistleblower complaints related to the NFS.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Develop and implement a program to address investigations not restricted to one locality 1/	1	0
Whistleblower and internal investigations: a) completed b) under active investigation	a) 2/ b) 2/	a) 96 b) 133
Develop an agreement to provide direction to line and LE&I on staff responsibilities (agreement)	1	1
All regions will submit monthly updates, from the case tracking system, of all cases being investigated	monthly report	3/

1/ Dropped due to higher priorities.

2/ Investigations based on complaints received throughout the year; not all regions complied.

3/ Partially accomplished.

**Outcome Analysis:** In general, the goal was successfully achieved. The oversight of investigations spanning the Nation was successfully implemented. Some regions had difficulty with the case tracking computer program, thus they couldn't provide the requested information in time for the FY 1996 report. This problem will be corrected in FY 1997. The case tracking system is considered to be an excellent tool to show how national oversight is being accomplished.

**Annual Goal #2**—Support national forest supervisors' requests to increase law enforcement officers in the field, emphasizing urban forests.

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Law Enforcement Officers hired on national forests (#)	485	466

**Outcome Analysis:** The planned indicator was not achieved, however, management efforts to achieve the goal will continue into FY 1997. This will require timely reprogramming of funding from benefiting programs.

**Annual Goal #3**—Integration of the LE&I organization within the Forest Service.



The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Implementation of planned actions: a) completed (#) b) in progress (#)	a) 1/ b) 1/	a) 10 b) 29
Realignment of all aspects of the new LE&I organization personnel actions completed (#) 2/	as needed	107
The LE&I organization complements agency reorganization by implementing the "contracting in" concept in personnel and fleet management	implement concept	not completed
Regional management reviews conducted (#) 2/	3	2

1/ Estimated at 39 after GPRA Plan was published.

2/ Not meaningful in assessing the goal status; will not be used in the future.

**Outcome Analysis:** Overall, the goal was successfully accomplished. A significant number of personnel actions have been completed to further define the LE&I organization. The concept of "contracting in" was not implemented due to excessive cost and improved regional support services to LE&I during FY 1996.

**Annual Goal #4**—Implementation of the initial test phase for the Law Enforcement Case Management System (LECMS) to meet the Uniform Crime Reporting requirements as mandated by Congress.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Test sites: a) chosen b) LECMS functional	a) 1/ b) 1/	ongoing
Produce/submit quality reports to the Federal Bureau of Investigation (FBI)	as needed	ongoing
Fulfill all appropriate requests for reports	as needed	ongoing

1/ As determined by feasibility study.

**Outcome Analysis:** The feasibility study, which was to be completed prior to the selection of test sites and reporting of information, took longer than expected. Thus, the goal was not accomplished in FY 1996 as intended. The LECMS project is continuing to be developed.

## ASSISTANCE TO STATE, PRIVATE, & OTHER FEDERAL LANDOWNERS

### Rural Community Assistance

**Program Description and Relevance to Strategic Goal(s)**—This program is relevant to the strategic goal of "providing multiple benefits within capabilities of ecosystems." The Forest Service works with rural residents, businesses, and local governments who seek to build vital communities as part of healthy ecosystems. Complex interconnections exist between natural resources and the economic, social, and environmental needs of rural communities. Via the agency's Rural Community Assistance programs, Forest Service employees and rural community leaders address challenges facing the communities.

**Annual Goal**—Meet or exceed the level of planned outputs based on previous Rural Community Assistance efforts to help rural community action teams or groups in developing and implementing their long-term goals and objectives. Continue to implement the President's Plan for the Pacific Northwest and northern California. (The goal was slightly modified after the FY 1996 GPRA Performance Plan was published.)

The following indicators were identified to assess progress toward achievement of this goal.

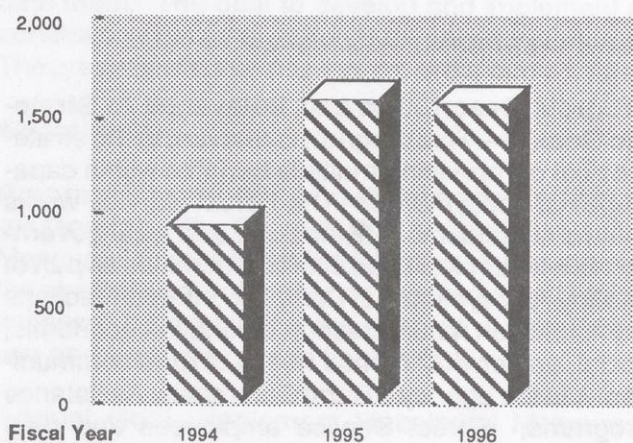
Performance Indicators:	Planned GPRA	Outputs
Rural communities assisted: a) total b) new 1/	a) 950 b) 25	a) 1,583 b) 230
Minority/Other communities assisted	100	168
Projects: a) completed b) ongoing	a) 350 b) 820	a) 493 b) 1,286
Communities Strategic Plans 2/ a) plans in progress b) completed plans	a) 50 b) 400	a) 105 b) 454

1/ Updated to 267 after the GPRA Plan was published.

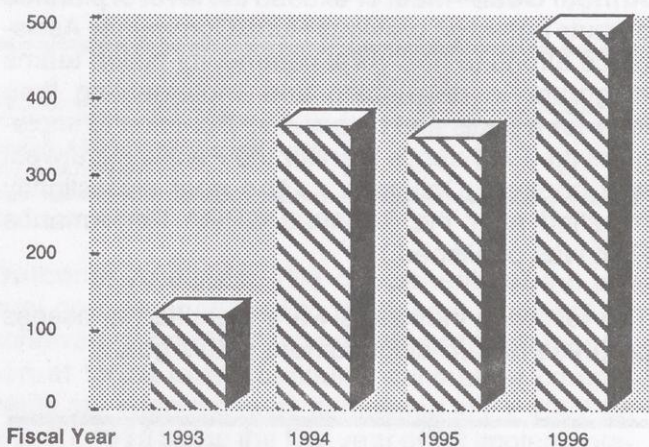
2/ New performance indicator.



GPRA Figure 7.  
Number of Rural Communities Assisted



GPRA Figure 8.  
Number of Projects Completed



**Outcome Analysis:** Based on the level of outputs, the goal was partially achieved. Outreach to new communities and funding for new projects was reduced from FY 1995 levels in order to direct limited resources toward communities already developing and implementing strategic plans. Due to the importance of strategic planning for the long-term success of rural communities, an additional indicator was added in FY 1996 to track the assistance the agency is providing for local action team planning.

New indicators are being developed to help track the progress of rural communities in managing change and becoming self-sufficient.

### Fire and Aviation Management

**Program Description and Relevance to Strategic Goal(s)**—This program area is relevant to the strategic goal of “restoring and protecting ecosystems” by increasing the use of prescribed fire on

NFS lands to maintain and restore the health of fire-dependent ecosystems, and in the development of collaborative and cooperative fire suppression programs to reduce fire loss and increase firefighter safety.

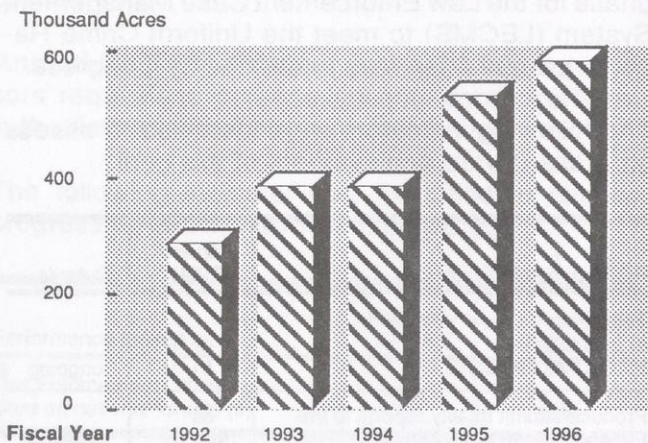
**Annual Goal #1**—To protect life, property, and natural resources from wildfire on the 191.6 million acres of NFS land and an additional 20 million acres of adjacent State and private land through fee or reciprocal protection agreements. Maintain a responsive and cost-effective program of wildfire presuppression and fuels management activity, commensurate with the threat to life and property, public values, and management objectives.

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Planned MAR	Output
Fuels management through prescribed fire or mechanical means (acres) 1/	550,000	574,568	599,482

1/ Also reported under vegetation management, page 2.

GPRA Figure 9.  
Fuels Management through Prescribed Fire or Mechanical Means



**Outcome Analysis:** The annual goal was achieved. The implementation of prescribed burn treatments emphasized ecosystem maintenance and restoration in fire-adapted ecosystems to achieve forest health and reduce the threat of wildfire on Federal and adjacent private lands. The program accomplishments reduced the threat of severe wildfire in certain key areas where private personnel, property, and resources at risk were identified.



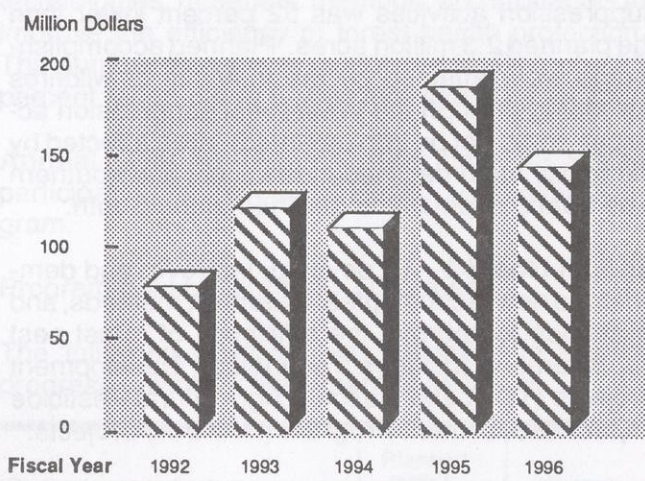
**Annual Goal #2**—To achieve national benefits by collaborating, cooperating, participating, and consulting with States on fire protection for non-Federal wildlands and other rural lands.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Acres protected (thousand) 1/	1,051	1,051
Property loaned to States for fire suppression (million\$)	115	145

1/ It was recognized that this indicator gives no indication of program effectiveness—it will be dropped as an output measure.

GPRA Figure 10.  
Property Loaned to the States



**Outcome Analysis:** The annual goal was successfully achieved. Effective and innovative use of excess property loaned to the States for wildland fire suppression was obtained through the close cooperation between the Forest Service and State foresters. The program continues to improve the local fire districts' capability to provide wildland fire protection in the wildland/urban interface. Improved fire capability at the local level effectively reduces the loss of life, property, and resources due to wildland fires.

### Forest Products, Conservation, and Recycling

**Program Description and Relevance to Strategic Goal(s)**—This program area is relevant to the strategic goal of "providing multiple benefits within the capabilities of ecosystems" by offering research-

based wood conservation and recycling technical assistance, and by expanding economic action programs to rural communities.

**Annual Goal**—Complete a minimum of 40 technical assists and/or applied studies in urban and community wood utilization and wood recycling technology; and 5 demonstrations of commercial applications of these technologies. Provide financial and technical assistance for a minimum of five educational and/or training workshops in wood recycling technologies.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Technical assists and/or applied studies in urban and community wood utilization, wood recycling technology	40	46
Commercial application demonstrations	5	11
Workshops/training in wood recycling technology conducted	5	5

**Outcome Analysis:** The goal was successfully achieved. Continued achievement at current levels will further the progress toward providing multiple benefits from direct results of increased utilization of forest products. Creating or adding economic value for previously undervalued tree species has a positive effect on protecting private land ecosystems. For FY 1997, the indicators will be modified to accurately reflect program outcomes toward achieving sustainable use of forests, promoting economic development and a quality environment.

### Wood in Transportation

**Program Description and Relevance to Strategic Goal(s)**—This program is relevant to the strategic goal of "providing multiple benefits within the capabilities of ecosystems." It improves rural transportation networks and demonstrates the commercial potential of using wood from underutilized and undervalued tree species for bridge and other transportation-related construction in rural communities.



**Annual Goal**—Within the context of the Wood in Transportation Program, complete 15 demonstrations of commercial applications for underutilized and/or local tree species. (Commercial value stimulates concern for management among private landowners.)

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Commercial applications for underutilized and/or local tree species demonstrated (#)	15	15

**Outcome Analysis:** The annual goal was achieved. Continued achievement at these program levels is consistent with the strategic goal. Emphasis is placed on adding economic value to underutilized tree species. For FY 1997, indicators reflecting progress toward revitalizing communities will replace the current indicator to more accurately reflect program outcomes.

### Forest Health Protection

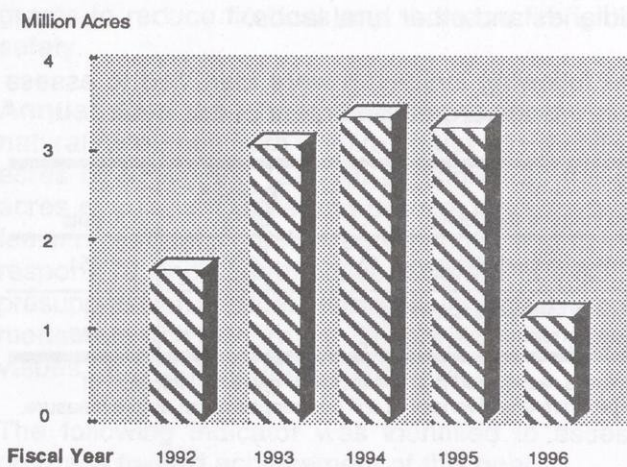
**Program Description and Relevance to Strategic Goal(s)**—This program area is relevant to the strategic goal of “restoring and protecting ecosystems” by assessing the influence of insects and diseases on forest health.

**Annual Goal #1**—To conduct insect and disease (I&D) prevention and suppression activities on Federal lands, and provide technical and financial assistance to non-Federal land managers.

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
I&D prevention and suppression treatment activities (million acres)	2.3	1.2

GPRA Figure 11.  
Prevention and Suppression Treatment Activities  
(Insect and Disease)



**Outcome Analysis:** The output for prevention and suppression activities was 52 percent lower than the planned 2.3 million acres. Planned accomplishments were affected by the intensity of wildfires spreading through the West (pest suppression activities could not be implemented); area affected by the gypsy moth declined in the East; and southern pine beetle populations declined in the South.

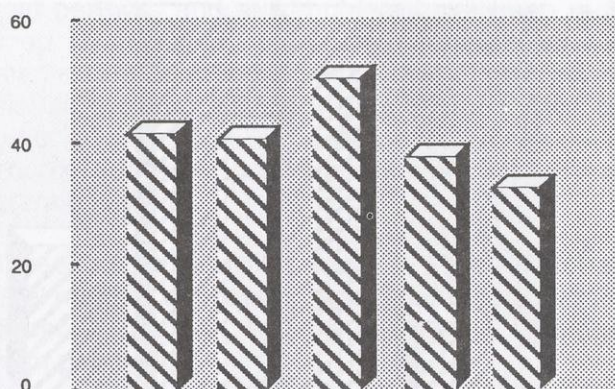
**Annual Goal #2**—To develop, improve, and demonstrate new technologies, materials, methods, and strategies to improve the efficiency of forest pest management: includes Technology Development Projects (TDP) and National Agricultural Pesticide Impact Assessment Program (NAPIAP) projects.

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Number of projects in progress	42	33



GPRA Figure 12.

**Number of Projects in Progress  
(Insect and Disease)**

Fiscal Year 1992 1993 1994 1995 1996

**Outcome Analysis:** The annual program goal was successfully accomplished. The program will continue to develop, improve, and demonstrate new technologies, materials, methods, and strategies to improve the efficiency of forest health protection. The number of projects completed is within the 25 percent range of the 5-year average (42 projects).

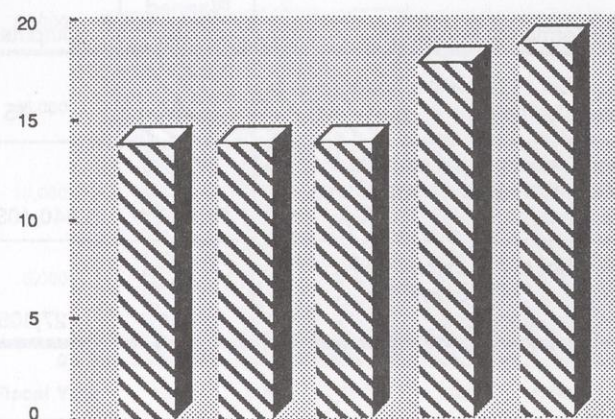
**Annual Goal #3**—For FY 1996 have 18 States participating in the Forest Health Monitoring Program.

Program goal benchmark: 50 States

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Number of States participating	18	19

GPRA Figure 13.

**Number of States Participating**

Fiscal Year 1992 1993 1994 1995 1996

**Outcome Analysis:** The goal was successfully achieved. Forty percent of the forested area of the lower 48 States was monitored for forest health. This program will continue to identify and test environmental indicators, and provide data to evaluate the health of the Nation's forests.

**Annual Goal #4**—To conduct detection surveys and evaluations of insects, diseases, and abiotic factors, and provide the information along with recommendations to the affected land managers.

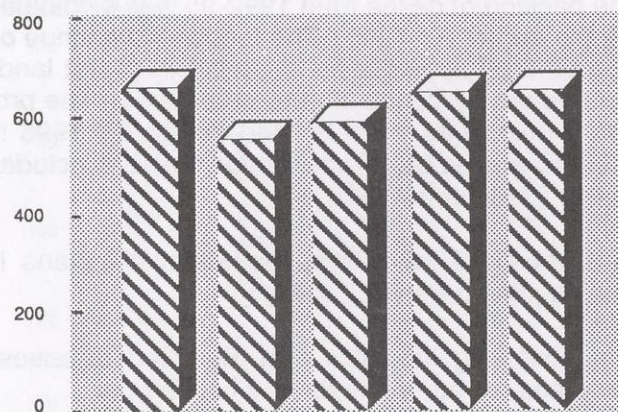
The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Surveys and evaluations conducted (million acres)	622	661

GPRA Figure 14.

**Surveys and Evaluations Conducted**

Million Acres



Fiscal Year 1992 1993 1994 1995 1996

**Outcome Analysis:** The goal for the program was successfully achieved. This program provided insect and disease management information to all Federal land managers, and cooperating States and landowners for their decisions and plans. Detection surveys and evaluations of insects, diseases, and abiotic factors were conducted on forested lands in all ownerships. The number of acres accomplished is 4 percent higher than the 5-year average (1991-95) of 635 million acres.



## Legacy

**Program Description and Relevance to Strategic Goal(s)**—This program area is relevant to the strategic goal of “restoring and protecting ecosystems” by assessing forest resources and acting to conserve forested land threatened by conversion to nonforest uses.

**Annual Goal #1**—Complete Legacy land acquisition cases and eliminate backlog (1992-95).

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Land acquisition cases:		
a) cases closed	a) 24	a) 9
b) land acquired (acres)	b) 20,000	b) 10,445

**Outcome Analysis:** The goal was partially achieved. The focus was on completing acquisition cases to reduce the backlog. This was achieved as the backlog of cases from 1992-95 was eliminated by the end of FY 1996. The focus will continue on completing acquisitions to conserve forest lands threatened by conversion to other uses. The program guidelines were revised during FY 1996 to incorporate the State grant option that was included in the 1996 Farm Bill.

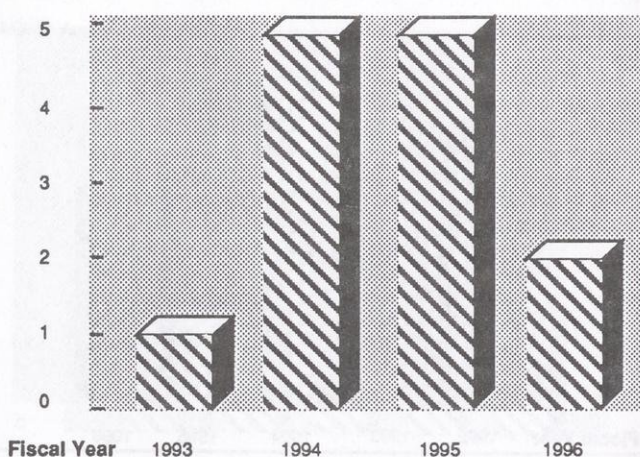
**Annual Goal #2**—Complete statewide plans in States joining Forest Legacy.

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Number of statewide plans completed	3-6	2

GPRA Figure 15.

### Number of Statewide Plans Completed



**Outcome Analysis:** This goal was partially met; only two States joining the Forest Legacy Program completed plans in FY 1996. Efforts will continue to increase the number of States completing statewide plans under the Legacy program.

## Natural Resources Conservation Education

**Program Description and Relevance to Strategic Goal(s)**—This program area is relevant to the strategic goal of “ensuring organizational effectiveness” by enhancing citizen understanding of ecosystem management and utilizing a more collaborative approach.

**Annual Goal**—Create/maintain State conservation education plans that further overall environmental education goals of each State.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Number of State-level conservation plans completed	45	45
Number of people educated directly on ecosystems/natural resources	20,000	5,640,403
Number of educators trained to teach about ecosystems/natural resources	10,000	27,405



**Outcome Analysis:** The goal was exceeded. More people were reached than planned for because infrastructure is in place as a result of State plans, and partners and stakeholders have been mobilized to strengthen outreach. Program achievements rely upon significant financial and professional input from educators, the private sector, and other partnerships. The demand for natural resource education programs exceeds current program capability.

Three indicators will be added in FY 1997 to track total number of projects reported, the total number of people reached, and the total dollars leveraged from partners.

### Stewardship

**Program Description and Relevance to Strategic Goal(s)**—This program area is relevant to the strategic goal of “restoring deteriorated ecosystems” by providing technical assistance to private landowners in the application of the Best Management Practices (BMP) to private land through stewardship.

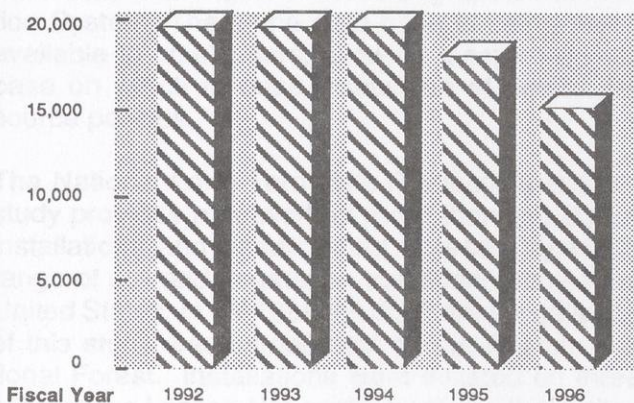
**Annual Goal #1**—Enroll as many or more landowners in FY 1996 as were enrolled in FY 1995.

The following indicator was identified to assess progress toward achievement of this goal.

Performance Indicator:	Planned GPRA	Output
Number of landowners enrolled in the Stewardship Program	25,300	15,303

GPRA Figure 16.

Number of Landowners Enrolled in the Stewardship Program



**Outcome Analysis:** The goal was not met for FY 1996. The actual accomplishment of 15,303 landowners was less than planned and can be attributed to a decreased budget.

**Annual Goal #2**—In FY 1996, meet or exceed the number of acres newly enrolled in the Forest Stewardship Program and associated Stewardship Incentives Program (SIP) practices in FY 1995.

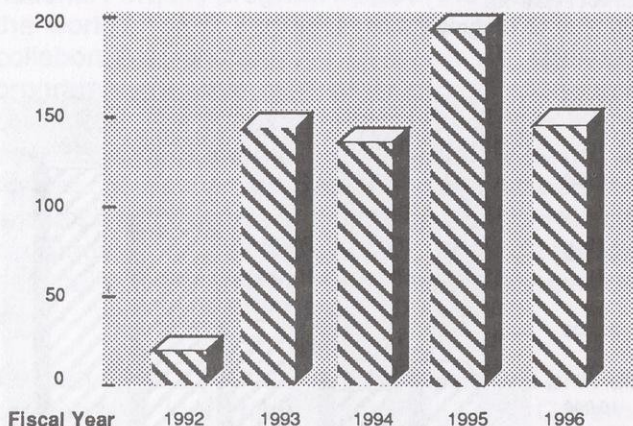
The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
NIPF land involved in multi-resource stewardship efforts:		
a) mgmt. plans (acres)	a) 4,400,000	a) 2,084,205
b) SIP treated (acres)	b) 300,000	b) 151,308
Treatment cost (\$\$/acre)		
a) planning	a) 3.18	a) 6.72
b) SIP treatment	b) 15.00	b) 29.74

GPRA Figure 17.

Stewardship Incentives Program

Thousand Acres



**Outcome Analysis:** The goal was partially met. Planned outputs were based on significantly higher budgets than were received. Accomplishments reflect work achieved with actual appropriations.

### Urban and Community Forestry

**Program Description and Relevance to Strategic Goal(s)**—This program area is relevant to the strategic goal of “restoring and protecting ecosystems” by increasing financial and technical assistance to build local capacities to improve urban environments and enhance community liveability and vitality.



**Annual Goal**—In FY 1996, the goal of the Urban and Community Forestry Program (U&CF) is to provide technical and financial assistance to communities equal to or greater (provided funding level is greater than FY 1995) than the level of support provided in FY 1995.

The following indicators were identified to assess progress toward achievement of this goal.

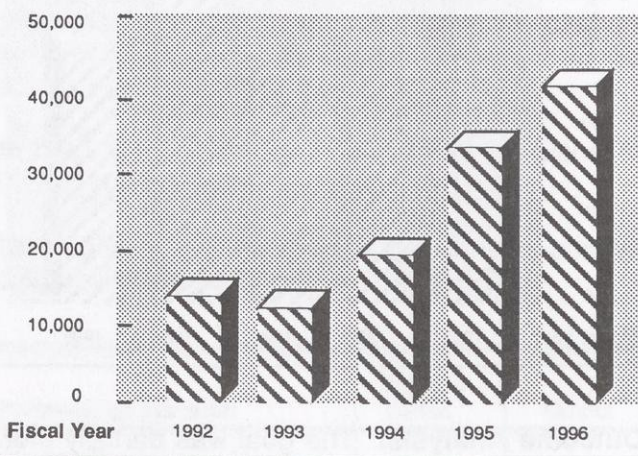
Performance Indicators:	Planned GPRA	Outputs
Technical assists provided	33,839	41,705
Communities with plans	1,400	1/
Communities assisted	2/	8,079
Federal grant dollars	2/	\$7.4 million
Matching community funds	2/	\$12.4 million

1/ Communities with plans is an element of the capacity of communities to carry out U&CF programs and is not separately identified in accomplishment reporting.

2/ New indicators.

GPRA Figure 18.

**Number of Technical Assistance Provided**



**Outcome Analysis:** The goal was successfully achieved. Building local program capacity and engaging the public in volunteer activities remains the focus of U&CF program achievements. To better measure the strength of the program, three new indicators were added after the FY 1996 GPRA Performance Plan was published. Trend data indicating increased outputs in most of the indicators is a demonstration of the increased capacity of the overall program to deliver services. Matching private sector contributions increased 14 percent over the previous year, demonstrating the commitment the public has to this program.

In FY 1997, the annual performance goal will be modified to focus on program continuity, planning, local budget allowances, and public awareness and support.

## CONDUCTING SCIENTIFIC RESEARCH

**Program Description and Relevance to Strategic Goal(s)**—Forest Service Research provides scientific information and new technologies needed to manage and sustain the natural resources of 1.6 billion acres of public and private forests and rangelands. Research directly supports the strategic goals of 1) "restoring and protecting ecosystems," and 2) "providing multiple benefits for people within the capabilities of ecosystems." In the strategic goal, "ensuring organizational effectiveness," research supports the needs of inventory and monitoring.

**Annual Goal**—Develop adaptive management strategies that will provide both 1) short-term technical assistance and knowledge, and 2) tools for implementing a long-term vision of ecosystem management.



The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Implement FY 1996 phase of the President's Plan for the Pacific Northwest (PNW)	implement	accomplished
Inventory and monitoring: a) Forest Inventory (MM acres) b) Status & Trends Reports dev.	a) 42 b) 90	a) 44 b) 90
Conservation assessments: a) Sierra Nevada assessment complete b) Interior Columbia River Basin assessment nearing completion	a) 1 b) 1	a) 1 b) 1
Long-term site productivity studies established	3	1 completed; 6 initiated
Establish forest health: rangeland exotic weeds research program	establish program	established

**Outcome Analysis:** Overall, the annual goal was successfully achieved.

Major accomplishments of the President's Plan for the Pacific Northwest include development of data bases for analyzing effects of land-use activities, and development of models that relate performance of biophysical systems to land management activities.

The Sierra Nevada Ecosystem Project (SNEP) Report to Congress was completed and delivered on June 7, 1996. The SNEP report is available as background information for development of land management plans and to aid in establishing research priorities.

Interior Columbia River Basin ecosystem management data is available in the Geographic Information System. The same data base is being made available to other users, allowing a common data base on which to base discussion of natural resource policies.

The National Long-Term Site Productivity (LTSP) study provides a network of more than two dozen installations, and research data representing a wide range of soil and vegetation conditions across the United States. In FY 1996, an additional installation of this study was established on the Plumas National Forest. Installations were initiated on three sites on the Lassen National Forest and three sites on the Davy Crockett National Forest.

The agency has taken the leadership role in USDA by determining that the United States could respond to 10 of the 67 indicators identified in the 7 criteria of the Santiago Agreement. A milestone in the Santiago Agreement this year was the completion of a First Approximation Report on Criteria and Indicators to be presented at the World Forest Congress in Turkey.

A research program on rangeland exotic weeds was established at Boseman, Montana.

These accomplishments are relevant to the Forest Service commitment of providing scientific information and new technologies needed to manage and sustain the natural resources at both national and international levels—there is a clear link between them and the agency's strategic goals.

## INTERNATIONAL FORESTRY COOPERATION

**Program Description and Relevance to Strategic Goal(s)**—International forestry activities are relevant to the strategic goals of 1) "restoring and protecting ecosystems," and 2) "ensuring organizational effectiveness." The Forest Service's International Forestry program helps in the protection of the world's forest ecosystems through facilitating collaborative relationships between the agency's programmatic areas with other organizations and countries. The Forest Service participates in the development of international bilateral agreements fostering forest conservation through joint research and assistance on specific projects of benefit to both countries. This work has direct application to trade, national security, and domestic forest management work.

**Annual Goal #1**—The Forest Service will provide professional leadership within the U.S. Government for the development and institutionalization of policies that advance sustainable forest management in the United States and in key partner countries.



The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Agreement on criteria and indicators for sustainable forest management	advance agreement	ongoing
Integrate sustainable forest management principles into RPA to facilitate interaction with other countries	advance integration	accomplished
Acceptance by key States and private organizations toward implementing sustainable forest management and measuring results on non-Federal lands	advance initiative	accomplished
Upward trend in person-years of policy assistance	9	11

**Outcome Analysis:** Overall, the goal was successfully achieved. The agency was very active in dealing with issues such as: measuring country progress in sustainable forest management, international trade issues, Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES), implementation of the Convention on Biodiversity, and certification of internationally traded timber. These international discussions are shaping modern concepts of forest management. Working closely with the State Department, the Forest Service has been successful in incorporating U.S. perspectives into very important documents and agreements related to the items listed above.

**Annual Goal #2**—Advance sustainable forest management in Brazil, Indonesia, Mexico, and Russia; expand the Sister Forest program to five new partnerships; and expand the role of the International Institute of Tropical Forestry (IITF) and Institute of Pacific Islands Forestry (IPIF) in planning, coordinating, implementing, and evaluating the international cooperation program of the agency.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Better forest management practices in Indonesia; increased participation in the MOU and NAFC working groups in Mexico; and better forest mgmt. practices in the pilot project areas in Siberia 1/	improve forest mgmt. practices	ongoing
Agreements are signed and initial exchanges accomplished for five new Sister Forest partnerships (agreements)	5	program de-emphasized by Congress
IITF and IPIF are involved in FY 96 program planning for IF project work in LAC and AP, respectively; new LAC tropical forest information system is initiated at IITF 2/	establish information system	information system not funded
Person-years of training; person-years of technical assistance; person-years of program development; number of international partnerships; and number of communications accomplished	trend in statistical indicators	see Table A below

1/ NACF = North American Forestry Commission.

2/ LAC = Latin American Countries, AP = Asian Pacific.

Table A.

Fiscal Year	1995	1996
Training received by others 1/	204	74
Technical assist received by others 1/	30	25
Policy assistance 1/	9	11
Cooperative research 1/	35	80
Program development 1/	9	20
Number of communications 2/	900	191
Partnerships	240	664

1/ Person-years.

2/ Publications and other items.

**Outcome Analysis:** The goals included in the 1996 GPRA Performance Plan addressed Brazilian deforestation, Sister Forest exchanges, tropical forestry data bases, and greater international assistance and training. Much of this has been set aside with the congressional deemphasis of this work. Forest Service participation in critical forest management issues, however, continues. Progress has been made working with the Chinese Government on understanding how to control the Hemlock Woolley Adelgid and the Oracella Mealy Bug that threaten U.S. forests. Russian work to protect North American forests from the Asian Gypsy Moth is also



resulting in improved trade standards. Work with the Brazilian Government on fire protection and remote sensing is resulting in improved inventories of forest resources important to U.S. furniture manufacturers.

Twelve Governments, including the United States, have agreed to the use of a set of internationally developed criteria and indicators (C&I) to define and measure national progress in sustainable forest management. In addition, the RPA Program Assessment currently reflects these new internationally developed criteria of sustainable forest management. The United States is now engaged in developing a "First Approximation Report" on the nations' progress toward reaching sustainable forest management using the C&I. A by-product of this work has been the greatly enhanced participation of the State foresters and industry on international issues and their domestic implications to U.S. competitiveness in global markets.

## ADDRESSING THE HUMAN DIMENSION

### Civil Rights and Personnel Management

**Program Description and Relevance to Strategic Goal(s)**—The Civil Rights and Personnel Management programs are relevant to the strategic goal of "ensuring organizational effectiveness" by accelerating efforts to achieve a multicultural organization; by enhancing the work environment; and by training and developing the employees.

**Annual Goal #1**—The Forest Service makes progress in building an innovative, creative, people-oriented work environment as evidenced through the results of the Continuous Improvement Process (CIP) survey.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
CIP survey results show increase in employee satisfaction with the working environment	improve when compared to 1995 survey results	1/
Favorable responses to CIP dimension on employee work environment	improve when compared to 1995 survey results	1/

1/ No survey conducted in FY 1995. The FY 1996 CIP survey results analysis will be completed in FY 1997.

**Annual Goal #2**—The Forest Service provides leadership and direction in becoming a multicultural organization in accordance with the vision set forth in "Toward a Multicultural Organization" and related task force reports and recommendations.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
The proportion of employees in under-represented groups increases (%)	(see Table A)	Table A, Figure 19.
Leadership positions occupied by women or minority employees and people with disabilities increases during FY 1996	(see Table B)	Table B
Favorable responses to CIP dimension on multicultural organization	increase when compared to FY 1995 survey	1/

1/ No survey conducted in FY 1995. The FY 1996 CIP survey analysis will be completed in FY 1997.

Table A. 1/

Fiscal Year	1992	1993	1994	1995	1996
Nonminority men	52.0%	51.7%	50.9%	51.0%	51.4%
Nonminority women	33.0%	32.8%	33.2%	32.9%	32.7%
Minority men	8.0%	8.7%	8.9%	9.3%	9.2%
Minority women	7.0%	6.8%	7.0%	6.9%	6.8%
Permanent work force	36,137	34,942	31,536	31,135	30,519

Source: USDA DN-714 Report; includes Cooperative Education Students and other seasonal appointments.

1/ Persons with disabilities for FY 1996 = 7.8%

GPRA Figure 19.

#### Composition of the Agency's Work Force

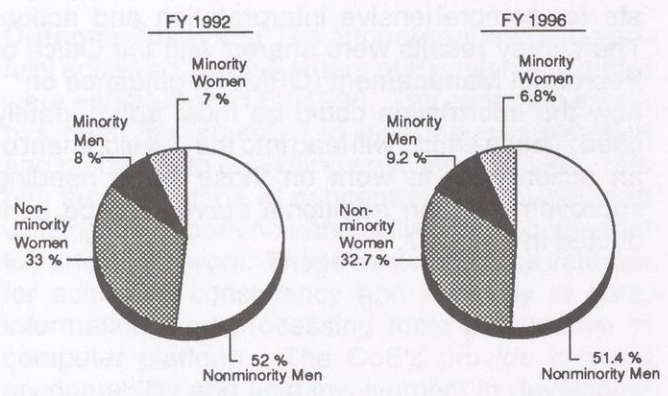




Table B. GS-14 and above positions, including SES 1/

Race/Nat. Origin	1993	1994	1995	1996
American Indian/Alaskan Nat.	1.4%	1.5%	1.4%	1.5%
Asian/Pacific Islander	1.1%	0.9%	1.1%	1.1%
African American	2.8%	3.3%	2.9%	3.1%
Hispanic	2.7%	3.0%	3.0%	3.4%
White Female	11.6%	12.4%	15.8%	15.0%

1/ Persons with disabilities for FY 1996 =1.8%.

**Annual Goal #3**—The Forest Service employees receive adequate training to effectively carry out the Forest Service mission.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Favorable responses to the CIP dimension on employee development	improve when compared to FY 1995	1/
Training/dollars spent--increase of hours/dollar increase when compared to FY 1995 cost	more training hours/dollars	information not collected

1/ No CIP survey conducted in FY 1995. The FY 1996 survey results analysis will be completed in FY 1997.

**Outcome Analysis:** The final FY 1996 CIP survey result analysis will not be available until mid-FY 1997. Since the planned FY 1995 CIP survey was not conducted, it is not possible to analyze trend data on responses to the survey. Preliminary analysis of the FY 1996 CIP survey provided minimum variation in the responses, which was not appropriate for comprehensive interpretation and action. The survey results were shared with the Office of Personnel Management (OPM) for guidance on how the information could be most appropriately used. These efforts will lead into the development of an action plan to work on those items needing improvement. An additional survey will be conducted in FY 1997.

No significant advance in workforce diversity was accomplished in FY 1996. Efforts to achieve a diversified, multicultural organization will continue in accordance with the vision set forth in the 1991 "Toward a Multicultural Organization" report and the CIP survey results.

### Information Systems & Technology (IS&T)

**Program Description and Relevance to Strategic Goal(s)**—The Information Systems and Technology support program is relevant to the strategic goal of "enhancing organizational effectiveness" by implementing an integrated information and technology infrastructure to support the agency's programs and activities.

**Annual Goal #1**—Conclusion of Project 615 Pilot Year (Strategy 6) and Development of Data and Applications Migration Plan (Strategy 4).

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Progress on Project 615 Pilot Year Assessment Report	report	completed
Migration of applications systems to new technology is on schedule according to Data and Applications Migration Plans	migrate applications	ongoing
Number of migrated systems	1/	ongoing

1/ The number of systems migrated will be reported when fully operational.

**Outcome Analysis:** Based on the actual accomplishments, the annual goal was successfully achieved. The migration to the new IBM environment is a 2-year effort. During the Project 615 Pilot Year, the agency focused on the new platform and laying the groundwork needed to migrate the applications during the second phase in FY 1997.



The Project 615 Pilot Year Assessment Report has been completed and submitted to Congress for their approval to proceed. The Pilot Phase accomplished all of its objectives and some outcomes are:

- The three IBM system configurations tested were successful.
- The IBM solution efficiently and effectively meets the corporate business requirements for land management analyses and planning.
- Interagency data-sharing capabilities have been greatly enhanced through improved telecommunications and standards-based software.
- Risks associated with deploying this large-scale open systems technology have been substantially reduced by completing the Pilot Phase.
- All of the groundwork toward migrating applications was completed.

#### **Annual Goal #2—Connecting to the Information Highway for public access.**

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Capabilities for public access to the agency's natural resources information sources including spatial data	capability in place	accomplished
On-line capability by the public, other agencies, and agency partners to Forest Service natural resources information	on-line capability	1/
Compliance with Executive Order 12906	comply	1/

1/ The planned outputs for these indicators were dependant upon having the IBM hardware in place. In compliance with the USDA moratorium, the Forest Service did not place any new orders for Project 615 technology for FY 1996.

**Outcome Analysis:** The FS Home Page and information locators such as the agency Government Information Locator Service provide effective on-line communication tools for the public, other agencies, partners, and with internal customers. On-line capability for spatial data access and full compliance with Executive Order 12906 is expected to be achieved within the next 2 years. The agency's Geographic Information Systems (GIS) capability plays a major role in this endeavor. This capability permits public access to Forest Service natural resource information and enables the agency to comply with Executive Order 12906—to be a part of the National Information Infrastructure and a supplier and customer to the National Resource Information Clearinghouse.

#### **Annual Goal #3—Establish Centers of Excellence.**

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Standardized system's mgmt. procedures implemented	implement system	implemented
Process for evaluating all applications for performance and redundancy implemented	implement process	ongoing
Standard Forest Service GIS user interface implemented and maintained	implement interface	ongoing
All applications, core tables, and metadata developed on the new technology platforms maintained in a national repository	maintain	ongoing

**Outcome Analysis:** The annual goal was successfully achieved; three Centers of Excellence (CoE's) were established in FY 1996. The centers concept has been implemented to give focused direction and guidance to achieving specialized tasks. This has the advantage of concentrating activities and utilizing the experience and skills of field personnel to perform the work. These centers are the vehicles for achieving consistency and reliability in data, information, and processing tools irrespective of computer platform. The CoE's provide focused accountability and field involvement in developing national products and standards. CoE's are in line with the spirit of reinventing Government. A description of the three centers implemented follows:



- **Geographic Information Systems Center of Excellence** : The Intermountain Region has been established as a center for agency-wide GIS support. Tasks include spatial filing structure, core data prototypes, standard products, data management, and technology transfer. A National GIS Implementation Strategy is also being developed. The center is the focal point for coordinating GIS activities for the agency in partnership and collaboration with other Federal, State, and local entities.
- **Information Management Repository (IMR) Center of Excellence**: This center supports agency-wide management for all information assets and related applications developed for the Forest Service's client/server technology base. The center assists program managers in implementing and maintaining applications that form the integrated information environment. The center also provides an enhanced systems development environment that includes identification and control of Forest Service software throughout its lifecycle.
- **Open Systems Environment (OSE) Center of Excellence**: This center is a focal point for all Forest Service automatic data processing technology infrastructure and systems distribution activities. The center's activities result in these products and outcomes:
  - A system manager's guide that provides uniform agency-wide systems operations management of current and emerging technologies.
  - A guide for uniform development and use of the graphical user interfaces for the client/server platform.
  - Training of systems managers and application developers.
  - The site testing of proposed system upgrades and solutions, and evaluation of the viability and utility of commercial software to meet Forest Service business requirements
  - The testing and evaluation of all Forest Service national software applications prior to their distribution.

**Annual Goal #4**—Development of a prototype for integrated natural resources inventory.

This above goal was modified to "Development of a natural resource information strategy and subsequent implementation plan" after the FY 1996 GPRA Performance Plan was published.

The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Establishment of a prototype national natural resources inventory database	establish prototype	completed
Develop natural resource information strategy project 1/	develop strategy project	completed
Establishment of a Center of Excellence for the Geographic Information Systems (GIS)	1	1

1/ New indicator.

**Outcome Analysis:** The goal was successfully achieved. The Natural Resource Information Strategy project was completed and several data base prototypes were developed. One is a Common Survey Data Structure (CSDS) for storing and managing field survey inventory data. Another is a joint venture between the Forest Service and the Natural Resources Conservation Service (NRCS) to coordinate strategic resource inventories for both public and private lands.

The Intermountain Region was established as a Center of Excellence for agency-wide Geographic Information Systems support (see outcome analysis, goal #3, page 22).

**Annual Goal #5**—Create integrated applications and data bases for Forest Service business systems.



The following indicators were identified to assess progress toward achievement of this goal.

Performance Indicators:	Planned GPRA	Outputs
Applications and data bases for business functions are created through the use of the Forest Service Standard Methodology	create applications & data bases	ongoing
Applications and data bases are fully integrated with related systems	integrate related systems	ongoing
New systems are connected to internal and appropriate external systems (e.g., NFC systems)	connect new systems	ongoing

**Outcome Analysis:** Through Forest Service direction and efforts such as the Information Management Coordination Group, applications and data bases are being created through the use of the Forest Service Standard Methodology.

A major agency goal is to integrate natural resources information. Progress has been achieved in three areas 1) the establishment of an Ecosystem Management (EM) Corporate Team to provide national leadership to manage resource information investments; 2) the development of EM business, data, and application models as part of an emerging "enterprise information architecture"; and 3) the chartering of a national EM Information Issues Team to coordinate the development and migration of natural resource information system components.

### ***Fiscal and Accounting Services***

**Program Description and Relevance to Strategic Goal(s)**—The Excellence in Financial Management, and the Fiscal and Accounting Services support programs are relevant to the strategic goal of "ensuring organizational effectiveness" by focusing on results, accountability, and customer service.

**Annual Goal #1**—Assure that quality financial information is available in a timely and user-friendly manner and is integrated into the agency decisionmaking process.

**Performance Indicators**—The following indicators provided the basis for monitoring and evaluating improvement on the financial statements, completion and analysis of National Finance Center (NFC) systems, and real property; and training needs analysis was undertaken.

1) Accomplishment of actions established in the 5-year CFO plan to improve financial systems on schedule.

2) Progress on improving the credibility and reliability of financial information as measured by the results of the financial statement audit.

3) Actions taken to change or expand regulations, legal and administrative, and financial authorities resulting from Forest Service program area emphasis changes, and reinvention, streamlining, and consolidation efforts.

4) Financial information is routinely used in resource management decisionmaking as demonstrated by implementation of least cost alternate to meet resource prescription.

5) Budget decisionmaking process is driven by timely and accurate financial and resource information.

6) OIG has no material weaknesses noted in financial report and issues a "favorable" opinion.

**Outcome Analysis:** The annual goal was partially accomplished. In 1996, financial management became a focus area by top agency officials. The following items were undertaken to improve the OIG opinion on future financial statements:

Ratings in financial performance were developed for each region, station, and the Washington Office. These were used in the annual performance rating of the Senior Executive Service (SES) officers and specific standards were added to SES performance elements covering financial management for FY 1997.

A Financial Health Task Force was established to improve the OIG financial audit opinion. This task force is an interagency effort including representatives from the OIG, Office of the Chief Financial Officer, and the Forest Service to develop recommendations and actions needed to improve financial health. The work of the task force began in FY 1996 and continued into FY 1997.



**Annual Goal #2**—Achieve an organizational culture where leadership, responsibility, and accountability for results are shared, communication is open, and there is a focus on the customer.

**Performance Indicators**—The following indicators provide the basis for the development and publication of the "Reinvention Plan of the Forest Service: The Changes Begin"; submission of the Forest Service/Natural Resources Conservation Service Administrative Consolidation Report to Congress; and the agency streamlining plan.

- 1) Diverse views and perspectives are included in decisionmaking.
- 2) Accountability based on shared leadership and customer focus.
- 3) "Improving Communications and Working Relationships" recommendations are being implemented.
- 4) Ethics/conduct standards well understood by all, and there is a declining trend in the number of cases of unethical behavior.
- 5) Major issues and initiatives are addressed by leadership at all levels in an integrated, strategic, results-oriented manner.
- 6) Specific reinvention decisions are implemented as scheduled.
- 7) Specific FS/NRCS administrative consolidation decisions are implemented as scheduled.
- 8) Specific streamlining decisions are implemented as scheduled.
- 9) Can demonstrate that ecosystem management is accomplished at least cost for resource prescription.

**Outcome Analysis:** The goal was partially achieved. Actions were identified to administratively merge the Southern and Southeastern Research Stations into one station. An automated travel voucher system was developed, which will be implemented in FY 1997.



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Table 1—Summary of National Forest System accomplishments compared to funded output levels and 5-year average--fiscal year 1996

Resource area	Activity	Units 1/	1996		Percent of funded	1992-96 average accomplishment	1996 as percent of 5-year average
			Funded	Accomplished 2/			
Resource							
Recreation	Visitor use	MM RVD's	341.2	341.2	100.0	320.0	107
		MM Visits	859.3	859.3			
Wilderness	Management	MM acres	34.7	34.7	100.0	34.6	100
Wildlife & fish	Habitat restored/enhanced						
	Appropriated funds	M acres	157.7	166.6	105.6	199.6	83
	K-V funds 3/	M acres	0.0	168.5	NA	204.7	82
	Habitat improvement						
	Appropriated funds	Structures	4,112.0	5,689.3	138.4	13,488.6	42
	K-V funds	Structures	0.0	25,288.0	NA	22,737.6	111
	Habitat restored/enhanced 4/						
	Appropriated funds	Miles	1,486.0	1,881.5	126.6	NA	NA
	K-V funds	Miles	0.0	488.9	NA	NA	NA
Range	Forage improvement						
	Appropriated funds	M acres	29.3	41.7	142.3	53.7	78
	K-V funds	M acres		8.3			
	Forage improvement						
	Appropriated funds	Structures	1,148.0	2,144.5	186.8	2,281.4	542
	K-V funds	Structures	0.0	271.0	NA	395.4	69
Timber	Sales offering	B bd. ft.	4.5	4.0	88.9	4.2	95
	Reforestation 5/						
	Appropriated funds	M acres	86.0	129.9	151.0	146.4	89
	K-V funds	M acres	200.5	227.6	NA	275.9	82
	Timber stand improvement						
	Appropriated funds	M acres	107.8	130.4	121.0	148.9	88
	K-V funds	M acres	116.3	128.4	NA	147.9	87
Soil & water	Resource improvements						
	Appropriated funds	M acres	16.8	25.4	151.2	27.2	93
	K-V funds	M acres	0.0	9.1	NA	9.9	92
	Soil inventory	M acres	7,535.2	7,099.3	94.2	6,934.1	102
Minerals	Bonded non-energy operations 4/	Operations processed	1,257.0	1,744.0	138.7	NA	NA
	Energy operations 4/	Operations processed	394.0	493.0	125.1	NA	NA

See footnotes at end of table.



**Table 1—Summary of National Forest System accomplishments compared to funded output levels and 5-year average--fiscal year 1996--**  
Continued

Resource area	Activity	Units 1/	1996			1992-96 average accomplishment	1996 as percent of 5-year average
			Funded	Accomplished 2/	Percent of funded		
Support	Trail construction/reconstruction	Miles	997.4	1,695.8	170.0	1,980.0	86
	Road construction						
	Appropriated funds						
	Construction	Miles	NA	16.7	NA	42.1	40
	Reconstruction	Miles	NA	486.7	NA	489.6	99
	Purchaser credit						
	Construction 6/	Miles	NA	446.2	NA	647.5	69
	Reconstruction 6/	Miles	NA	2,366.7	NA	2,124.4	111
	Fuel management						
	Appropriated funds	M acres	574.6	599.5	104.3	438.7	137
	Brush disposal funds	M acres	153.0	165.8	108.4	225.6	73
	Land acquired						
	Purchase and donation	M acres	29.2	56.3	192.8	97.8	58
	Exchanges	M acres	34.3	65.8	191.8	78.4	84
	Landline location	Miles	864.0	1,424.0	164.8	2,665.6	53

1/ M = thousand, MM = million, B = billion, RVD = recreation visitor day.

2/ Does not include accomplishments from contributed funding sources.

3/ K-V = Knutson Vandenberg Act.

4/ New indicator in FY 1995. No data available for 5-year average.

5/ Includes natural regeneration without site preparation.

6/ Includes miles turned back to the Forest Service for construction or reconstruction (purchaser election program).



62 Table 2--National Forest System funding--fiscal year 1996 compared to long-term program costs

	1996 Actual 1/	2005 RPA 2/	Percent of 1996 Actual to 2005 RPA
	1,000 constant 1996 dollars		
Ecosystem Planning, Inventory, and Monitoring 3/	130,088	217,095	60
Minerals and geology management	35,017	42,572	82
Real estate management	43,047	NA	NA
Landline location	14,006	NA	NA
Maintenance of facilities	23,008	38,971	59
Law enforcement operations 4/	59,637	75,613	79
Forest road maintenance	81,019	133,434	61
Recreation use	211,151	NA	NA
Timber sales management	188,641	732,934 5/	26
Forestland vegetation management	51,768 6/	NA	NA
Wildlife and fisheries habitat management	85,561	232,451	37
Rangeland management	27,012	55,703	NA
Range betterment fund	4,647	NA	NA
Soil, water and air management	42,014	142,436	29
Subtotal	866,528	1,454,113	60
General Administration (subtotal)	263,698	317,065	83
Preparedness and fire use	295,315	398,184 7/	74
Suppression operations	90,170	NA	NA
Emergency contingency	100,000		
Subtotal	485,485	398,184	122
Youth Conservation Corps (subtotal)	(1,000)	NA	NA
Construction:			
Construction of facilities 8/	46,029	58,880	NA
Forest road and trail construction	114,951	331,997	NA
Forest roads purchaser construction 9/	(41,291)	NA	NA
Emergency supplemental	60,800		
Subtotal	221,780	390,877	NA

See footnotes at end of table.



Table 2--National Forest System funding--fiscal year 1996 compared to long-term program costs--Continued

	1996 Actual 1/	2000 RPA 2/ 1,000 constant 1996 dollars	Percent of 1996 Actual to 2000 RPA
Land acquisition	39,392	NA	NA
Acquisition of lands for National Forests, special acts	1,069	NA	NA
Acquisition of lands to complete land exchange	341	NA	NA
Gifts, donations and bequests	87	NA	NA
Permanent appropriations	217,963	NA	NA
Trust funds	196,208	NA	NA
<b>Subtotal</b>	<b>455,060</b>	<b>NA</b>	<b>NA</b>
<b>Total</b>	<b>2,292,551</b>	<b>NA</b>	<b>NA</b>

1/ Information from the FY 1998 Explanatory Notes

2/ Information from Draft 1995 RPA Program. Numbers shown represent total costs, which include appropriated and other financing (challenge cost share, volunteers, new sources).

3/ Ecosystem Planning, Inventory and Monitoring was introduced as a budget line item in FY 1995.

4/ Includes NFS, cooperative, and drug enforcement/law enforcement activities.

5/ Projection represents total funding for timber program.

6/ Includes reforestation trust fund dollars.

7/ Projection represents total funding for fire program.

8/ Excludes construction of research facilities.

9/ This account was taken off budget in 1982. For comparison, the amounts are shown as non-add items.



Table 3--National Forest System funding--fiscal years 1992-96

	1996	1995	1994	1993	1992
<i>1,000 dollars actual</i>					
Ecosystem Planning, Inventory, and Monitoring 1/	130,088	149,732			
Minerals and geology management	35,017	38,932	33,017	34,812	34,332
Real estate management	43,047	45,621	34,880	36,024	35,430
Landline location	14,006	15,945	28,783	30,873	32,251
Maintenance of facilities	23,008	26,304	26,476	26,495	26,283
Law enforcement operations	59,637	63,516	55,130	15,479	8,377
Forest road maintenance	81,019	83,784	79,180	81,936	85,891
Timber sales management	188,641	108,555	184,606	219,033	263,745
Forestland vegetation management 2/	51,768	84,907	62,339	92,306	96,521
Recreation use	211,151	220,136	224,522	229,742	216,396
Wildlife and fish habitat management	85,561	93,182	121,130	116,364	112,500
Rangeland management	27,012	18,473	44,127	44,443	43,153
Soil, water and air management	42,014	48,282	77,984	72,325	76,243
Subtotal	861,881	847,637	972,174	999,832	1,031,122
General Administration (subtotal)	263,698	296,982	298,174	305,941	303,786
Preparedness and fire use	295,315	160,010	190,108	189,163	187,411
Suppression operations	90,170	225,628	190,222	185,411	110,589
Emergency contingency	100,000				
Subtotal	485,485	385,638	380,330	374,574	298,000
Youth Conservation Corps (subtotal) 3/	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Construction					
Construction of facilities 4/	46,029	61,588	94,437	83,868	77,497
Forest road and trail construction 5/	114,951	98,185	97,345	140,586	168,989
Forest trail construction	-	32,448	32,310	27,233	21,667
Emergency supplemental	60,800				
Forest roads purchaser construction 6/	(41,291)	(50,000)	(60,000)	(110,669)	(113,000)
Transfer to salvage	0	0	0	-2,750	NA
Watershed restoration	0	0	20,000		
Subtotal	221,780	192,221	244,092	248,937	268,153

See footnotes at end of table.



Table 3--National Forest System funding--fiscal years 1992-96--Continued

	1996	1995	1994	1993	1992
	<i>1,000 dollars actual</i>				
Land acquisition	39,392	63,873	64,250	62,412	88,306
Acquisition of lands for National Forests, special acts	1,069	1,247	1,212	1,180	1,134
Acquisition of lands to complete land exchange	341	794	203	151	1,230
Gifts, donations and bequests	87	4	96	5	96
Range betterment	4,647	1,149	4,600	4,647	4,795
Permanent appropriations	217,963	506,289	542,774	539,240	550,562
Trust funds	196,208	222,953	298,404	310,191	303,379
Total	2,292,551	2,518,787	2,806,309	2,847,110	2,850,563

1/ Ecosystem Planning, Inventory, and Monitoring was introduced as a budget line item in FY 1995.

2/ Includes reforestation trust fund dollars.

3/ Appropriations Act required minimum level of funding from National Forest funds; amounts not included in totals.

1992 - operated a \$2.5 million program from available funds.

1993 - operated a \$2.1 million program from available funds.

1994 - operated a \$1.7 million program from available funds.

1995 - operated a \$1.3 million program from available funds.

1996 - operated a \$1.2 million program from available funds.

4/ Excludes construction of research facilities.

5/ In FY 1996, road and trail construction EBLI's were combined.

6/ This account was taken off budget in 1982. For comparison, the amounts are shown as non-add items.



Table 4—Summary of National Forest System 1996 accomplishments compared to long-term program trends

Resource area	Activity	Units 1/	1996 Actual	2005 RPA projections 2/	1995 Actual	Percent of change comparisons	
						1995 Actual to 1996 Actual	1996 Actual to 2000 RPA
Final output 3/							
Timber	Sales offering	B board ft	4.0	4.5	4.0	100	89
Recreation	Visitor use	MM RVD's	341.2	NA	345.1	101	NA
		MM Visits	859.3	814.6	829.8	97	105
		MM AUM's	9.2	7.9	9.3	101	116
Range	Permitted grazing						
Minerals	Bonded non-energy operations 4/	Operations processed	1,744.0	NA	5,331.0	306	NA
	Energy operations 4/	Operations processed	493.0	NA	991.0	201	NA
Wildlife & fish	User-days of recreation	MM AD's 5/	86.1	132.4	50.1	58	65
Intermediate output 6/							
Timber	Reforestation 7/	M acres	357.5	362.0	387.0	108	99
	Timber stand improvement 7/	M acres	258.8	267.0	273.3	106	97
Wildlife & fish	Habitat restored/enhanced	M acres	166.6	NA	196.8 8/	118	NA
	Habitat improvement	Structures	5,689.3	NA	9,267.0 8/	163	NA
	Habitat restored/enhanced	Miles	1,881.5	NA	1,493.0 8/	79	NA
Wilderness	Management	MM acres	34.7	NA	34.6	100	NA
Soil & water	Resource improvement	M acres	25.4	NA	35.5 8/	140	NA
	Soil inventory	M acres	7,099.3	NA	9,826.0 8/	138	NA
Range	Forage improvements	M acres	41.7	NA	27.0 8/	65	NA
	Forage improvements	Structures	2,144.5	NA	1,603.2 8/	75	NA
Trails	Construction/ reconstruction	Miles	1,695.8	NA	2,139.4	126	NA
Roads	Construction/ reconstruction 9/	Miles	3,316.3	3,165.0	2,867.3	86	105
Fire	Fuels management 10/	M acres	765.3	342.0	742.6	97	224
Lands	Purchase and donation	M acres	56.3	NA	186.0	330	NA

1/ B = billion, MM = million, M = thousand, RVD's = recreation visitor-days, AUM's = animal unit months, AD's = activity days.

2/ Information derived from Draft 1995 RPA Program. Numbers shown represent total costs, which include appropriated and other financing (challenge cost share, volunteers, new sources).

3/ Final output = forest and rangeland goods and services purchased or consumed by the private sector or individual consumers.

4/ In 1996 the unit of measure changed from 'plans' to 'operations'. Accomplishments are comparable between 1995 and 1996.

5/ AD's are included in RVD's.

6/ Intermediate output = work performed by the Forest Service that contributes to the production of final outputs.

7/ Includes acres from carryover funds, and does not include accomplishments from contributed funds.

8/ Accomplished with appropriated funds.

9/ Includes appropriated and purchaser roads.

10/ Includes accomplishments from appropriated funds and brush disposal funds.



Table 5—National Forest System lands administered by the Forest Service as of September 30, 1996

State, Commonwealth, or Territory	National forests, purchase units, research areas, and other areas	National grasslands <i>Acres</i>	Land utilization projects	Total
Alabama	663,123	0	40	663,163
Alaska	21,971,245	0	0	21,971,245
Arizona	11,251,424	0	0	11,251,424
Arkansas	2,553,892	0	0	2,553,892
California	20,617,261	18,425	0	20,635,686
Colorado	13,876,192	628,419	0	14,504,611
Connecticut	24	0	0	24
Florida	1,146,668	0	0	1,146,668
Georgia	864,993	0	0	864,993
Hawaii	1	0	0	1
Idaho	20,410,527	47,756	0	20,458,283
Illinois	276,676	0	0	276,676
Indiana	194,264	0	0	194,264
Kansas	0	108,175	0	108,175
Kentucky	691,963	0	0	691,963
Louisiana	603,786	0	0	603,786
Maine	53,040	0	0	53,040
Michigan	2,855,899	0	959	2,856,858
Minnesota	2,837,240	0	0	2,837,240
Mississippi	1,157,013	0	0	1,157,013
Missouri	1,493,198	0	0	1,493,198
Montana	168,796,777	0	0	16,879,677
Nebraska	257,653	94,480	0	352,133
Nevada	5,818,569	0	0	5,818,569
New Hampshire	724,049	0	0	724,049
New Mexico	9,190,265	136,417	240	9,326,922
New York	15,825	0	0	15,825
North Carolina	1,243,139	0	0	1,243,139
North Dakota	743	1,105,030	0	1,105,773
Ohio	227,239	0	0	227,239
Oklahoma	257,395	46,286	0	303,681
Oregon	15,552,932	111,348	856	15,665,136
Pennsylvania	513,264	0	0	513,264
Puerto Rico	27,831	0	0	27,831
South Carolina	612,023	0	0	612,023
South Dakota	1,145,010	868,156	0	2,013,166
Tennessee	633,481	0	0	633,481
Texas	637,280	117,620	0	754,900
Utah	8,112,564	0	0	8,112,564
Vermont	359,289	0	0	359,289
Virgin Islands	147	0	0	147
Virginia	1,656,282	0	0	1,656,282
Washington	9,175,831	0	738	9,176,569
West Virginia	1,032,573	0	0	1,032,573
Wisconsin	1,520,464	0	0	1,520,464
Wyoming	8,687,871	560,166	0	9,248,037
<b>Total</b>	<b>187,799,825</b>	<b>3,842,278</b>	<b>2,833</b>	<b>191,644,936</b>



Table 6--Miles of landline location by region--fiscal year 1996 1/

Region	Total miles boundary	Miles Surveyed 1996	Miles Surveyed To Date	Maintained 1996
Northern (R-1)	27,725	315	9,484	174
Rocky Mountain (R-2)	48,850	179	8,649	71
Southwestern (R-3)	18,053	76	5,770	19
Intermountain (R-4)	20,960	171	4,981	29
Pacific Southwest (R-5)	26,700	159	12,613	80
Pacific Northwest (R-6)	25,627	208	16,474	247
Southern (R-8)	41,234	106	36,793	2,431
Eastern (R-9)	42,071	259	12,791	53
Alaska (R-10)	2,602	72	1,795	45
Total	253,822	1,545	109,350	3,149

1/. Totals include accomplishment from the NFLL appropriation, all contributing benefiting functions, and cooperative and cost sharing activities.

Table 7--Land acquisition and exchange--fiscal years 1995 and 1996

	1996 Acres	1995 Acres
Purchase	65,848	88,000
Exchange	13,479	98,000



Table 8--Wildlife and fish habitat restoration and enhancement by region--fiscal year 1996 1/

Region	Wildlife	Inland fish 2/	Anadromous fish 2/	Threatened, endangered & sensitive species 3/	Total
Northern (R-1)					
Acres of inventory 4/					0
Acres protected 4/					0
Acres restored/enhanced	9,746	16	0	4,712	14,474
Structures	57	4/	4/	108	165
Rocky Mountain (R-2)					
Acres of inventory 4/					0
Acres protected 4/					0
Acres restored/enhanced	10,747	63	0	1,048	11,858
Structures	214	4/	4/	23	237
Southwestern (R-3)					
Acres of inventory 4/					0
Acres protected 4/					0
Acres restored/enhanced	7,531	173	0	1,371	9,075
Structures	190	4/	4/	91	281
Intermountain (R-4)					
Acres of inventory 4/					0
Acres protected 4/					0
Acres restored/enhanced	13,058	78	0	3,688	16,824
Structures	219	4/	4/	49	268
Pacific Southwest (R-5)					
Acres of inventory 4/					0
Acres protected 4/					0
Acres restored/enhanced	7,766	414	0	273	8,453
Structures	242	4/	4/	195	437
Pacific Northwest (R-6)					
Acres of inventory 4/					0
Acres protected 4/					0
Acres restored/enhanced	22,966	38	3	957	23,964
Structures	1,210	4/	4/	142	1,352
Southern (R-8)					
Acres of inventory 4/					0
Acres protected 4/					0
Acres restored/enhanced	20,051	2,480	0	36,143	58,674
Structures	510	4/	4/	720	1,230
Eastern (R-9)					
Acres of inventory 4/					0
Acres protected 4/					0
Acres restored/enhanced	12,790	3,112	0	5,707	21,609
Structures	1,366	4/	4/	352	1,718
Alaska (R-10)					
Acres of inventory 4/					0
Acres protected 4/					0
Acres restored/enhanced	29	144	1,330	0	1,503
Structures	0	4/	4/	1	1
Total					
Acres of inventory	0	0	0	0	0
Acres protected	0	0	0	0	0
Acres restored/enhanced	104,684	6,518	1,333	53,899	166,434 5/
Structures	4,008	0	0	1,681	5,689 6/

1/ Includes activities accomplished with appropriated funds.

2/ Lake acres.

3/ Terrestrial acres.

4/ Data no longer collected

5/ In addition, 250,689 acres were restored or enhanced with contributed funds, timber sale (K-V) funds, and other funds.

6/ In addition, 26,712 structures were completed with contributed funds, timber sale (K-V) funds, and other funds.



Table 9—Aquatic habitat restoration and enhancement by region—fiscal year 1996 1/

Region	Inland fish	Anadromous fish	Threatened, endangered & sensitive species	Total
Northern (R-1)				
stream miles of inventory 2/				0
stream miles protected 2/				0
stream miles restored/enhanced	173	14	14	201
Rocky Mountain (R-2)				
stream miles of inventory 2/				0
stream miles protected 2/				0
stream miles restored/enhanced	199	0	10	209
Southwestern (R-3)				
stream miles of inventory 2/				0
stream miles protected 2/				0
stream miles restored/enhanced	21	0	11	32
Intermountain (R-4)				
stream miles of inventory 2/				0
stream miles protected 2/				0
stream miles restored/enhanced	59	82	36	177
Pacific Southwest (R-5)				
stream miles of inventory 2/				0
stream miles protected 2/				0
stream miles restored/enhanced	181	125	22	328
Pacific Northwest (R-6)				
stream miles of inventory 2/				0
stream miles protected 2/				0
stream miles restored/enhanced	36	122	31	189
Southern (R-8)				
stream miles of inventory 2/				0
stream miles protected 2/				0
stream miles restored/enhanced	133	0	1	134
Eastern (R-9)				
stream miles of inventory 2/				0
stream miles protected 2/				0
stream miles restored/enhanced	310	227	5	542
Alaska (R-10)				
stream miles of inventory 2/				0
stream miles protected 2/				0
stream miles restored/enhanced	10	43	0	53
Total 2/				
stream miles of inventory	0	0	0	0 2/
stream miles protected	0	0	0	0 2/
stream miles restored/enhanced	1,122	613	130	1,865 3/

1/ Includes activities accomplished with appropriated funds.

2/ Data no longer collected.

3/ In addition, 1,216 stream miles were restored or enhanced with contributed funds, timber sale (K-V) funds, and other funds.



Table 10--Total recreation visits on National Forest System lands by State--fiscal years 1992-96

State, Commonwealth, or Territory 1/	1996	1995	1994	1993	1992
	1,000 Visits 2/				
Alabama	1,406.0	1,242.9	1,277.3	1,337.1	1,112.9
Alaska	17,181.0	10,648.2	12,912.9	9,088.0	17,275.5
Arizona	72,044.0	72,196.9	80,471.8	81,609.1	62,584.9
Arkansas	5,909.0	5,448.8	5,260.3	5,314.2	5,162.2
California	195,880.0	181,032.6	178,676.2	177,047.3	183,272.9
Colorado	60,488.1 3/	60,488.1	62,741.5	49,684.5	40,880.0
Florida	8,878.0	9,472.0	9,472.3	9,371.1	9,313.5
Georgia	8,332.0	8,768.4	8,456.1	8,511.8	7,259.5
Idaho	23,201.0	22,252.6	21,526.7	19,795.1	16,196.4
Illinois	1,034.0	985.0	985.0	980.0	938.5
Indiana	525.0	510.0	230.0	664.0	551.8
Kansas	184.0	181.3	180.0	28.0	175.0
Kentucky	5,670.0	5,590.7	5,380.4	5,269.7	5,282.8
Louisiana	1,748.0	1,737.1	1,951.8	1,828.1	1,254.1
Maine	1,000.0	1,000.0	397.3	397.3	121.0
Michigan	9,997.0	8,943.6	9,317.0	9,469.9	8,645.0
Minnesota	12,833.0	8,896.9	8,743.8	5,079.9	6,056.0
Mississippi	3,827.0	2,632.2	2,517.0	2,318.5	2,311.4
Missouri	7,299.0	6,467.6	6,041.6	5,758.0	3,111.3
Montana	31,836.0	30,820.8	27,106.4	21,808.0	21,412.0
Nebraska	528.0	618.3	766.8	932.5	90.1
Nevada	21,423.0	24,169.0	22,867.3	23,504.0	22,567.2
New Hampshire	5,500.0	5,500.0	11,347.0	11,347.0	6,018.0
New Mexico	12,644.0	12,685.5	12,438.5	6,052.4	3,009.0
New York	19.0	51.7	17.2	17.5	76.0
North Carolina	20,935.0	19,905.8	18,043.8	18,127.3	18,029.7
North Dakota	387.0	385.0	375.0	415.0	447.0
Ohio	900.0	900.0	1,000.0	679.5	2,475.0
Oklahoma	1,868.0	1,790.3	1,799.6	1,763.3	1,706.4
Oregon	97,465.7 4/	97,465.7	97,465.7	73,072.8	73,106.8
Pennsylvania	13,837.0	14,795.5	11,630.0	11,981.0	12,013.0
Puerto Rico	630.0	700.0	963.5	963.5	869.3
South Carolina	2,532.0	2,549.4	2,519.8	2,499.0	2,805.0
South Dakota	6,173.0	6,022.3	6,082.4	4,927.2	6,885.0
Tennessee	9,911.0	9,504.6	8,875.8	8,870.7	8,953.8
Texas	3,712.0	3,852.8	3,715.9	3,285.3	3,416.9
Utah	44,105.0	43,554.5	46,178.5	34,314.8	34,266.0
Vermont	2,699.0	2,698.0	3,434.7	3,429.2	5,536.0
Virginia	18,755.0	17,862.4	17,861.4	17,465.3	10,911.4
Washington	97,456.0 4/	97,456.0	97,456.0	67,778.0	67,756.6
West Virginia	4,284.0	4,156.3	4,413.2	3,801.0	2,980.0
Wisconsin	9,981.0	10,134.4	9,425.6	7,492.3	7,740.0
Wyoming	14,266.0	13,683.9	12,915.8	11,396.0	6,605.6
Total	859,282.8	829,757.1	835,238.9	729,474.2	691,180.5

1/ Unlisted States have no Forest Service recreation programs.

2/ One Visit is an entry of one person upon a national forest for the purpose of participating in one or more recreation activity for an unspecified period of time. Only the "primary" activity of the recreation visitor is recorded.

3/ Visits for Colorado are for 1995; data not available for 1996.

4/ Visits for Oregon and Washington are 1994 data; 1995 and 1996 data not available.



Table 11—State summary of total recreation use on National Forest System lands by activity—fiscal year 1996

State, Commonwealth, or Territory 1/	Camping, picnicking & swimming	Mechanized travel & viewing scenery	Hiking, horseback riding & water travel	Winter sports	Resorts, cabins & organization camps	Hunting
1,000 RVD's 3/						
Alabama	175.0	125.0	67.0	0.0	0.0	162.0
Alaska	368.0	4,777.0	368.0	89.0	181.0	145.0
Arizona	7,911.0	15,731.0	3,109.0	169.0	1,006.0	1,052.0
Arkansas	619.0	555.0	215.0	0.0	42.0	510.0
California	18,824.0	25,492.0	5,915.0	4,246.0	7,696.0	1,742.0
Colorado 4/	6,079.8	10,212.1	2,726.9	6,525.1	766.1	1,756.4
Florida	1,536.0	459.0	178.0	0.0	213.0	243.0
Georgia	832.0	1,004.0	386.0	2.0	21.0	345.0
Idaho	4,472.0	4,506.0	1,421.0	821.0	610.0	1,154.0
Illinois	262.0	443.0	190.0	0.0	9.0	140.0
Indiana	242.0	102.0	119.0	2.0	18.0	104.0
Kansas	17.0	27.0	3.0	0.0	1.0	9.0
Kentucky	685.0	755.0	283.0	4.0	8.0	217.0
Louisiana	198.0	161.0	29.0	0.0	24.0	114.0
Maine	31.0	65.0	19.0	4.0	6.0	9.0
Michigan	1,537.0	1,676.0	302.0	76.0	115.0	538.0
Minnesota	1,983.0	1,116.0	886.0	112.0	441.0	366.0
Mississippi	318.0	562.0	153.0	0.0	27.0	487.0
Missouri	983.0	616.0	356.0	0.0	11.0	278.0
Montana	2,515.0	4,862.0	1,411.0	776.0	444.0	1,221.0
Nebraska	183.0	59.0	25.0	1.0	8.0	12.0
Nevada	1,090.0	1,175.0	447.0	350.0	154.0	199.0
New Hampshire	656.0	1,310.0	473.0	548.0	233.0	43.0
New Mexico	2,979.0	2,202.0	724.0	751.0	256.0	541.0
New York	16.0	8.0	4.0	2.0	0.0	4.0
North Carolina	1,710.0	2,460.0	1,210.0	15.0	100.0	793.0
North Dakota	16.0	30.0	18.0	1.0	0.0	56.0
Ohio	50.0	93.0	23.0	0.0	0.0	233.0
Oklahoma	56.0	179.0	56.0	0.0	0.0	66.0
Oregon 5/	11,289.5	11,719.1	3,889.7	1,583.9	2,027.7	2,024.1
Pennsylvania	866.0	1,521.0	348.0	10.0	42.0	178.0
Puerto Rico	92.0	17.0	7.0	0.0	0.0	0.0
South Carolina	272.0	241.0	143.0	0.0	1.0	211.0
South Dakota	282.0	2,580.0	206.0	18.0	118.0	91.0
Tennessee	1,251.0	1,023.0	336.0	6.0	102.0	265.0
Texas	640.0	414.0	111.0	0.0	30.0	223.0
Utah	6,334.0	6,611.0	1,294.0	1,329.0	932.0	863.0
Vermont	131.0	319.0	110.0	584.0	56.0	87.0
Virginia	1,175.0	1,642.0	480.0	33.0	20.0	878.0
Washington 5/	5,165.5	11,490.7	3,384.2	1,090.6	1,119.9	853.3
West Virginia	556.0	306.0	159.0	8.0	38.0	225.0
Wisconsin	615.0	807.0	125.0	29.0	20.0	258.0
Wyoming	2,069.0	2,688.0	1,389.0	522.0	805.0	688.0
Total	87,081.8	122,140.9	33,098.8	19,707.6	17,701.7	19,383.8

See footnotes at end of table.



Table 11—State summary of total recreation use on National Forest System lands by activity—fiscal year 1996--  
Continued

State, Commonwealth, or Territory 1/	Fishing	Non-consumptive fish & wildlife use 1,000 RVD's 3/	Other recreation activities	Total	Total Visits 2/ 1,000 Visits
Alabama	69.0	7.0	84.0	689.0	1,406.0
Alaska	510.0	45.0	479.0	6,962.0	17,181.0
Arizona	1,031.0	558.0	4,433.0	35,000.0	72,044.0
Arkansas	106.0	28.0	135.0	2,210.0	5,909.0
California	3,356.0	416.0	3,478.0	71,165.0	195,880.0
Colorado	1,697.5	176.5	1,030.3	30,970.7	60,488.1
Florida	183.0	22.0	126.0	2,960.0	8,878.0
Georgia	199.0	37.0	99.0	2,925.0	8,332.0
Idaho	1,071.0	201.0	1,109.0	15,365.0	23,201.0
Illinois	44.0	19.0	81.0	1,188.0	1,034.0
Indiana	55.0	6.0	36.0	684.0	525.0
Kansas	14.0	3.0	12.0	86.0	184.0
Kentucky	230.0	14.0	130.0	2,326.0	5,670.0
Louisiana	29.0	5.0	39.0	599.0	1,748.0
Maine	16.0	2.0	6.0	158.0	1,000.0
Michigan	433.0	26.0	163.0	4,866.0	9,997.0
Minnesota	897.0	35.0	146.0	5,982.0	12,833.0
Mississippi	110.0	16.0	155.0	1,828.0	3,827.0
Missouri	145.0	20.0	109.0	2,518.0	7,299.0
Montana	838.0	174.0	1,254.0	13,495.0	31,836.0
Nebraska	5.0	4.0	23.0	320.0	528.0
Nevada	92.0	78.0	272.0	3,857.0	21,423.0
New Hampshire	30.0	16.0	45.0	3,354.0	5,500.0
New Mexico	341.0	186.0	1,346.0	9,326.0	12,644.0
New York	2.0	1.0	2.0	39.0	19.0
North Carolina	342.0	42.0	307.0	6,979.0	20,935.0
North Dakota	3.0	4.0	5.0	133.0	387.0
Ohio	56.0	5.0	64.0	524.0	900.0
Oklahoma	15.0	10.0	11.0	393.0	1,868.0
Oregon	1,976.4	594.2	1,924.7	37,029.3	97,465.7
Pennsylvania	164.0	32.0	107.0	3,268.0	13,837.0
Puerto Rico	0.0	44.0	11.0	171.0	630.0
South Carolina	60.0	15.0	68.0	1,011.0	2,532.0
South Dakota	147.0	13.0	116.0	3,571.0	6,173.0
Tennessee	206.0	31.0	89.0	3,309.0	9,911.0
Texas	742.0	27.0	115.0	2,302.0	3,712.0
Utah	1,102.0	69.0	844.0	19,378.0	44,105.0
Vermont	22.0	2.0	84.0	1,395.0	2,699.0
Virginia	370.0	76.0	253.0	4,927.0	18,755.0
Washington	420.0	120.2	1,152.5	24,796.9	97,456.0
West Virginia	132.0	10.0	65.0	1,499.0	4,284.0
Wisconsin	503.0	9.0	161.0	2,527.0	9,981.0
Wyoming	396.0	100.0	457.0	9,114.0	14,266.0
Total	18,159.9	3,298.9	20,626.5	341,199.9	859,282.8

1/ Unlisted States have no Forest Service recreation programs.

2/ One Visit is an entry of one person upon a national forest for the purpose of participating in one or more recreation activity for an unspecified period of time. Only the "primary" activity of the recreation visitor is recorded.

3/ One recreation visitor-day (RVD) is the recreation use of National Forest land or water that aggregates 12 visitor-hours. This may entail 1 person for 12 hours, 12 persons for 1 hour, or any equivalent combination of individual or group use, either continuous or intermittent.

4/ Numbers for Colorado are from 1995; 1996 data is not available.

5/ Numbers for Oregon and Washington are from 1994; 1995 and 1996 data is not available.



Table 12--Trail miles on the National Forest System by State--fiscal years 1994-96

State, Commonwealth, or Territory 1/	1996			1995			1994		
	Total	Const/Reconst 2/	Maintained	Total	Const/Reconst 2/	Maintained	Total	Const/Reconst 2/	Maintained
Alabama	294.0	21.0	160.0	278.8	12.5	138.0	279.3	14.0	147.0
Alaska	861.0	34.0	394.0	878.7	35.3	426.6	908.2	26.2	481.4
Arizona	4,537.0	74.0	1,110.0	4,601.0	81.1	1,127.2	4,499.8	66.8	707.7
Arkansas	961.0	12.0	536.0	939.1	46.0	563.5	849.3	62.0	340.5
California	18,158.0	316.0	8,662.0	15,144.7	321.3	7,088.0	15,098.0	348.4	7,314.5
Colorado	9,551.0	75.0	5,233.0	9,795.6	127.6	3,842.7	9,703.7	55.8	4,431.4
Florida	442.0	4.0	420.0	444.7	23.0	405.6	348.9	10.7	111.0
Georgia	760.0	4.0	427.0	721.0	4.2	174.0	706.0	8.7	310.7
Idaho	20,269.0	377.0	8,704.0	18,947.3	207.0	8,289.8	19,075.6	184.4	11,027.9
Illinois	302.0	24.0	64.0	301.7	35.0	69.9	301.7	12.2	37.9
Indiana	225.0	6.0	225.0	195.5	8.0	118.0	124.5	3.5	124.5
Kansas	56.0	0.0	31.0	70.0	0.0	0.0	70.0	0.0	46.0
Kentucky	511.0	12.0	142.0	529.6	22.3	129.6	502.4	13.5	131.8
Louisiana	323.0	30.0	167.0	247.9	112.0	186.0	234.9	82.0	70.0
Maine	134.0	0.0	134.0	133.5	0.0	133.5	222.0	2.0	222.0
Michigan	2,711.0	6.0	1,446.0	2,653.2	29.5	1,660.8	3,067.7	60.4	2,786.9
Minnesota	2,198.0	18.0	2,198.0	1,739.6	24.2	1,463.1	1,878.0	35.0	1,878.0
Mississippi	352.0	6.0	145.0	352.5	27.5	224.3	356.2	89.3	246.7
Missouri	747.0	36.0	747.0	761.0	59.0	761.0	752.0	63.6	752.0
Montana	18,024.0	137.0	10,399.0	15,596.7	184.1	10,316.5	15,150.1	208.5	9,310.8
Nebraska	82.0	2.0	82.0	80.0	2.0	74.2	54.0	0.0	46.0
Nevada	1,665.0	39.0	182.0	1,659.7	45.6	181.3	1,636.7	20.5	534.7
New Hampshire	1,543.0	18.0	1,543.0	1,543.5	42.7	1,543.5	1,263.7	5.0	1,263.7
New Mexico	4,389.0	28.0	926.0	4,208.2	40.6	551.7	4,234.0	38.5	1,070.0
New York	38.0	2.0	38.0	38.4	3.0	38.4	37.0	0.0	37.0
North Carolina	1,713.0	6.0	97.0	1,630.8	20.8	433.2	1,638.4	18.0	397.0
North Dakota	53.0	14.0	35.0	57.4	19.0	41.1	38.4	0.0	9.3
Ohio	323.0	12.0	263.0	323.0	20.0	323.0	299.5	0.0	299.5
Oklahoma	195.0	1.0	123.0	194.0	16.0	134.4	185.4	16.0	54.5
Oregon	11,494.0	115.0	7,905.0	11,493.8	109.6	7,908.6	11,493.8	169.9	7,908.7
Pennsylvania	655.0	1.0	655.0	654.0	10.0	654.0	644.1	16.0	552.2
Puerto Rico	24.0	1.0	7.0	21.1	2.0	10.0	21.1	2.0	11.0
South Carolina	431.0	7.0	166.0	371.9	11.6	183.2	441.3	4.7	229.4
South Dakota	403.0	11.0	292.0	274.4	41.0	274.4	274.4	3.6	274.4
Tennessee	741.0	6.0	79.0	740.7	7.0	78.5	747.0	8.4	80.5

See footnotes at end of table



Table 12--Trail miles on the National Forest System by State--fiscal years 1994-96--Continued

State, Commonwealth, or Territory 1/	1996			1995			1994		
	Total	Const/Reconst 2/	Maintained	Total	Const/Reconst 2/	Maintained	Total	Const/Reconst 2/	Maintained
Texas	275.0	50.0	43.0	299.9	45.0	81.0	302.9	16.0	112.0
Utah	6,431.0	74.0	3,351.0	6,430.8	121.1	3,350.8	6,442.3	191.0	3,025.8
Vermont	1,027.0	21.0	832.0	1,028.0	49.0	832.7	1,028.0	65.6	832.7
Virginia	1,867.0	11.0	249.0	1,860.9	26.0	240.4	1888.8	13.7	375.1
Washington	9,117.0	38.0	6,873.0	9,125.3	62.5	6,890.9	9,116.3	84.3	6,861.9
West Virginia	983.0	0.0	742.0	977.2	7.5	732.2	980.8	17.7	622.9
Wisconsin	1,699.0	12.0	1,133.0	1,686.5	23.0	1,120.5	1,649.2	43.5	1,649.2
Wyoming	6,523.0	35.0	2,547.0	6,390.5	54.8	3,397.3	6083.8	32	3646.5
Total	133,087.0 3/	1,696.0	69,507.0	125,422.1 4/	2,139.4	66,193.4	124,629.2	2,113.4	70,372.7

1/ Unlisted States have no Forest Service recreation programs.

2/ Miles constructed include construction of new trails and reconstruction of existing trails. The predominant activity is reconstruction, funds used are appropriated.

3/ In FY 1996, does not include 454 contributed miles.

4/ In FY 1995, does not include 265.7 contributed miles.



Table 13--Acres of the National Wilderness Preservation System by State--calendar years 1992-96 1/

State, Commonwealth, or Territory 2/	1996	1995	1994	1993	1992
1,000 acres 3/					
Alabama	32	32	32	33	33
Alaska	5,752	5,752	5,752	5,753	5,753
Arizona	1,345	1,345	1,345	1,345	1,345
Arkansas	117	117	117	117	117
California	4,433	4,305	4,305	4,305	4,302
Colorado	3,144	3,145	3,148	3,148	2,587 <sup>4</sup>
Florida	74	74	74	74	74
Georgia	115	115	114	113	113
Idaho	3,962	3,962	3,962	3,962	3,962
Illinois	26	26	26	26	26
Indiana	13	13	13	13	13
Kentucky	17	17	17	16	16
Louisiana	9	9	9	9	9
Maine	12	12	12	12	12
Michigan	92	92	92	92	92
Minnesota	810	810	810	807	803
Mississippi	6	6	6	6	6
Missouri	63	63	63	63	63
Montana	3,372	3,372	3,372	3,372	3,372
Nebraska	8	8	8	8	8
Nevada	786	786	786	786	786
New Hampshire	103	103	103	103	103
New Mexico	1,388	1,388	1,388	1,388	1,388
North Carolina	103	103	103	103	103
Oklahoma	15	15	15	14	14
Oregon	2,072	2,071	2,080	2,080	2,080
Pennsylvania	9	9	9	9	9
South Carolina	17	17	17	17	17
South Dakota	10	10	10	10	10
Tennessee	66	66	66	66	66
Texas	38	38	38	37	35
Utah	774	774	774	774	774
Vermont	59	59	59	59	59
Virginia	87	87	87	87	87
Washington	2,573	2,573	2,573	2,573	2,576
West Virginia	81	81	81	81	81
Wisconsin	42	42	42	42	42
Wyoming	3,111	3,080	3,080	3,080	3,080
Total 4/	34,736	34,577	34,588	34,584	34,017

1/ Includes all changes to the Wilderness Preservation System through the 104th Congress.

2/ Unlisted States have no National Forest System acres in the National Wilderness Preservation System.

3/ Acreage for most States is estimated pending final map compilation; therefore, minor changes may occur between years.

4/ Total acreage is shown. Any difference between the total and column sum is due to rounding.



Table 14—Fuels treatment acreage accomplished by appropriation--fiscal year 1996

Region	Forest fire protection	Accomplishment	
		Brush disposal funds	Total
		Acre	
Northern (R-1)	35,462	16,247	51,709
Rocky Mountain (R-2)	23,672	5,413	29,085
Southwestern (R-3)	65,174	25,881	91,055
Intermountain (R-4)	41,438	9,416	50,854
Pacific Southwest (R-5)	32,391	26,594	58,985
Pacific Northwest (R-6)	70,319	80,577	150,896
Southern (R-8)	341,201	-	341,201
Eastern (R-9)	7,306	2,374	9,680
Alaska (R-10)	200	-	200
<b>Total</b>	<b>617,163</b>	<b>166,502</b>	<b>783,665</b>



Table 15--Pesticide use report--fiscal year 1996

Common name	Management Objective	Treatment unit	Units treated	Quantity used
				Pounds 1/
Fungicides and fumigants:				
Ammonium chloride compounds	Disinfectant	Greenhouses	0.1	0.3
Basamid	Soil fumigation	Acres	0.4	99.0
Benomyl	Nursery disease control	Acres	64.4	61.7
	Nursery disease control	Seedlings	1,313,000.0	100.0
Borax	Disease control	Acres	35,564.0	21,233.3
Captan	Disease control	Acres	0.2	10.0
Carboxin/Thiram	Nursery disease control	Acres	0.1	0.1
Chlorothalonil	Disease control	Acres	92.3	164.2
	Fungus control	Acres	27.5	41.3
	Nursery disease control	Acres	60.9	82.4
	Seed orchard protection	Acres	34.0	94.2
Copper sulfate	Disease control	Acres	3.5	2.7
DCNA	Disease control	Greenhouses	15.0	21.0
	Nursery disease control	Acres	0.2	0.2
	Nursery disease control	Buildings	1.0	3.8
Dazomet	Nursery disease control	Acres	61.0	21,350.0
	Soil fumigation	Acres	46.9	16,756.5
Dodine	Fungus control	Acres	6.0	7.8
	Nursery disease control	Acres	0.2	0.1
Etridiazole	Nursery disease control	Acres	0.4	3.9
Iprodione	Disease control	Greenhouses	15.0	6.3
Metalaxyl	Nursery disease control	Acres	1.0	2.0
	Nursery disease control	Buildings	1.0	0.0
Methyl bromide	Soil fumigation	Acres	1.8	634.0
Methyl bromide/Chloropicrin	Nursery disease control	Acres	11.5	4,025.0
	Soil fumigation	Acres	60.3	15,142.0
Propiconazole	Nursery disease control	Acres	54.6	6.7
Thiophanate-methyl	Disease control	Acres	0.3	5.5
	Disease control	Greenhouses	15.0	7.8
	Fungus control	Acres	46.0	39.1
	Nursery disease control	Acres	24.5	11.0
	Nursery disease control	Buildings	1.0	0.1
Thiram	Fungus control	Pounds of seed	165.0	28.0

See footnotes at end of table.



Table 15--Pesticide use report--fiscal year 1996-- Continued

Common name	Management Objective	Treatment unit	Units treated	Quantity used
				Pounds 1/
Fungicides and fumigants: (Continued)				
Triadimefon	Disease control	Acres	0.1	0.2
	Nursery disease control	Acres	428.0	10.3
	Research	Greenhouses	1.0	0.1
Total 1996 fungicides and fumigants		Acres	36,590.1	
		Buildings	3.0	
		Greenhouses	46.1	
		Pounds of seed	165.0	
		Seedlings	1,313,000.0	
		Total Lbs		79,950.6
See footnotes at end of table.				



Table 15--Pesticide use report--fiscal year 1996--Continued

Common name	Management Objective	Treatment unit	Units treated	Quantity used Pounds 1/
Herbicides, algicides, and plant growth regulators:				
2,4-D	Agriculture weed control	Acres	104.0	125.8
	Noxious weed control	Acres	5,840.6	3,145.8
	Nursery weed control	Acres	168.0	45.0
	Recreation improvement	Acres	8.0	12.0
	Right-of-way vegetation mgmt.	Acres	0.9	2.5
	Seed orchard protection	Acres	12.0	0.8
	Vegetation management	Acres	1.0	0.1
	Wildlife habitat improvement	Acres	31.0	29.6
2,4-D/Clopyralid	Agriculture weed control	Acres	17.0	38.5
	Noxious weed control	Acres	1,530.5	1,562.3
	Recreation improvement	Acres	15.0	0.6
2,4-D/Dicamba	Noxious weed control	Acres	3,651.8	4,966.6
2,4-D/Glyphosate	Agriculture weed control	Acres	24.0	10.7
	Noxious weed control	Acres	244.5	145.0
	Wildlife habitat improvement	Acres	2.0	1.5
2,4-D/Metsulfuron-me./Picloram	Noxious weed control	Acres	103.0	21.4
2,4-D/Metsulfuron-methyl	Noxious weed control	Acres	343.0	417.7
2,4-D/Picloram	Agriculture weed control	Acres	75.0	88.8
	Noxious weed control	Acres	11,263.2	10,112.3
	Wildlife habitat improvement	Acres	300.0	60.0
2,4-D/Triclopyr	Nursery weed control	Acres	1.0	1.5
Agribrom	Nursery weed control	Acres	0.1	0.0
Aphthona lacertosa	Noxious weed control	Acres	1.0	500.0 Insects
Bentazon	Nursery weed control	Acres	0.2	0.2
Bromacil/Diuron	Vegetation management	Acres	248.5	9.4
Ceutorhynchus litura	Noxious weed control	Acres	2.0	904.0 Insects
Chlorsulfuron	Noxious weed control	Acres	143.0	4.6
Clopyralid	Noxious weed control	Acres	1,023.3	224.5
Copper compounds	Aquatic vegetation control	Acres	6.0	1.0
Cyanazine/Metolachlor	Noxious weed control	Acres	40.0	120.0
DCPA	Nursery weed control	Acres	14.5	117.0
Dicamba	Noxious weed control	Acres	832.8	339.9
	Nursery weed control	Acres	15.0	15.4
Diuron	Vegetation management	Acres	6.0	0.6
Diuron/Sulfometuron-methyl	Right-of-way vegetation mgmt.	Acres	40.0	198.0
EPTC	Noxious weed control	Acres	15.0	26.5
Fosamine ammonium	Noxious weed control	Acres	13.5	108.7
	Right-of-way vegetation mgmt.	Acres	126.0	140.0
Fosamine ammonium/Imazapyr	Right-of-way vegetation mgmt.	Acres	80.0	120.0
Fosamine ammonium/Triclopyr	Right-of-way vegetation mgmt.	Acres	115.1	561.0
Glyphosate	Aquatic vegetation control	Acres	2.0	0.5
	Conifer and hardwood release	Acres	96.0	74.9
	Conifer release	Acres	5,692.0	8,679.6
	Housekeeping/facilities maint.	Acres	126.6	241.2
	Noxious weed control	Acres	2,211.6	773.8
	Nursery weed control	Acres	622.2	951.5
	Recreation improvement	Acres	47.0	19.6
	Research	Acres	2.3	5.2
	Right-of-way vegetation mgmt.	Acres	93.0	252.0
	Seed orchard protection	Acres	77.7	254.0
	Site preparation	Acres	2,831.0	2,329.7
	Weed control	Acres	50.0	52.0
	Wildlife habitat improvement	Acres	497.8	587.6

See footnotes at end of table.



Table 15--Pesticide use report--fiscal year 1996--Continued

Common name	Management Objective	Treatment unit	Units treated	Quantity used	
				Pounds 1/	
Herbicides, algicides, and plant growth regulators: (Continued)					
Glyphosate/Imazapyr	Conifer release	Acres	525.0	651.8	
Glyphosate/Oryzalin	Right-of-way vegetation mgmt.	Acres	2.7	9.7	
Glyphosate/Sulfometuron-methyl	Herbaceous weed control	Acres	100.0	334.8	
	Site preparation	Acres	781.0	146.4	
Glyphosate/Triclopyr	Conifer release	Acres	2,494.0	4,810.1	
	Research	Acres	72.5	131.3	
	Site preparation	Acres	128.0	384.0	
Hexazinone	Conifer release	Acres	2,152.0	4,857.4	
	Site preparation	Acres	4,850.0	10,859.3	
Hexazinone/Sulfometuron-methyl	Conifer release	Acres	95.0	28.5	
	Site preparation	Acres	2,058.0	115.2	
Imazapyr	Conifer release	Acres	1,262.0	275.2	
	Hardwood release	Acres	380.0	20.0	
	Nursery weed control	Acres	50.0	22.0	
	Recreation improvement	Acres	2.0	2.5	
	Site preparation	Acres	269.0	2.5	
Imazapyr/Triclopyr	Conifer release	Acres	3,856.0	3,022.7	
	Site preparation	Acres	3,403.0	2,477.0	
Larinus planus	Noxious weed control	Acres	1.0	400.0	Insects
Larinus/Urophora	Noxious weed control	Acres	4.0	100,000.0	Insects
Metsulfuron-methyl	Noxious weed control	Acres	867.6	25.2	
Metsulfuron-methyl/Picloram	Noxious weed control	Acres	210.0	0.8	
	Right-of-way vegetation mgmt.	Acres	11.0	2.1	
Oberea erythrocephala	Noxious weed control	Acres	1.0	200.0	Insects
Oxyfluorfen	Nursery weed control	Acres	286.7	191.2	
Pendimethalin	Housekeeping/facilities maint.	Acres	3.0	4.0	
Phenmedipham/Desmedipham	Nursery weed control	Acres	0.9	0.5	
Picloram	Agriculture weed control	Acres	43.0	20.7	
	Noxious weed control	Acres	17,609.4	5,366.0	
	Right-of-way vegetation mgmt.	Acres	0.1	0.7	
	Site preparation	Acres	123.0	44.5	
	Wildlife habitat improvement	Acres	173.0	46.6	
Picloram/Triclopyr	Noxious weed control	Acres	5.0	10.8	
Sethoxydim	Nursery weed control	Acres	23.5	15.2	
Simazine	Nursery weed control	Acres	2.1	25.0	
Sulfometuron-methyl	Housekeeping/facilities maint.	Acres	3.0	1.0	
	Site preparation	Acres	497.0	62.1	
Triclopyr	Conifer and hardwood release	Acres	1,421.0	1,136.9	
	Conifer release	Acres	6,434.1	4,681.4	
	Hardwood release	Acres	1,283.0	1,042.3	
	Housekeeping	Acres	1.0	0.8	
	Housekeeping/facilities maint.	Acres	4.0	13.0	
	Noxious weed control	Acres	31.5	24.1	
	Nursery weed control	Acres	0.1	0.1	
	Right-of-way vegetation mgmt.	Acres	168.0	465.4	
	Site preparation	Acres	16,420.0	5,349.0	
	Thinning	Acres	560.0	319.5	
	Wildlife habitat improvement	Acres	2,141.0	1,797.3	
	Urophora cardui	Noxious weed control	Acres	1.0	1,000.0
Total 1996 herbicides, algicides, and plant regulators		Acres	109,615.9		
				103,004.0	Insects
				85,793.5	Lbs

See footnotes at end of table.



Table 15--Pesticide use report--fiscal year 1996--Continued

Common name	Management Objective	Treatment unit	Units treated	Quantity used	
				Pounds 1/	
Insecticides, acaricides, and pheromones:					
Acephate	Insect eradication	Ribes plants	350.0	0.0	
	Nursery insect control	Acres	35.6	35.6	
	Nursery insect control	Buildings	1.0	0.8	
	Research	Greenhouses	1.0	0.1	
	Seed orchard protection	Greenhouses	1.0	0.5	
Bacillus thuringiensis	Insect suppression	Acres	2,015.0	48,400.0	BIU
			209.0	459.2	
Bifenthrin	Insect suppression	Acres	16.0	2.0	
	Research	Greenhouses	1.0	0.1	
Borax	Housekeeping/facilities maint.	Buildings	1.0	3.9	
Carbaryl	Insect eradication	Seedlings	30,720.0	0.5	
	Insect suppression	Acres	4,970.2	402.6	
	Insect suppression	Trees	80.0	40.0	
	Nursery insect control	Greenhouses	1.0	0.3	
Chlorpyrifos	Insect suppression	Acres	51.1	34.1	
	Nursery insect control	Acres	22.5	22.5	
Crop oil	Recreation improvement	Acres	30.0	1,420.0	
Diazinon	Nursery insect control	Acres	39.0	19.4	
	Recreation improvement	Acres	1.0	0.5	
	Vector/plague suppression	Acres	1,325.0	51.9	
Dienochlor/Acephate	Insect eradication	Ribes plants	909.0	0.3	
Dimethoate	Insect suppression	Acres	18.0	9.0	
Disparlure	Insect suppression	Acres	844.0	72.5	
Dormant oil	Insect suppression	Acres	16.0	40.0	
Esfenvalerate	Insect suppression	Acres	20.0	5.3	
	Insect suppression	Trees	80.0	0.4	
	Nursery insect control	Acres	0.3	0.0	
	Seed orchard protection	Acres	29.0	0.7	
Fenbutatin-oxide	Insect eradication	Ribes plants	561.0	0.1	
	Research	Greenhouses	1.0	0.1	
Fenoxycarb	Recreation improvement	Acres	35.0	8.3	
Fenvalerate	Nursery insect control	Acres	1.1	1.1	
Hydramethylnon	Insect suppression	Acres	29.0	65.7	
	Recreation improvement	Acres	2.0	1.5	
Imidacloprid	Recreation improvement	Acres	3.0	0.2	
Malathion	Seed orchard protection	Acres	63.0	36.0	
Permethrin	Seed orchard protection	Acres	16.5	1.1	
Potassium salts of fatty acids	Insect suppression	Acres	2.8	4.2	
	Recreation improvement	Acres	35.0	1,562.0	
Total 1996 insecticides, acaricides, and pheromones		Acres	9,829.1		
		Buildings	2.0		
		Greenhouses	5.0		
		Ribes plants	1,820.0		
		Seedlings	30,720.0		
		Trees	160.0		
		BIU		48,400.0	
		Total Lbs		4,302.0	

See footnotes at end of table.



Table 15--Pesticide use report--fiscal year 1996--Continued

Common name	Management Objective	Treatment unit	Units treated	Quantity used
				Pounds 1/
Predacides, piscicides, and repellants:				
Antimycin A	Fish eradication	Stream miles	12.0	2.6
Bromadiolone	Housekeeping/facilities maint.	Buildings	44.0	0.0
Garlic	Animal damage control	Acres	4.0	0.4
Putrescent egg solids	Animal damage control	Acres	16,610.0	3,047.6
Rotenone	Fish eradication	Acres	25.0	6.8
	Fish eradication	Stream miles	18.0	1.0
Thiram	Animal damage control	Acres	3,200.0	160.0
Ziram/Thiram/Alkylpyr./Para-d.	Animal damage control	Acres	3.0	4.5
Total 1996 predacides, piscicides and repellants		Acres	19,842.0	
		Buildings	44.0	
		Stream miles	30.0	
			Total Lbs	3,222.9

See footnotes at end of table.



Table 15--Pesticide use report--fiscal year 1996--Continued

Common name	Management Objective	Treatment unit	Units treated	Quantity used Pounds 1/
Rodenticides:				
Aluminum phosphide	Animal damage control	Acres	153.0	2.4
	Seed orchard protection	Acres	33.0	0.8
Diphacinone	Animal damage control	Acres	151.0	1.5
	Housekeeping/facilities maint.	Buildings	22.0	0.0
	Vector/plague suppression	Acres	218.0	5.0
Strychnine	Animal damage control	Acres	42,614.9	230.4
Zinc phosphide	Animal damage control	Acres	1,243.0	51.9
Total 1996 rodenticides		Acres	44,412.9	
		Buildings	22.0	
		Total Lbs		292.0
Grand total 1996 units treated		Acres	220,290.0	
		Buildings	71.0	
		Greenhouses	51.1	
		Pounds of seed	165.0	
		Ribes plants	1,820.0	
		Seedlings	1,343,720.0	
		Stream miles	30.0	
		Trees	160.0	
Grand total 1996 amounts active ingredient used				48,400.0 BIU
				103,004.0 Insects
				173,561.0 Lbs

1/ Pounds of active ingredient, unless other units are indicated. BIU = (billion international units), PIB = (polyhedral inclusion bodies), Insects

NOTE: Totals not adding exactly may be due to rounding.



Table 16--Reforestation funding and accomplishments by funding source--fiscal years 1992-96

	Appropriated	Knutson-Vandenberg	Total
1992			
Million dollars 1/	39.9	88.0	127.9
1,000 acres	162.6	319.4	482.0 2/
Constant dollars/acre	245.1	275.4	265.4 3/
1993			
Million dollars 1/	38.7	80.7	119.4
1,000 acres	159.3	292.9	452.2 4/
Constant dollars/acre	243.1	275.4	264.0 3/
1994			
Million dollars 1/	34.3	67.5	101.8
1,000 acres	146.1	288.8	434.9 5/
Constant dollars/acre	234.4	233.7	234.1 3/
1995			
Million dollars 1/	37.0	78.4	115.4
1,000 acres	136.1	250.9	387.0 6/
Constant dollars/acre	271.9	312.6	298.2 3/
1996			
Million dollars 1/	31.9	62.0	93.9
1,000 acres	129.9	227.6	357.5 7/
Constant dollars/acre	245.4	272.3	262.7 3/

- 1/ All previously published values have been converted to an obligations basis in 1996 constant dollars. No General Administration funds or law enforcement funds included. Does not include funds for nursery and tree improvement.
- 2/ Includes 98,369 acres of certified natural regeneration without site preparation, but does not include 9,973 acres accomplished with contributed funding.
- 3/ Weighted average.
- 4/ Includes 108,314 acres of certified natural regeneration without site preparation, but does not include 21,889 acres accomplished with contributed funding.
- 5/ Includes 101,010 acres of certified natural regeneration without site preparation, but does not include 6,194 acres accomplished with contributed funding.
- 6/ Includes 103,692 acres of certified natural regeneration without site preparation, but does not include 5,270 acres accomplished with contributed funding.
- 7/ Includes 113,295 acres of certified natural regeneration without site preparation, but does not include 5,403 acres accomplished with contributed funding.



Table 17—Reforestation program needs--fiscal years 1996-98

	Current and Projected	Prior Year Projected 1/
	1,000 acres	1,000 acres
Fiscal year 1996		
10/1/95 balance	842	843
Actual needs 2/	325	300
Actual accomplishments	-363	-277
10/1/96 balance	804	866
Fiscal year 1997		
10/1/96 balance	804	866
New needs 2/	300	280
Projected accomplishments	-315	-317
10/1/97 balance	789	829
Fiscal year 1998		
10/1/97 balance	789	
New needs 2/	280	
Projected accomplishments	-309	
Projected 10/1/98 balance	760	

1/ Projections in FY 1995 Report of the Forest Service.

2/ Actual or new needs are the results of timber harvests, regeneration failures, and natural disasters such as fires, storms, insects, diseases, and other changes.



Table 18—Reforestation needs as of October 1, 1996, by State, national forest, and site productivity class

State, Commonwealth, or Territory 1/ National Forest	Acres by site productivity class 2/				Total acres
	0-49	50-84	85-119	120+	
<b>Alabama</b>					
NFs in Alabama (subtotal)	219	1,762	898	121	3,000
<b>Alaska</b>					
Chugach	0	144	0	0	144
Tongass-Chatham	35	472	2,045	4,134	6,686
Tongass-Ketchikan	158	324	1,050	8,631	10,163
Tongass-Stikine	0	0	0	6,257	6,257
Subtotal	193	940	3,095	19,022	23,250
<b>Arizona</b>					
Apache-Sitgreaves	4,715	4,952	246	0	9,913
Coconino	5,408	3,752	0	0	9,160
Coronado	0	8	0	0	8
Kaibab	5,052	2,313	0	0	7,365
Prescott	97	0	0	0	97
Tonto	1,845	187	0	0	2,032
Subtotal	17,117	11,212	246	0	28,575
<b>Arkansas</b>					
Ouachita	3	968	479	230	1,680
Ozark-St. Francis	7	6,766	1,144	38	7,955
Subtotal	10	7,734	1,623	268	9,635
<b>California</b>					
Angeles	244	611	297	0	1,152
Cleveland	0	122	0	0	122
Eldorado	0	7	1,931	2,432	4,370
Inyo	0	9	0	0	9
Klamath	402	2,102	2,557	1,689	6,750
Lake Tahoe Basin	0	47	727	842	1,616
Lassen	17	7,879	3,908	3,363	15,167
Los Padres	0	21	5	0	26
Mendocino	121	1,518	1,232	818	3,689
Modoc	0	1,691	166	447	2,304
Plumas	0	1,249	8,231	1,865	11,345
Rogue River	0	95	0	0	95
San Bernardino	346	389	29	0	764
Sequoia	18	130	512	1,074	1,734
Shasta	0	367	1,382	1,015	2,764
Sierra	67	407	2,180	1,333	3,987
Siskiyou	0	0	0	0	0
Six Rivers	0	4	897	602	1,503
Stanislaus	2,224	15,976	26,866	20,394	65,460
Tahoe	168	1,333	5,012	2,680	9,193

See footnotes at end of table.



Table 18—Reforestation needs as of October 1, 1996, by State, national forest, and site productivity class--Continued

State, Commonwealth, or Territory 1/ National Forest	Acres by site productivity class 2/				Total acres
	0-49	50-84	85-119	120+	
California (continued)					
Toiyabe	423	1,240	0	0	1,663
Trinity	2	1,923	667	1,131	3,723
Subtotal	4,032	37,120	56,599	39,685	137,436
Colorado					
Arapaho and Roosevelt	5,350	185	0	0	5,535
Grand Mesa, Uncompahgre, and Gunnison	7,560	2,146	113	12	9,831
Manti-La Sal	0	0	0	0	0
Medicine Bow and Routt	4,558	2,149	237	0	6,944
Pike and San Isabel	1,389	704	0	0	2,093
Rio Grande	4,769	3,362	95	0	8,226
San Juan	2,239	2,210	353	0	4,802
White River	813	1,293	161	0	2,267
Subtotal	26,678	12,049	959	12	39,698
Florida					
NFs in Florida (subtotal)	8	1	14	1,579	1,602
Georgia					
Chattahoochee and Oconee (subtotal)	0	0	3,315	1,379	4,694
Idaho					
Boise	7,169	38,312	10,559	2,334	58,374
Caribou	0	317	31	0	348
Challis	481	298	0	0	779
Clearwater	3,432	544	2,243	2,563	8,782
Idaho Panhandle	6,424	1,495	4,020	3,603	15,542
Kootenai	0	0	0	0	0
Nez Perce	397	970	3,354	1,635	6,356
Payette	749	1,893	2,336	4	4,982
Salmon	5,713	182	0	0	5,895
Sawtooth	329	279	0	0	608
Targhee	915	6,196	0	56	7,167
Subtotal	25,609	50,486	22,543	10,195	108,833
Illinois					
Shawnee (subtotal)	0	0	901	0	901
Indiana					
Hoosier (subtotal)	0	0	1,147	585	1,732
Kentucky					
Daniel Boone (subtotal)	0	355	585	147	1,087

See footnotes at end of table.



Table 18--Reforestation needs as of October 1, 1996, by State, national forest, and site productivity class--Continued

State, Commonwealth, or Territory 1/ National Forest	Acres by site productivity class 2/				Total acres
	0-49	50-84	85-119	120+	
Louisiana					
Kisatchie (subtotal)	0	103	722	956	1,781
Maine					
White Mountain (subtotal)	126	110	68	24	328
Michigan					
Hiawatha	6,319	8,450	2,585	81	17,435
Huron-Manistee	26	2,084	87	11	2,208
Ottawa	905	12,709	2,930	141	16,685
Subtotal	7,250	23,243	5,602	233	36,328
Minnesota					
Chippewa	108	1,340	0	0	1,448
Superior	1,449	10,810	834	232	13,325
Subtotal	1,557	12,150	834	232	14,773
Mississippi					
NFs in Mississippi (subtotal)	219	565	528	1,589	2,901
Missouri					
Mark Twain (subtotal)	0	19,111	92	0	19,203
Montana					
Beaverhead	277	0	0	0	277
Bitterroot	1,713	912	106	9	2,740
Custer	2,462	420	56	0	2,938
Deerlodge	1,453	461	272	0	2,186
Flathead	2,549	1,102	1,069	229	4,949
Gallatin	256	1,592	0	0	1,848
Helena	527	40	104	0	671
Kootenai	5,104	4,982	5,338	705	16,129
Lewis and Clark	892	113	15	0	1,020
Lolo	5,833	3,017	1,390	471	10,711
Subtotal	21,066	12,639	8,350	1,414	43,469
Nebraska					
Nebraska (subtotal)	0	0	0	0	0
Nevada					
Humboldt	0	0	0	0	0
Inyo	0	0	0	0	0
Lake Tahoe Basin	0	0	0	1,199	1,199
Toiyabe	0	0	0	0	0
Subtotal	0	0	0	1,199	1,199
New Hampshire					
White Mountain (subtotal)	1,860	5,218	2,431	317	9,826

See footnotes at end of table.



Table 18--Reforestation needs as of October 1, 1996, by State, national forest, and site productivity class--Continued

State, Commonwealth, or Territory 1/ National Forest	Acres by site productivity class 2/				Total acres
	0-49	50-84	85-119	120+	
<b>New Mexico</b>					
Carson	2,738	1,201	30	0	3,969
Cibola	206	35	0	0	241
Gila	2,171	502	0	0	2,673
Lincoln	37	784	57	0	878
Santa Fe	5,217	790	0	0	6,007
<b>Subtotal</b>	<b>10,369</b>	<b>3,312</b>	<b>87</b>	<b>0</b>	<b>13,768</b>
<b>New York</b>					
Green Mountain (subtotal)	0	0	11	8	19
<b>North Carolina</b>					
NFs in North Carolina (subtotal)	622	2,117	20	345	3,104
<b>Ohio</b>					
Wayne (subtotal)	0	0	809	1,381	2,190
<b>Oklahoma</b>					
Ouachita (subtotal)	0	0	10	358	368
<b>Oregon</b>					
Deschutes	14,417	2,390	527	0	17,334
Fremont	6,955	3,582	265	0	10,802
Klamath	10	0	49	118	177
Malheur	3,800	9,663	0	0	13,463
Mt. Hood	626	3,153	283	584	4,646
Ochoco	2,024	3,311	142	0	5,477
Rogue River	0	751	2,903	133	3,787
Siskiyou	69	33	615	373	1,090
Siuslaw	0	0	0	257	257
Umatilla	373	30,685	1,316	879	33,253
Umpqua	90	82	1,046	57	1,275
Wallowa-Whitman	1,364	10,937	1,691	30	14,022
Willamette	48	1,350	1,855	5,599	8,852
Winema	1,969	4,740	3,263	542	10,514
<b>Subtotal</b>	<b>31,745</b>	<b>70,677</b>	<b>13,955</b>	<b>8,572</b>	<b>124,949</b>
<b>Pennsylvania</b>					
Allegheny (subtotal)	214	2,142	5,018	514	7,888
<b>Puerto Rico</b>					
Caribbean (subtotal)	0	0	41	118	159
<b>South Carolina</b>					
Francis Marion and Sumter (subtotal)	0	55	914	348	1,317
<b>South Dakota</b>					
Black Hills (subtotal)	30,917	5,092	6	22	36,037

See footnotes at end of table.



Table 18--Reforestation needs as of October 1, 1996, by State, national forest, and site productivity class--Continued 91

State, Commonwealth, or Territory 1/ National Forest	Acres by site productivity class 2/				Total acres
	0-49	50-84	85-119	120+	
Tennessee					
Cherokee (subtotal)	13	362	790	3,244	4,409
Texas					
NFs in Texas (subtotal)	0	3,762	846	314	4,922
Utah					
Ashley	6,853	0	0	0	6,853
Dixie	147	0	0	0	147
Fishlake	135	299	5	0	439
Manti-LaSal	0	552	19	0	571
Uinta	0	0	218	0	218
Wasatch-Cache	153	25	84	15	277
Subtotal	7,288	876	326	15	8,505
Vermont					
Green Mountain (subtotal)	33	610	0	11	654
Virginia					
George Washington and Jefferson (subtotal)	1,261	4,308	268	373	6,210
Washington					
Colville	755	2,891	1,630	0	5,276
Gifford Pinchot	0	869	1,148	470	2,487
Idaho Panhandle	149	0	32	0	181
Mt. Baker-Snoqualmie	0	163	327	276	766
Okanogan	9,835	2,984	995	0	13,814
Olympic	0	10	91	135	236
Umatilla	14	1,445	0	77	1,536
Wenatchee	10	27,291	2,019	247	29,567
Subtotal	10,763	35,653	6,242	1,205	53,863
West Virginia					
George Washington and Jefferson	28	278	10	149	465
Monongahela	104	641	940	796	2,481
Subtotal	132	919	950	945	2,946
Wisconsin					
Chequamegon	2,723	9,585	2,104	148	14,560
Nicolet	300	1,776	450	303	2,829
Subtotal	3,023	11,361	2,554	451	17,389

See footnotes at end of table.



Table 18--Reforestation needs as of October 1, 1996, by State, national forest, and site productivity class--Continued

State, Commonwealth, or Territory 1/ National Forest	Acres by site productivity class 2/				Total acres
	0-49	50-84	85-119	120+	
Wyoming					
Bighorn	2,419	193	0	0	2,612
Black Hills	9,907	6,396	38	0	16,341
Bridger-Teton	0	8	1,443	0	1,451
Medicine Bow and Routt	3,322	267	0	0	3,589
Shoshone	391	447	0	90	928
Targhee	35	3	0	0	38
Wasatch-Cache	146	126	0	0	272
Subtotal	16,220	7,440	1,481	90	25,231
Total	218,544	343,484	144,880	97,271	804,179

1/ Site productivity class refers to the amount of wood produced in cubic feet per acre per year in a natural unmanaged stand.

2/ Unlisted States had no reforestation needs as of October 1, 1996.



Table 19—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1996

State, Commonwealth, or Territory 1/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total Acres	Cleaning	Release	Pre-commercial Thinning	Fertili- zation	Pruning	Total Acres
	Planted	Seeds	w/site prep. 2/	w/o site prep. 2/							
Alabama											
NFs in Alabama (subtotal)	3,430	0	749	266	4,445	0	1,224	0	0	0	1,224
Alaska											
Tongass-Chatham	90	0	0	2,670	2,760	0	0	1,876	0	10	1,886
Tongass-Ketchikan	47	0	0	7,140	7,187	0	0	525	0	0	525
Tongass-Stikine	275	0	0	2,227	2,502	0	0	324		0	324
Subtotal	412	0	0	12,037	12,449	0	0	2,725	0	10	2,735
Arizona											
Apache-Sitgreaves	0	0	0	844	844	0	0	0	0	0	0
Coconino	0	0	0	1,620	1,620	0	35	6,361	0	0	6,396
Kaibab	306	10	148	2,834	3,298	0	0	85	0	0	85
Tonto	0	0	0	92	92	0	0	0	0	0	0
Subtotal	306	10	148	5,390	5,854	0	35	6,446	0	0	6,481
Arkansas											
Ouachita	2,180	0	5,489	0	7,669	0	3,039	1,442	0	0	4,481
Ozark-St. Francis	832	0	919	125	1,876	0	1,122	115	0	0	1,237
Subtotal	3,012	0	6,408	125	9,545	0	4,161	1,557	0	0	5,718
California											
Angeles	0	0	0	10	10	0	275	85	0	93	453
Cleveland	0	0	0	0	0	0	0	0	0	0	0
Eldorado	1,084	0	17	0	1,101	0	3,806	1,914	0	0	5,720
Inyo	0	0	0	0	0	0	89	457	0	0	546
Klamath	4,262	0	5	19	4,286	0	2,261	2,406	0	0	4,667
Lake Tahoe Basin	0	0	0	0	0	0	0	263	0	0	263
Lassen	0	0	0	0	0	0	1,216	9,460	0	0	10,676
Mendocino	0	0	0	0	0	0	2,129	495	541	41	3,206
Modoc	100	0	0	0	100	0	522	787	201	0	1,510
Plumas	207	0	0	0	207	0	950	2,295	0	0	3,245
Rogue River	136	0	0	0	136	0	0	0	0	0	0

See footnotes at end of table.



**Table 19—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1996--**  
Continued

State, Commonwealth, or National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration	Natural regeneration			Total  Acres	Cleaning	Release	Pre-commercial Thinning	Fertili- zation	Pruning	Total  Acres
	Planted	Seeds	w/site prep. 2/	w/o site prep. 2/							
California (continued)											
San Bernardino	0	0	0	0	0	0	12	25	0	90	127
Sequoia	876	0	0	0	876	0	1,863	789	0	76	2,728
Shasta	1,702	0	0	0	1,702	0	5,410	1,328	0	0	6,738
Sierra	1,307	0	10	0	1,317	0	3,592	339	0	0	3,931
Siskiyou	101	0	0	0	101	0	70	0	0	0	70
Six Rivers	2,916	0	0	93	3,009	0	2,347	997	0	0	3,344
Stanislaus	552	0	18	0	570	0	7,319	0	0	0	7,319
Tahoe	1,944	0	0	247	2,191	0	4,013	3,583	0	229	7,825
Trinity	6	0	0	0	6	0	1,715	201	0	0	1,916
Subtotal	15,193	0	50	369	15,612	0	37,589	25,424	742	529	64,284
Colorado											
Arapaho and Roosevelt	77	0	159	905	1,141	0	3	0	0	0	3
Grand Mesa, Uncompahgre, and Gunnison	16	0	248	1,112	1,376	0	0	0	0	0	0
Medicine Bow and Routt	30	74	456	513	1,073	0	0	90	0	0	90
Pike and San Isabel	170	0	115	1,060	1,345	0	140	0	0	0	140
Rio Grande and San Juan	0	0	50	3,314	3,364	0	0	197	0	0	197
White River	0	0	49	431	480	0	107	0	0	0	107
Subtotal	293	74	1,077	7,335	8,779	0	250	287	0	0	537
Florida											
NFs in Florida (subtotal)	2,176	3,240	0	498	5,914	0	235	0	0	0	235
Georgia											
Chattahoochee- Oconee (subtotal)	2,581	0	1,047	57	3,685	0	1,234	624	0	0	1,858
Idaho											
Boise	804	0	0	514	1,318	0	332	3,932	0	0	4,264
Caribou	205	0	0	0	205	0	0	44	0	0	44
Clearwater	4,304	0	207	672	5,183	0	130	386	0	327	843

See footnotes at end of table.



**Table 19—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1996--**  
Continued

State, Commonwealth, or Territory 1/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total	Cleaning	Release	Pre-commercial Thinning	Fertili- zation	Pruning	Total
	Planted	Seeds	w/site prep. 2/	w/o site prep. 2/							
					Acre						Acre
Idaho (continued)											
Idaho Panhandle	8,518	0	588	401	9,507	0	955	3,502	525	1,653	6,635
Kootenai	186	0	0	0	186	0	0	0	0	0	0
Nez Perce	2,019	0	998	118	3,135	0	116	643	0	0	759
Payette	1,267	0	58	55	1,380	0	0	1,286	0	0	1,286
Salmon and Challis	183	0	0	941	1,124	0	29	319	0	0	348
Sawtooth	89	0	31	7	127	0	0	0	0	0	0
Targhee	3,063	0	5,201	68	8,332	0	0	102	0	0	102
Subtotal	20,638	0	7,083	2,776	30,497	0	1,562	10,214	525	1,980	14,281
Illinois											
Shawnee (subtotal)	0	0	0	149	149	0	300	0	0	0	300
Indiana											
Hoosier (subtotal)	24	0	207	0	231	0	0	0	0	0	0
Kentucky											
Daniel Boone (subtotal)	449	0	1,314	0	1,763	0	361	0	0	0	361
Louisiana											
Kisatchie (subtotal)	3,158	0	621	0	3,779	0	520	238	0	0	758
Michigan											
Hiawatha	1,198	34	1,497	2,032	4,761	0	596	0	0	95	691
Huron-Manistee	468	0	2,415	1,072	3,955	0	111	42	0	0	153
Ottawa	469	0	3,508	4,242	8,219	0	729	0	0	44	773
Subtotal	2,135	34	7,420	7,346	16,935	0	1,436	42	0	139	1,617
Minnesota											
Chippewa	309	26	6,711	77	7,123	0	0	0	0	23	23
Superior	609	0	1,999	9,118	11,726	0	383	0	0	0	383
Subtotal	918	26	8,710	9,195	18,849	0	383	0	0	23	406

See footnotes at end of table.



**Table 19—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1996--**  
Continued

State, Commonwealth, or Territory 1/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total Acres	Cleaning	Release	Pre-commercial Thinning	Ferti- zation	Pruning	Total Acres
	Planted	Seeds	w/site prep. 2/	w/o site prep. 2/							
Mississippi NFs in Mississippi (subtotal)	8,465	17	152	0	8,634	0	1,681	199	131	0	2,011
Missouri Mark Twain (subtotal)	973	0	11,191	67	12,231	0	1,194	3,473	0	0	4,667
Montana											
Beaverhead	597	0	690	84	1,371	0	78	638	0	0	716
Bitterroot	1,444	0	0	85	1,529	0	177	359	0	0	536
Custer	1,330	0	54	676	2,060	0	0	139	0	0	139
Deerlodge	53	0	372	77	502	0	0	196	0	0	196
Flathead	3,218	15	1,233	199	4,665	0	0	2,592	0	38	2,630
Gallatin	1,660	0	282	218	2,160	0	94	510	0	0	604
Helena	1,327	0	281	55	1,663	0	0	149	0	0	149
Kootenai	6,865	0	1,917	243	9,025	0	22	3,856	0	121	3,999
Lewis and Clark	456	0	303	7	766	0	163	98	0	0	261
Lolo	8,850	10	2,278	417	11,555	0	54	1,155	0	0	1,209
Subtotal	25,800	25	7,410	2,061	35,296	0	588	9,692	0	159	10,439
New Hampshire White Mountain (subtotal)	0	0	1,099	1,377	2,476	0	0	0	0	0	0
New Mexico											
Carson	702	0	565	8,821	10,088	0	141	203	0	0	344
Cibola	335	0	0	53	388	0	0	0	0	0	0
Gila	0	0	2,194	1,694	3,888	0	0	0	0	0	0
Lincoln	0	0	0	512	512	0	0	32	0	0	32
Santa Fe	384	0	0	308	692	0	0	50	0	0	50
Subtotal	1,421	0	2,759	11,388	15,568	0	141	285	0	0	426
New York Green Mountain (subtotal)	0	0	20	0	20	0	25	0	0	0	25

See footnotes at end of table.



**Table 19—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1996--**  
Continued

State, Commonwealth, or Territory 1/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total  Acres	Cleaning	Release	Pre-commercial Thinning	Fertili- zation	Pruning	Total  Acres
	Planted	Seeds	w/site prep. 2/	w/o site prep. 2/							
North Carolina											
NFs in North Carolina (subtotal)	1,721	0	1,991	50	3,762	0	2,112	325	0	0	2,437
Ohio											
Wayne-Hoosier (subtotal)	113	0	323	0	436	0	48	0	0	0	48
Oklahoma											
Ouachita (subtotal)	635	0	0	0	635	0	0	39	0	0	39
Oregon											
Deschutes	1,643	0	2,329	812	4,784	0	0	1,529	0	0	1,529
Fremont	1,349	0	0	77	1,426	0	0	591	0	0	591
Klamath	178	0	0	9	187	0	51	23	0	0	74
Malheur	2,927	0	78	60	3,065	243	0	3,115	0	48	3,406
Mt. Hood	2,356	0	208	328	2,892	0	0	336	30	28	394
Ochoco	2,458	0	0	0	2,458	0	0	0	0	0	0
Rogue River	3,368	0	0	333	3,701	0	0	0	0	0	0
Siskiyou	1,320	0	0	0	1,320	0	1,358	840	0	21	2,219
Siuslaw	623	0	0	0	623	0	471	521	0	0	992
Umatilla	2,597	0	197	5,214	8,008	0	0	1,135	74	29	1,238
Umpqua	3,796	0	0	0	3,796	0	0	847	0	0	847
Wallowa-Whitman	6,544	258	1,419	6,636	14,857	11	5	2,624	0	37	2,677
Willamette	8,536	0	0	444	8,980	0	1,480	4,565	3,797	1,415	11,257
Winema	284	0	1,732	0	2,016	0	0	4,420	0	0	4,420
Subtotal	37,979	258	5,963	13,913	58,113	254	3,365	20,546	3,901	1,578	29,644
Pennsylvania											
Allegheny (subtotal)	0	0	2,184	1,129	3,313	0	100	0	0	0	100
South Carolina											
Francis Marion and Sumter (subtotal)	4,772	0	0	0	4,772	0	6,760	539	0	0	7,299

See footnotes at end of table.



**Table 19—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1996--**  
Continued

State, Commonwealth, or Territory 1/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total Acres	Cleaning	Release	Pre-commercial Thinning	Fertili- zation	Pruning	Total Acres
	Planted	Seeds	w/site prep. 2/	w/o site prep. 2/							
South Dakota											
Black Hills	0	0	0	9,175	9,175	0	0	6,780	0	0	6,780
Custer	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	9,175	9,175	0	0	6,780	0	0	6,780
Tennessee											
Cherokee (subtotal)	948	0	1,193	15	2,156	0	904	0	0	0	904
Texas											
NFs in Texas (subtotal)	771	0	814	175	1,760	0	0	945	0	0	945
Utah											
Ashley	0	0	0	8,918	8,918	0	0	500	0	0	500
Dixie	1,474	0	0	902	2,376	0	194	3,754	0	0	3,948
Fishlake	40	0	0	0	40	0	321	0	0	0	321
Manti-La Sal	0	0	0	91	91	0	0	86	0	0	86
Subtotal	1,514	0	0	9,911	11,425	0	515	4,340	0	0	4,855
Vermont											
Green Mountain (subtotal)	101	0	178	2	281	0	223	0	0	0	223
Virginia											
George Washington and Jefferson (subtotal)	589	0	2,222	229	3,040	0	593	157	0	0	750
Washington											
Colville	4,409	0	299	1,971	6,679	0	0	1,263	0	141	1,404
Gifford Pinchot	6,009	0	0	256	6,265	0	0	630	0	0	630
Idaho Panhandle	1,010	0	44	29	1,083	0	0	62	0	0	62
Mt. Baker-Snoqualmie	33	0	0	0	33	0	0	0	0	0	0

See footnotes at end of table.



**Table 19—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1996--**  
Continued

State, Commonwealth, or Territory 1/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total Acre	Cleaning	Release	Pre-commercial Thinning	Fertili- zation	Pruning	Total Acre
	Planted	Seeds	w/site prep. 2/	w/o site prep. 2/							
Washington (continued)											
Okanogan	744	0	1,211	432	2,387	0	0	0	0	0	0
Olympic	1,525	0	0	3	1,528	0	0	1,029	0	0	1,029
Umatilla	761	0	0	253	1,014	0	0	600	0	100	700
Wenatchee	911	0	50	8,514	9,475	0	0	697	0	0	697
Subtotal	15,402	0	1,604	11,458	28,464	0	0	4,281	0	241	4,522
West Virginia											
George Washington and Jefferson	0	0	204	0	204	0	88	0	0	0	88
Monongahela	66	0	1,035	46	1,147	0	611	277	0	0	888
Subtotal	66	0	1,239	46	1,351	0	699	277	0	0	976
Wisconsin											
Chequamegon	653	29	785	798	2,265	0	213	0	0	95	308
Nicolet	500	0	678	848	2,026	0	458	0	0	0	458
Subtotal	1,153	29	1,463	1,646	4,291	0	671	0	0	95	766
Wyoming											
Bighorn	0	0	683	953	1,636	0	0	0	0	0	0
Black Hills	0	0	0	728	728	0	0	548	0	0	548
Bridger-Teton	75	0	0	0	75	0	0	0	0	0	0
Medicine Bow and Routt	10	66	1,897	1,616	3,589	0	318	1,527	0	0	1,845
Shoshone	0	0	56	1,813	1,869	0	0	0	0	0	0
Targhee	455	0	875	0	1,330	0	0	0	0	0	0
Subtotal	540	66	3,511	5,110	9,227	0	318	2,075	0	0	2,393
Total	157,688	3,779	80,150	113,295	354,912	254	69,227	101,510	5,299	4,754	181,044

1/ Unlisted States and Forests had no certification in fiscal year 1996.

2/ w/ site prep. = with site preparation; w/o site prep. = without site preparation.



Table 20—Certification of reforestation and timber stand improvement acreages by region--fiscal year 1996

Region	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total	Cleaning	Release	Precom- mercial thinning	Fertili- zation	Pruning	Total
	Planted	Seeded	With site preparation	Without site preparation							
Acres											
Northern (R-1)	41,837	25	9,247	3,281	54,390	0	1,789	14,285	525	2,139	18,738
Rocky Mountain (R-2)	303	140	3,713	21,620	25,776	0	568	9,142	0	0	9,710
Southwest (R-3)	1,727	10	2,907	16,778	21,422	0	176	6,731	0	0	6,907
Intermountain (R-4)	7,655	0	6,165	11,496	25,316	0	876	10,023	0	0	10,899
Pacific Southwest (R-5)	15,134	0	50	378	15,562	0	37,570	25,447	742	529	64,288
Pacific Northwest (R-6)	52,430	258	7,523	25,333	85,544	254	3,384	24,742	3,901	1,819	34,100
Southern (R-8)	32,707	3,257	16,715	1,415	54,094	0	19,873	4,623	131	0	24,627
Eastern (R-9)	5,483	89	33,830	20,957	60,359	0	4,991	3,792	0	257	9,040
Alaska (R-10)	412	0	0	12,037	12,449	0	0	2,725	0	10	2,735
Total	157,688	3,779	80,150	113,295	354,912	254	69,227	101,510	5,299	4,754	181,044



Table 21--Timber stand improvement funding and accomplishments by funding source--fiscal years 1992-96

101

	Appropriated	Knutson-Vandenberg	Total
1992			
Million dollars 1/	25.1	27.8	52.9
1,000 acres	171.7	181.4	353.1 2/
Constant dollars/acre	146.0	153.5	149.8 3/
1993			
Million dollars 1/	25.8	26.1	51.9
1,000 acres	175.6	165.8	341.4 4/
Constant dollars/acre	146.7	157.4	152.0 3/
1994			
Million dollars 1/	17.9	21.4	39.3
1,000 acres	131.6	131.4	263.0 5/
Constant dollars/acre	136.0	163.2	149.4 3/
1995			
Million dollars 1/	24.6	26.8	51.4
1,000 acres	140.7	132.6	273.3 6/
Constant dollars/acre	175.0	202.3	188.1 3/
1996			
Million dollars 1/	21.4	23.1	44.5
1,000 acres	130.4	128.4	258.8 7/
Constant dollars/acre	163.8	179.8	171.9 3/

1/ All previously published values have been converted to an obligations basis in 1996 constant dollars. No General Administration or law enforcement funds included. Does not include funds for nursery and tree improvement.

2/ Does not include 1,746 acres accomplished with contributed funding.

3/ Weighted average.

4/ Does not include 2,565 acres accomplished with contributed funding.

5/ Does not include 1,572 acres accomplished with contributed funding.

6/ Does not include 270 acres accomplished with contributed funding.

7/ Does not include 889 acres accomplished with contributed funding.



Table 22—Timber stand improvement needs as of October 1, 1996, by State, national forest, and cubic foot productivity class

State, Commonwealth, or Territory 1/ National Forest	All timber stand improvement Cubic foot productivity classes 2/				Total	Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+					
	Acres								
Alabama									
NFs in Alabama (subtotal)	461	3,763	1,396	668	6,288	5,780	508	0	0
Alaska									
Chugach	0	45	374	0	419	45	374	0	0
Tongass-Chatham	0	178	207	8,813	9,198	150	9,048	0	0
Tongass-Ketchikan	14	24	58	21,215	21,311	54	21,257	0	0
Tongass-Stikine	0	0	0	695	695	0	695	0	0
Subtotal	14	247	639	30,723	31,623	249	31,374	0	0
Arizona									
Apache-Sitgreaves	3,199	1,027	70	0	4,296	15	4,281	0	0
Coconino	4,638	703	0	0	5,341	0	5,341	0	0
Coronado	0	22	0	0	22	0	22	0	0
Kaibab	1,419	222	0	0	1,641	0	1,641	0	0
Prescott	40	0	0	0	40	40	0	0	0
Tonto	970	225	0	0	1,195	650	545	0	0
Subtotal	10,266	2,199	70	0	12,535	705	11,830	0	0
Arkansas									
Ouachita	53	1,982	2,253	556	4,844	2,783	2,061	0	0
Ozark-St. Francis	291	10,662	412	70	11,435	6,314	5,121	0	0
Subtotal	344	12,644	2,665	626	16,279	9,097	7,182	0	0
California									
Angeles	404	1,182	388	0	1,974	1,236	376	0	362
Cleveland	0	689	0	0	689	511	177	0	1
Eldorado	70	555	8,492	19,146	28,263	21,967	6,238	58	0
Inyo	0	98	0	0	98	19	79	0	0
Klamath	521	20,254	30,527	16,980	68,282	36,584	31,664	34	0
Lake Tahoe Basin	800	2,329	2,962	437	6,528	3,635	2,893	0	0
Lassen	1,542	37,378	17,450	2,662	59,032	27,156	31,876	0	0
Los Padres	0	138	0	0	138	72	41	0	25
Mendocino	55	18,279	18,224	39,183	75,741	44,695	27,071	3,972	3

See footnotes at end of table.



Table 22--Timber stand improvement needs as of October 1, 1996, by State, national forest, and cubic foot productivity class--Continued

State, Commonwealth, or Territory 1/ National Forest	All timber stand improvement Cubic foot productivity classes 2/				Total	Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+					
	<i>Acres</i>								
California (continued)									
Modoc	61	10,517	4,190	1,254	16,022	6,923	9,008	76	15
Plumas	59	3,870	16,580	8,284	28,793	7,966	20,827	0	0
Rogue River	0	774	0	0	774	690	84	0	0
San Bernardino	272	2,577	107	66	3,022	1,246	1,741	0	35
Sequoia	0	1,391	2,395	6,998	10,784	6,431	3,489	672	192
Shasta	0	761	1,260	5,212	7,233	5,812	1,421	0	0
Sierra	231	2,177	7,463	7,617	17,488	11,176	6,025	0	287
Siskiyou	0	0	1,823	0	1,823	906	718	199	0
Six Rivers	0	182	8,325	20,347	28,854	18,597	10,257	0	0
Stanislaus	179	4,557	10,043	48,511	63,290	43,112	20,178	0	0
Tahoe	481	5,215	28,813	30,372	64,881	30,279	34,226	376	0
Toiyabe	512	820	30	0	1,362	0	1,362	0	0
Trinity	366	13,623	12,213	9,767	35,969	13,021	22,948	0	0
Subtotal	5,553	127,366	171,285	216,836	521,040	282,034	232,699	5,387	920
Colorado									
Arapaho-Roosevelt	1,778	0	0	0	1,778	287	1,491	0	0
Grand Mesa, Uncompahgre, and Gunnison	2,822	344	0	0	3,166	495	2,671	0	0
Manti-La Sal	0	90	95	0	185	0	185	0	0
Medicine Bow and Routt	8,854	2,899	50	0	11,803	3,241	8,562	0	0
Pike and San Isabel	1,181	287	0	0	1,468	1,057	411	0	0
Rio Grande	70	78	0	0	148	78	70	0	0
San Juan	1,814	1,172	0	0	2,986	2,779	207	0	0
White River	107	916	261	0	1,284	1,284	0	0	0
Subtotal	16,626	5,786	406	0	22,818	9,221	13,597	0	0
Florida									
NFs in Florida (subtotal)	1,483	404	516	41	2,444	992	392	1,060	0
Georgia									
Chattahoochee and Oconee (subtotal)	0	892	5,739	3,402	10,033	1,775	7,158	1,100	0

See footnotes at end of table.



Table 22--Timber stand improvement needs as of October 1, 1996, by State, national forest, and cubic foot productivity class--Continued

State, Commonwealth, or Territory 1/ National Forest	All timber stand improvement Cubic foot productivity classes 2/				Total	Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+					
	Acres								
Idaho									
Boise	1,158	2,329	7,493	1,098	12,078	1,950	10,128	0	0
Caribou	0	662	47	0	709	9	700	0	0
Challis	1,070	914	0	0	1,984	1,249	735	0	0
Clearwater	578	106	1,313	2,904	4,901	2,107	2,037	0	757
Idaho Panhandle	22,043	9,711	32,812	32,595	97,161	9,446	78,344	2,658	6,713
Kootenai	31	0	8	35	74	0	74	0	0
Nez Perce	203	1,865	4,664	1,596	8,328	356	7,957	15	0
Payette	411	1,446	2,688	22	4,567	1,142	3,425	0	0
Salmon	5,999	396	0	0	6,395	5,611	784	0	0
Sawtooth	396	24	0	0	420	152	268	0	0
Targhee	5	14,983	0	0	14,988	73	14,915	0	0
Subtotal	31,894	32,436	49,025	38,250	151,605	22,095	119,367	2,673	7,470
Illinois									
Shawnee (subtotal)	0	50	663	0	713	660	0	0	53
Indiana									
Hoosier (subtotal)	0	0	919	4,049	4,968	1,555	1,385	0	2,028
Kentucky									
Daniel Boone (subtotal)	7	810	4,567	480	5,864	414	5,414	3	33
Louisiana									
Kisatchie (subtotal)	2	1,069	3,342	2,714	7,127	3,788	3,339	0	0
Maine									
White Mountain (subtotal)	6	36	15	13	70	11	59	0	0
Michigan									
Hiawatha	674	5,532	428	42	6,676	1,310	442	0	4,924
Huron-Manistee	1,260	2,027	379	0	3,666	727	2,880	0	59
Ottawa	130	1,417	208	0	1,755	1,755	0	0	0
Subtotal	2,064	8,976	1,015	42	12,097	3,792	3,322	0	4,983

See footnotes at end of table.



Table 22—Timber stand improvement needs as of October 1, 1996, by State, national forest, and cubic foot productivity class--Continued

State, Commonwealth, or Territory 1/ National Forest	All timber stand improvement Cubic foot productivity classes 2/				Total	Release subtotal	Thinning subtotal	Ferti- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+ Acres					
Minnesota									
Chippewa	0	4,459	283	29	4,771	4,400	0	0	371
Superior	2,815	0	196	27	3,038	3,038	0	0	0
Subtotal	2,815	4,459	479	56	7,809	7,438	0	0	371
Mississippi									
NFs in Mississippi (subtotal)	474	333	2,976	3,059	6,842	4,829	1,627	386	0
Missouri									
Mark Twain (subtotal)	0	15,315	174	0	15,489	2,202	13,212	0	75
Montana									
Beaverhead	9,965	8,746	1,430	76	20,217	187	20,030	0	0
Bitterroot	9,635	7,470	5,145	214	22,464	2,852	19,612	0	0
Custer	1,384	5	25	0	1,414	145	1,269	0	0
Deerlodge	17,203	3,261	1,415	127	22,006	105	21,901	0	0
Flathead	8,450	2,353	10,250	5,081	26,134	624	25,176	0	334
Gallatin	578	5,856	0	0	6,434	10	6,424	0	0
Helena	579	410	470	12	1,471	3	1,458	10	0
Idaho Panhandle	10	0	310	347	667	0	598	0	69
Kootenai	11,610	25,281	37,334	6,462	80,687	1,484	79,115	0	88
Lewis and Clark	1,401	945	603	6	2,955	8	2,947	0	0
Lolo	3,804	8,905	7,034	1,351	21,094	1,104	19,983	0	7
Subtotal	64,619	63,232	64,016	13,676	205,543	6,522	198,513	10	498
Nevada									
Lake Tahoe Basin (subtotal)	0	0	0	120	120	0	120	0	0
New Hampshire									
White Mountain (subtotal)	111	121	67	24	323	16	307	0	0

See footnotes at end of table.



Table 22--Timber stand improvement needs as of October 1, 1996, by State, national forest, and cubic foot productivity class--Continued

State, Commonwealth, or Territory 1/ National Forest	All timber stand improvement Cubic foot productivity classes 2/ Acre				Total	Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+					
New Mexico									
Carson	1,698	725	30	0	2,453	165	2,288	0	0
Cibola	1,670	0	0	0	1,670	0	1,670	0	0
Gila	3,289	232	0	0	3,521	0	3,521	0	0
Lincoln	85	1,539	78	0	1,702	0	1,702	0	0
Santa Fe	6,495	309	0	0	6,804	481	6,323	0	0
Subtotal	13,237	2,805	108	0	16,150	646	15,504	0	0
New York									
Green Mountain (subtotal)	0	80	653	0	733	58	675	0	0
North Carolina									
NFs in North Carolina (subtotal)	694	2,594	421	2,746	6,455	3,798	1,781	876	0
Ohio									
Wayne (subtotal)	26	275	618	2,508	3,427	828	1,261	0	1,338
Oklahoma									
Ouachita (subtotal)	0	522	304	205	1,031	513	518	0	0
Oregon									
Deschutes	15,135	10,283	1,181	458	27,057	2,006	19,671	71	5,309
Fremont	11,066	4,061	571	0	15,698	2,121	13,577	0	0
Klamath	12	208	632	927	1,779	988	791	0	0
Malheur	3,603	8,409	0	0	12,012	0	11,933	0	79
Mt. Hood	327	17,048	11,384	2,643	31,402	618	13,481	14,713	2,590
Ochoco	7,920	5,160	12	0	13,092	370	11,338	0	1,384
Rogue River	0	5,399	28,182	1,181	34,762	8,212	13,293	6,274	6,983
Siskiyou	71	1,913	15,885	4,416	22,285	6,938	9,133	3,951	2,263
Siuslaw	0	0	0	5,825	5,825	2,876	2,917	0	32
Umatilla	2,674	4,151	1,043	389	8,257	148	8,080	0	29
Umpqua	0	6,373	25,202	8,940	40,515	896	21,510	15,522	2,587
Wallowa-Whitman	10,918	13,232	3,365	0	27,515	1,046	26,008	0	461
Willamette	53	3,801	51,008	63,502	118,364	13,188	25,077	56,567	23,532
Winema	6,163	13,331	4,203	0	23,697	2,000	21,464	0	233
Subtotal	57,942	93,369	142,668	88,281	382,260	41,407	198,273	97,098	45,482

See footnotes at end of table.



Table 22--Timber stand improvement needs as of October 1, 1996, by State, national forest, and cubic foot productivity class--Continued

State, Commonwealth, or Territory 1/ National Forest	All timber stand improvement Cubic foot productivity classes 2/ 0-49      50-84      85-119      120+				Total	Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	Acres								
Pennsylvania									
Allegheny (subtotal)	143	884	1,151	436	2,614	2,614	0	0	0
Puerto Rico									
Caribbean (subtotal)	0	300	798	0	1,098	498	600	0	0
South Carolina									
Francis Marion & Sumter (subtotal)	0	0	467	0	467	315	152	0	0
South Dakota									
Black Hills (subtotal)	6,126	415	0	0	6,541	181	6,360	0	0
Tennessee									
Cherokee (subtotal)	38	1,622	340	2,020	4,020	3,226	794	0	0
Texas									
NFs in Texas (subtotal)	0	619	2,079	1,392	4,090	3,668	422	0	0
Utah									
Ashley	8,911	0	0	0	8,911	0	8,911	0	0
Dixie	3,046	1,209	0	0	4,255	1,476	2,779	0	0
Fishlake	399	92	0	0	491	491	0	0	0
Manti-LaSal	0	168	1,331	200	1,699	0	1,699	0	0
Uinta	0	13	45	0	58	58	0	0	0
Wasatch-Cache	171	573	0	0	744	146	598	0	0
Subtotal	12,527	2,055	1,376	200	16,158	2,171	13,987	0	0
Vermont									
Green Mountain (subtotal)	744	1,300	109	0	2,153	895	1,258	0	0
Virginia									
George Washington & Jefferson (subtotal)	586	3,865	1,222	1,593	7,266	2,501	4,702	0	63
Washington									
Colville	521	5,640	6,526	278	12,965	1,144	11,670	0	151
Gifford Pinchot	0	24,970	34,160	8,395	67,525	423	41,960	14,188	10,954
Idaho Panhandle	1,210	392	4,554	2,693	8,849	113	8,720	0	16

See footnotes at end of table.



Table 22--Timber stand improvement needs as of October 1, 1996, by State, national forest, and cubic foot productivity class--Continued

State, Commonwealth, or Territory 1/ National Forest	All timber stand improvement Cubic foot productivity classes 2/ Acres				Total	Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+					
Washington (continued)									
Mt. Baker-Snoqualmie	0	40	2,857	1,855	4,752	110	2,860	1,488	294
Okanogan	2,768	4,652	769	0	8,189	2,539	5,249	0	401
Olympic	0	1,250	13,764	2,210	17,224	17	13,910	2,810	487
Umatilla	7	7,706	23	24	7,760	100	7,144	0	516
Wenatchee	1,136	19,660	3,829	2,150	26,775	3,480	15,572	6,080	1,643
Subtotal	5,642	64,310	66,482	17,605	154,039	7,926	107,085	24,566	14,462
West Virginia									
George Washington and Jefferson	100	150	0	234	484	461	23	0	0
Monongahela	76	625	712	431	1,844	1,218	626	0	0
Subtotal	176	775	712	665	2,328	1,679	649	0	0
Wisconsin									
Chequamegon	131	574	181	88	974	874	0	0	100
Nicolet	47	751	313	0	1,111	550	120	0	441
Subtotal	178	1,325	494	88	2,085	1,424	120	0	541
Wyoming									
Bighorn	14,592	362	0	0	14,954	2,772	12,182	0	0
Black Hills	686	324	0	0	1,010	0	1,010	0	0
Bridger-Teton	0	282	859	0	1,141	0	1,141	0	0
Medicine Bow and Routt	7,804	162	13	0	7,979	393	7,586	0	0
Shoshone	184	108	0	0	292	225	67	0	0
Wasatch-Cache	232	27	0	0	259	0	259	0	0
Subtotal	23,498	1,265	872	0	25,635	3,390	22,245	0	0
Total	258,296	458,518	530,848	432,518	1,680,180	440,913	1,027,791	133,159	78,317

1/ Unlisted States had no timber stand improvement needs as of October 1, 1996.

2/ Cubic foot productivity class refers to the cubic feet of wood produced per acre per year in a natural unmanaged stand.



Table 23--Timber stand improvement program needs--fiscal years 1996-98

	Current and Projected	Prior Year Projected 1/
	1,000 acres	1,000 acres
Fiscal year 1996		
10/1/95 balance	1,454	1,454
Actual needs	486	300
Actual accomplishments	-260	-267
10/1/96 balance	1,680	1,487
Fiscal year 1997		
10/1/96 balance	1,680	1,487
New needs	350	300
Projected accomplishments	-274	-207
10/1/97 balance	1,756	1,580
Fiscal year 1998:		
10/1/97 balance	1,756	
New needs	300	
Projected accomplishments	-237	
Projected 10/1/98 balance	1,819 2/	

1/ Projections in FY 1995 Report of the Forest Service

2/ This represents over 6 years of future projected accomplishments.



Table 24--Timber offered, sold, and harvested--fiscal years 1992-96 1/

	1996	1995	1994	1993	1992
<b>Offered</b>					
Volume (billion board feet)	4.0	4.0	3.4	4.6	5.1
Volume (billion cubic feet) 2/	(0.75)	(0.77)	(0.65)	(0.87)	(1.0)
<b>Sold</b>					
Number of sales	190,123	216,272	215,004	255,825	250,852
Volume (billion board feet)	3.4	2.9	3.1	4.5	4.4
Volume (billion cubic feet) 2/	(0.64)	(0.54)	(0.57)	(0.85)	(0.86)
Value (million dollars) 3/	450.5	369.7	508.9	774.9	576.2
<b>Harvested</b>					
Volume (billion board feet)	3.7	3.9	4.8	5.9	7.3
Volume (billion cubic feet) 2/	(0.69)	(0.74)	(0.94)	(1.2)	(1.4)
Value (million dollars) 3/	544.3	616.1	783.0	914.6	934.5

1/ These figures do not include nonconvertible product sales (see table 27 for nonconvertible product sales information).

2/ Conversion from the 1990 RPA Program, which vary by region, except for FY 1996, which comes from the Sales Tracking and Accomplishment Reporting System (STARS).

3/ Includes reforestation, stand improvement, and timber salvage deposits. Does not include value of roads or brush disposal.



	1996			1995		
	Offered 1/	Sold 2/ 3/	Harvested 4/	Offered 1/	Sold 2/ 3/	Harvested 4/
<i>Million board feet</i>						
Northern (R-1)	395.6	369.9	342.7	248.7	188.2	350.3
Rocky Mountain (R-2)	155.4	82.5	154.5	176.5	167.1	187.0
Southwestern (R-3)	34.3	33.4	46.3	128.9	85.6	99.6
Intermountain (R-4)	323.8	270.1	265.0	388.6	212.1	208.3
Pacific Southwest (R-5)	610.2	409.3	548.2	544.4	379.0	453.3
Pacific Northwest (R-6)	907.8	939.4	775.7	776.8	401.0	877.1
Southern (R-8)	743.2	678.2	847.4	870.1	815.6	809.8
Eastern (R-9)	577.0	529.6	621.3	576.6	540.5	657.4
Alaska (R-10)	268.2	72.0	123.5	296.1	96.2	223.1
<b>Total</b>	<b>4,015.5</b>	<b>3,384.4</b>	<b>3,724.6</b>	<b>4,006.7</b>	<b>2,885.3</b>	<b>3,865.9</b>

1/ Sales offered for the fiscal year being displayed.

2/ Includes sales offered in prior fiscal years and sold in the fiscal year being displayed, and miscellaneous small sales that were previously offered and/or sold and were reoffered and sold in the fiscal year being displayed. Does not include the volume of long-term sales released for harvesting.

3/ Sold and offered will not be equal since some sales were not sold (awarded) in the same fiscal year in which they were offered. Some sales did not receive any bids, or were withdrawn.

4/ Includes the volume harvested on long-term sales.



Table 26—Timber sold and harvested by State—fiscal year 1996 1/

State or Commonwealth 2/	Timber sold			Timber harvested	
	Sales	Volume	Bid value 3/	Volume	Receipts 3/
		MBF 4/	Actual dollars	MBF 4/	Actual dollars
Alabama	695	47,890.09	6,667,212.12	65,027.26	8,046,913.04
Alaska	88	72,034.71	12,355,562.54	123,473.11	14,469,295.72
Arizona	9,856	20,064.55	314,875.27	31,507.07	2,276,539.87
Arkansas	3,223	168,303.78	23,430,202.95	176,958.60	23,867,251.03
California	40,685	409,844.27	46,837,482.68	536,757.20	80,470,247.20
Colorado	14,226	43,264.55	1,938,250.38	83,168.77	7,907,990.80
Florida	127	48,782.27	4,294,692.73	35,830.22	3,329,575.59
Georgia	1,136	34,919.63	2,623,222.54	40,006.09	3,100,884.44
Idaho	19,713	324,742.92	28,637,833.01	351,631.62	61,901,696.81
Illinois	83	85.00	845.00	1,167.51	41,205.73
Indiana	61	175.39	12,955.82	180.30	13,709.85
Kentucky	624	22,792.16	1,638,926.83	19,753.71	1,500,314.84
Louisiana	349	52,015.49	7,923,711.43	72,379.19	9,607,439.57
Maine	0	0.00	0.00	2,072.91	85,012.65
Michigan	487	157,357.22	9,655,685.90	176,937.32	8,725,884.46
Minnesota	257	115,621.18	6,991,611.82	156,991.06	6,357,431.75
Mississippi	700	112,670.96	18,931,250.10	210,251.50	29,414,158.03
Missouri	863	58,248.24	5,019,759.11	48,226.66	4,478,647.12
Montana	13,910	247,020.39	25,315,095.33	198,622.51	31,580,129.90
Nebraska	6	9.00	90.00	6.00	60.00
Nevada	1,469	1,865.25	24,019.26	14,092.14	417,422.56
New Hampshire	148	18,223.65	1,168,301.06	16,450.96	775,041.98
New Mexico	10,703	13,304.20	248,452.45	14,786.90	398,244.05
New York	10	14.00	280.00	189.00	18,609.21
North Carolina	1,637	23,479.77	1,212,179.60	30,550.19	1,824,041.26
North Dakota	38	45.00	450.00	45.00	450.00
Ohio	86	147.36	7,460.01	145.21	7,249.05
Oklahoma	69	16,138.51	2,764,868.11	21,208.32	3,633,683.56
Oregon	26,586	695,495.73	152,798,733.83	546,066.36	140,619,413.09
Pennsylvania	91	54,318.89	19,662,810.98	59,641.14	23,016,155.67
South Carolina	399	43,267.57	4,667,297.56	37,291.99	4,157,306.00
South Dakota	2,002	14,295.91	967,795.01	45,006.42	8,207,278.71
Tennessee	475	12,597.94	850,075.89	11,551.62	792,069.72
Texas	227	62,623.57	12,043,771.94	88,958.61	16,045,258.54
Utah	6,572	54,324.20	2,767,617.07	44,420.29	4,014,218.31
Vermont	73	2,154.03	309,048.64	5,411.95	622,945.27
Virginia	3,263	30,646.91	3,106,379.72	36,273.54	2,998,446.10
Washington	7,674	243,915.58	31,597,732.29	229,667.08	23,916,398.82
West Virginia	528	14,227.77	3,320,728.64	29,620.13	5,804,605.80
Wisconsin	912	111,024.35	7,267,632.79	125,522.23	5,672,226.79
Wyoming	20,072	36,495.81	3,077,773.25	36,704.07	4,233,557.99
Total	190,123	3,384,447.80	450,452,673.66	3,724,551.76	544,349,010.88

1/ Excludes nonconvertible products such as Christmas trees, cones, burls, etc.

2/ States not listed had no timber sold or harvested in fiscal year 1996.

3/ Includes reforestation and stand improvement costs and timber salvage. Does not include value of roads or brush disposal.

4/ MBF = thousand board feet.



Table 27—Number of sales, volume, and value of timber sold on National Forest System lands by size class--fiscal years 1992-96

	Sale size class						Noncon- vertibles	5/ Total less non- convertibles
	To 1/ \$300	\$301- 2/ \$2,000	\$2,001- 3/ 2,000 MBF 4/	2,001 MBF- 5,000 MBF	5,001 MBF- 15,000 MBF	15,001 MBF and over		
1992								
Number of sales	231,038	15,840	3,361	448	162	3	218,851	250,852
Volume (MBF)	410,377	195,702	1,448,513	1,288,949	1,033,838	81,073	0	4,458,452
Value (\$1,000)	4,058	5,170	160,044	207,443	190,718	6,382	2,423	573,815
1993								
Number of sales	229,759	20,895	4,637	394	123	17	220,962	255,825
Volume (MBF)	469,537	168,865	1,447,127	1,170,276	955,561	303,958	0	4,515,324
Value (\$1,000)	3,918.3	5,097.4	189,645.9	215,229.4	278,137.4	82,859.5	2,791.4	774,887.9
1994								
Number of sales	197,201	15,025	2,672	298	65	7	221,747	215,268
Volume (MBF)	373,213	110,680	1,183,399	885,899	430,629	72,528	0	3,056,348
Value (\$1,000)	3,668.8	2,662.7	180,012.0	190,016.1	116,719.9	15,824.1	3,138.3	508,903.6
1995								
Number of sales	193,794	18,483	3,673	235	62	25	199,739	216,272
Volume (MBF)	332,832	121,486	1,060,704	693,538	389,225	287,477	0	2,885,262
Value (\$1,000)	3,684.7	4,341.6	147,773.8	113,124.5	70,356.7	30,455.0	2,935.1	369,736.3
1996								
Number of sales	166,156	19,406	4,126	325	100	10	217,208	190,123
Volume (MBF)	265,546	119,707	1,076,694	1,032,758	795,123	94,620	0	3,384,448
Value (\$1,000)	3,293.9	4,755.7	139,586.8	167,803.2	119,463.1	15,550.0	3,261.8	450,452.7

1/ Sales up to \$300 per sale.

2/ Sales ranging from \$301 to \$2,000 per sale.

3/ Sales valued at more than \$2,000 but less than 2,001 MBF in volume.

4/ MBF = thousand board feet.

5/ Nonconvertible products include Christmas trees, cones, burls, etc. No volume is attributed to these sales.



Table 28—Uncut timber volume under contract by region--fiscal years 1992-96

Region	1996 1/		1995 1/		1994 2/		1993		1992	
	MMBF 3/	MMCF 4/	MMBF 3/	MMCF 5/	MMBF 3/	MMCF 5/	MMBF 3/	MMCF 5/	MMBF 3/	MMCF 5/
Northern (R-1)	568	142	555	136	706	173	1,086	266	1,319	322
Rocky Mountain (R-2)	339	68	461	105	507	116	526	120	683	157
Southwestern (R-3)	84	17	116	19	135	23	148	25	199	33
Intermountain (R-4)	417	73	512	105	417	85	483	99	503	102
Pacific Southwest (R-5)	775	149	793	123	871	135	907	141	964	150
Pacific Northwest (R-6)	1,289	248	1,148	225	1,594	313	2,218	435	3,358	658
Southern (R-8)	871	158	1,159	216	1,140	213	1,253	234	1,251	233
Eastern (R-9)	1,388	225	1,475	239	1,607	260	1,665	269	1,706	277
Alaska (R-10) 6/	149	37	103	26	63	16	77	20	95	24
Total	5,880	1,117	6,322	1,194	7,040	1,334	8,363	1,609	10,078	1,956

1/ Data source is the automated timber sale accounting system (ATSA), rather than regional calculations.

2/ Some numbers have changed from 1994 Report due to replacement of regional information with more auditable data obtained from the ATSA.

3/ Volume (million board feet) in local scale.

4/ Million cubic feet conversions based upon actual FY 1996 regional conversion factors, which vary by region.

5/ Million cubic feet conversions based on 1990 RPA Program, and vary by region.

6/ Long term sale not included.



Table 29--Timber sale funding--fiscal years 1994-96

	1996	1995 1/	1994
	<i>1,000 dollars</i>		
National Forest System			
Timber management.....			130,511
Harvest administration.....			54,095
Subtotal, Timber sales management	188,582	181,050	184,606
Support to timber sales program			
Minerals.....			1,018
Forest fire protection.....			2,909
Recreation.....			6,567
Wildlife and fish.....			11,802
Range.....			166
Soil and water.....			4,371
Landline location.....			9,390
Subtotal, Support to the timber sales program			36,223
Road construction (timber-related)			
Forest Service construction.....	57,000	51,807	51,061
Purchaser construction.....	(50,000)	(50,000)	(60,000)
Purchaser construction by the Forest Service.....	5,945	5,945	8,457
Subtotal, Road construction	62,945	57,752	59,518
Total, appropriated accounts	251,527	238,802	280,347
Special accounts 2/			
Timber salvage sales.....	209,000	183,164	186,737
Total	460,527	421,966	467,084

1/ For FY 1995, line items were reallocated under the new budget structure and benefitting fund concept approved in the FY 1995 Appropriations Act. Thus, timber management, harvest administration, and resource support to the timber program are included in the timber sales management line.

2/ Includes General Administration expenses.



Table 30--Authorized grazing use in HM's by State--fiscal year 1996 1/

State, Commonwealth, or Territory 2/	Cattle	Sheep	Domestic horses	Wild horses	Wild burros	Total
Alabama	749	0	0	0	0	749
Arizona	812,025	72,660	7,148	0	264	892,097
Arkansas	25,706	0	24	0	0	25,730
California	263,914	130,623	3,094	8,740	1,404	407,775
Colorado	637,368	454,899	3,324	0	0	1,095,591
Florida	96	0	0	0	0	96
Georgia	5,212	0	0	328	0	5,540
Idaho	414,774	495,068	5,165	0	0	915,007
Illinois	117	0	0	0	0	117
Kansas	26,410	0	0	0	0	26,410
Louisiana	17,614	0	0	0	0	17,614
Michigan	1,421	0	0	0	0	1,421
Minnesota	40	0	0	0	0	40
Mississippi	168	0	0	0	0	168
Missouri	20,279	0	0	0	0	20,279
Montana	421,322	52,724	9,868	350	0	484,264
Nebraska	92,508	0	8	0	0	92,516
Nevada	151,090	175,008	264	11,147	2,603	340,112
New Mexico	630,170	74,513	4,467	3,048	0	712,198
New York	6,970	0	104	0	0	7,074
North Dakota	360,935	0	3,771	0	0	364,706
Ohio	693	0	0	0	0	693
Oklahoma	17,383	0	0	0	0	17,383
Oregon	330,723	75,534	1,060	2,760	0	410,077
South Dakota	344,397	20,736	92	0	0	365,225
Texas	21,964	0	0	0	0	21,964
Utah	314,544	490,994	1,599	0	0	807,137
Vermont	111	0	83	0	0	194
Virginia	12,920	0	2,974	0	0	15,894
Washington	69,593	38,866	50	0	0	108,509
West Virginia	4,670	0	0	0	0	4,670
Wyoming	433,877	347,161	6,665	0	0	787,703
<b>Total</b>	<b>5,439,763</b>	<b>2,428,786</b>	<b>49,760</b>	<b>26,373</b>	<b>4,271</b>	<b>7,948,953</b>

1/ A head month (HM) is the billing unit for permitted grazing and is equal to 1 month's occupancy.

2/ Unlisted States had no Forest Service grazing program in 1996.



Table 31--Annual grazing statistics--fiscal year 1996

	Permittees	Cattle		Horses and burros		Sheep and goats		Total	
		Number	HM's 1/ AUM's 2/	Number	HM's AUM's	Number	HM's AUM's	Number	HM's AUM's
Permitted to graze		1,260,265	6,295,878 7,921,868	9,867	47,882 56,056	958,929	2,901,113 837,800	2,229,061	9,244,873 8,815,724
Authorized to graze:									
Paid permits 3/	8,526	1,157,939	5,417,294 6,803,617	9,342	44,405 51,638	859,195	2,425,833 689,829	2,026,476	7,887,532 7,545,084
Free use	58	2,479	22,268 6,835	521	5,350 6,412	2,350	1,111 120	5,350	28,729 13,367
Private land permits	132	49,382	238,400 300,514	469	3,607 4,303	7,521	32,151 9,361	57,372	274,158 314,178
Crossing	4	505	201 266	103	5 6	5,985	1,842 424	6,593	2,048 696
Total Authorized 4/	8,588	1,160,923	5,439,763 6,810,718	9,966	49,760 58,056	867,530	2,428,786 690,373	2,038,419	7,918,309 7,559,147
Wild horses				2,279	26,373				26,373
Wild burros				353	26,373 4,271 4,271				26,373 4,271 4,271

1/ A head month (HM) is the billing unit for permitted grazing and is equal to 1 month's occupancy.

2/ An animal unit month (AUM) is the amount of forage required by a 1,000 lb. cow, or the equivalent for 1 month.

3/ Includes term and temporary grazing permits and all other paid permits (e.g., transportation, research, working animals, special uses, etc.).

4/ Private land permit data not included in totals.



Table 32—Status of NFS acres within grazing allotments with range vegetation management objectives--fiscal year 1996

Region	Total number of allotments	Acres with range vegetation management objectives	Acres meeting or moving toward FP objectives 1/	Acres not meeting or moving toward FP objectives 1/	Acres of undetermined status	Acres monitored in FY 1996
Northern (R-1)	1,571	4,660,022	3,866,703	793,319	0	1,288,296
Rocky Mountain (R-2)	2,244	11,434,778	8,479,765	646,043	2,308,970	2,573,869
Southwest (R-3)	1,397	18,391,295	12,118,287	4,375,772	1,897,236	6,347,675
Intermountain (R-4)	1,718	19,327,456	14,907,573	1,458,644	2,961,239	6,109,136
Pacific Southwest (R-5)	710	6,774,510	3,544,782	204,549	3,025,179	1,784,223
Pacific Northwest (R-6)	726	10,252,378	6,820,203	293,395	3,138,780	3,261,659
Southern (R-8)	465	1,264,294	1,086,200	46,155	131,939	270,037
Eastern (R-9)	165	65,720	60,558	2,205	2,957	62,666
Total	8,996	72,170,453	50,884,071	7,820,082	13,466,300	21,697,561

See footnotes at end of table.



**Table 32—Status of NFS acres within grazing allotments with range vegetation management objectives--fiscal year 1996--**  
Continued

Total riparian acres	Riparian acres meeting or moving toward FP objectives 1/	Riparian acres not meeting or moving toward FP objectives 1/	Riparian acres of undetermined status	Riparian acres monitored in FY 1996	Region
193,113	141,017	52,096	0	57,289	Northern (R-1)
507,975	338,638	42,421	126,916	107,721	Rocky Mountain (R-2)
246,330	149,589	66,838	29,903	80,483	Southwest (R-3)
618,868	459,566	81,349	77,953	179,015	Intermountain (R-4)
316,431	172,280	17,027	127,124	81,901	Pacific Southwest (R-5)
475,754	325,273	29,168	121,313	142,160	Pacific Northwest (R-6)
61,004	32,203	2,301	26,500	3,338	Southern (R-8)
1,666	1,107	287	272	1,244	Eastern (R-9)
2,421,141	1,619,673	291,487	509,981	653,151	Total

1/ FP = forest plan.



Table 33--Energy mineral workload and production--fiscal years 1992-96

Fiscal year	Acres under lease	Oil production 1/	Gas production 1/	Coal production 1/
	Millions	Barrels	1,000 cu.ft.	Short tons
1992	9.0	11,000,000	210,000,000	85,000,000
1993	9.6	10,500,000	210,000,000	90,000,000
1994	6.5	12,400,000	325,400,000	114,500,000
1995	6.0	12,000,000	325,000,000	115,000,000
1996	5.9	10,000,000	300,000,000	115,000,000

1/ Estimates.



Table 34—Road maintenance accomplishments--fiscal year 1996

Region	Cost	Miles fully maintained 1/	Total Miles 2/
	1,000 dollars	Miles	Miles
Northern (R-1)	8,007	27,162	50,152
Rocky Mountain (R-2)	6,102	15,057	31,992
Southwestern (R-3)	6,474	11,799	52,959
Intermountain (R-4)	6,073	13,474	37,645
Pacific Southwest (R-5)	14,616	13,497	44,190
Pacific Northwest (R-6)	19,614	38,633	94,097
Southern (R-8)	8,531	16,621	35,096
Eastern (R-9)	6,255	14,188	30,629
Alaska (R-10)	1,384	2,376	3,458
Total 3/	77,056	152,807	380,218

1/ Includes miles of road maintained at a level consistent with current use.

2/ Road mile changes include roads acquired through land and right-of-way purchases, inventory revisions and new construction.

3/ Does not include \$17,984,400 of Washington Office funds and other funds .



Table 35—Road and bridge construction and reconstruction--fiscal year 1996

Region	From Appropriated Funds				
	Construction		Bridges No.	Reconstruction	
	Roads	Miles		Roads	Bridges No.
	Cost			Miles	
	1,000 dollars				
Northern (R-1)	11,034	0.6	1	88.1	11
Rocky Mountain (R-2)	6,534	2.9	0	57.2	0
Southwestern (R-3)	7,197	2.7	0	26.9	0
Intermountain (R-4)	6,166	3.7	0	14.3	0
Pacific Southwest (R-5)	7,573	2.3	1	38.7	1
Pacific Northwest (R-6)	16,872	1.1	1	127.8	4
Southern (R-8)	11,605	1.2	0	70.8	5
Eastern (R-9)	7,758	1.4	1	32.3	3
Alaska (R-10)	9,592	0.8	1	30.6	9
Total 1/	84,331	16.7	5	486.7	33

See footnotes at end of table.



Table 35--Road and bridge construction and reconstruction--fiscal year 1996

By Timber Purchasers 2/					Region
Construction		Reconstruction			
Roads	Miles	Bridges	Roads	Bridges	
Cost		No.	Miles 2/	No.	
1,000 dollars					
4,681	67.7	0	534.9	0	Northern (R-1)
2,500	17.9	1	57.5	0	Rocky Mountain (R-2)
99	0.0	0	0.0	0	Southwestern (R-3)
3,483	32.8	1	208.0	2	Intermountain (R-4)
4,879	25.8	0	292.4	0	Pacific Southwest (R-5)
6,017	82.2	0	584.9	3	Pacific Northwest (R-6)
7,969	50.2	0	391.5	3	Southern (R-8)
3,680	26.7	0	158.7	0	Eastern (R-9)
7,983	114.5	16	86.2	14	Alaska (R-10)
41,291	417.8	18	2,314.1	22	

1/ Includes funds for engineering and program support for appropriated roads and timber purchaser roads. Does not include \$5,655,400 of Washington Office and other funds.

2/ Does not include 28.4 miles of construction, 52.6 miles of reconstruction, and construction of 2 bridges turned back to the Forest Service (Purchaser Election Program).



124 Table 36—Purchaser election roads constructed by the Forest Service--fiscal year 1996

Region	Cost 1,000 dollars	Construction		Reconstruction	
		Roads	Bridges	Roads	Bridges
		Miles	No.	Miles	No.
Northern (R-1)	21	0.0	0	8.4	0
Rocky Mountain (R-2)	15	0.0	0	0.0	0
Southwestern (R-3)	0	0.0	0	0.0	0
Intermountain (R-4)	19	0.0	0	0.0	0
Pacific Southwest (R-5)	62	0.0	0	9.7	0
Pacific Northwest (R-6)	40	1.0	0	1.0	0
Southern (R-8)	256	0.0	0	23.9	0
Eastern (R-9)	101	0.7	0	3.4	0
Alaska (R-10)	5,659	26.7	2	6.2	0
Total 1/	6,173	28.4	2	52.6	0

1/ Does not include General Administrative expenses.



Table 37--Payment to States from national forest receipts--fiscal years 1994-96 1/

State, Commonwealth, or Territory	FY 1996	FY 1995	FY 1994
<i>Dollars actual</i>			
Alabama	2,049,877.80	1,468,155.91	1,271,055.32
Alaska	5,905,519.94	7,600,541.26	8,782,012.16
Arizona	1,631,749.08	3,182,123.93	3,949,883.28
Arkansas	6,648,382.02	4,938,171.81	4,535,988.40
California	36,157,525.82	43,045,670.58	50,981,328.44
Colorado	5,955,613.62	5,584,256.33	6,318,890.15
Florida	1,066,315.90	1,334,477.12	1,068,081.49
Georgia	907,778.79	758,829.26	892,851.64
Idaho	17,457,711.74	15,031,321.37	25,227,816.58
Illinois	27,727.21	32,531.32	37,588.40
Indiana	7,410.94	13,755.32	18,228.06
Kentucky	494,031.96	311,288.83	446,667.89
Louisiana	2,735,547.25	2,174,763.33	2,577,223.55
Maine	34,773.87	33,068.56	32,800.47
Michigan	2,384,195.64	2,504,904.39	1,964,052.45
Minnesota	3,179,462.34	2,977,331.33	2,818,868.30
Mississippi	8,276,153.99	7,224,011.21	5,928,308.80
Missouri	1,231,668.46	1,170,273.33	1,235,858.48
Montana	9,383,236.30	10,555,715.38	14,482,280.68
Nebraska	30,563.25	36,887.86	67,973.60
Nevada	298,540.38	322,014.89	520,368.09
New Hampshire	510,233.26	485,115.81	480,777.36
New Mexico	652,646.23	1,102,857.41	1,458,715.36
New York	6,375.28	5,776.98	7,607.03
North Carolina	692,308.54	941,657.23	678,553.50
North Dakota	82.02	122.88	94.23
Ohio	11,399.70	15,554.61	30,109.51
Oklahoma	883,416.06	643,567.28	595,042.78
Oregon	95,238,952.66	109,647,413.38	119,791,067.39
Pennsylvania	6,207,364.12	5,362,116.42	5,301,759.86
Puerto Rico	20,837.85	14,555.48	25,571.76
South Carolina	960,281.44	1,359,265.06	1,586,032.17
South Dakota	2,349,598.42	2,839,734.94	2,631,316.84
Tennessee	319,484.79	441,952.31	385,048.53
Texas	4,337,308.72	2,893,393.24	3,599,206.19
Utah	1,831,244.84	1,553,366.88	2,373,290.67
Vermont	256,960.60	177,634.44	166,768.17
Virginia	822,089.27	996,568.42	820,206.58
Washington	29,429,025.66	30,089,073.00	31,913,563.22
West Virginia	1,860,935.47	1,403,962.13	761,339.86
Wisconsin	1,621,386.26	1,327,757.01	1,206,337.52
Wyoming	1,844,048.53	1,881,106.70	2,191,880.96
Total	255,719,766.02	273,482,644.93	309,162,415.72

1/ Data Source: All Service Receipts - ASR-09-3.



Table 38—State and Private Forestry funding--fiscal year 1996 compared to long-term program costs

	1996 Actual	1995 Actual	2005 RPA 1/ 1,000 constant 1996 dollars	Percent of 1996 Actual to 2005 RPA
<b>Appropriated accounts</b>				
Forest pest management	32,971	35,600	NA	NA
Fire protection	17,001	13,963	NA	NA
Forest management and utilization	86,861	107,699	NA	NA
Special projects	0	0	NA	NA
Hurricane Andrew/Iniki	0	0	NA	NA
<b>Subtotal</b>	<b>136,833</b>	<b>157,262</b>	<b>363,449</b>	<b>38</b>
<b>Transfer accounts</b>				
Rural community fire protection	2,000	3,468	NA	NA
Watershed and flood prevention	139	510	NA	NA
Watershed planning	452	235	NA	NA
Watershed operations	153	154	NA	NA
Emergency watershed protection	200	0	NA	NA
Emergency watershed	958	0	NA	NA
Resource conservation and development	494	606	NA	NA
River basin surveys and investigations	0	581	NA	NA
Forestry Incentives Program 2/	633	675	NA	NA
Agricultural Conservation Program 2/	750	1,020	NA	NA
Pesticide assessment	358	367	NA	NA
<b>Subtotal</b>	<b>6,137</b>	<b>7,616</b>	<b>NA</b>	<b>NA</b>
<b>Total</b>	<b>142,970</b>	<b>164,878</b>	<b>NA</b>	<b>NA</b>

1/ Information from Draft 1995 RPA Program. Only total appropriation for S&PF is available. Number shown represents total costs, which include appropriated and other financing (S&PF cost share, volunteers, new sources).

2/ Includes only technical assistance allocated for the Forestry Incentives and Agricultural Conservation Programs (administered jointly by ASCS and FS).



Table 39--State and Private Forestry funding--fiscal years 1992-96

	1996	1995	1994	1993	1992
	<i>1,000 dollars actual</i>				
<b>Appropriated accounts</b>					
Forest pest management	32,971	34,902	38,541	40,605	57,205
Fire protection	17,001	13,689	17,148	16,885	16,618
Forest management and utilization	86,861	105,587	93,218	77,583	68,116
Special projects	0	0	19,200	21,155	20,848
Hurricane Andrew/Iniki	0	0	0	4,140	0
<b>Subtotal</b>	<b>136,833</b>	<b>154,178</b>	<b>168,107</b>	<b>160,368</b>	<b>162,787</b>
<b>Transfer accounts</b>					
Rural community fire protection	2,000	3,400	3,500	3,500	3,500
Watershed and flood prevention	139	500	2,020	2,020	2,100
Watershed planning	452	230	303	303	303
Watershed operations	153	151	410	410	403
Emergency watershed protection	200	0	100	0	200
Emergency watershed	958	0	0	0	0
Resource conservation and development	494	594	555	512	584
River basin surveys and investigations	0	570	830	850	850
Forestry Incentives Program 1/	633	662	1,169	1,245	1,187
Agricultural Conservation Program 1/	750	1,000	1,824	1,944	1,827
Pesticide assessment	358	360	190	361	163
<b>Subtotal</b>	<b>6,137</b>	<b>7,467</b>	<b>10,901</b>	<b>10,784</b>	<b>10,954</b>
<b>Total</b>	<b>142,970</b>	<b>161,645</b>	<b>179,008</b>	<b>171,152</b>	<b>173,741</b>

1/ Includes only technical assistance allocated for the Forestry Incentives and Agricultural Conservation Programs (administered jointly by ASCS and FS).



Table 40—Summary of State and Private Forestry 1996 accomplishments compared to long-term program levels

	Unit of measure 2/	1996 Actual	1996 Funded	Percent of 1996 Actual to 1996 Funded	1995 Actual	2005 1/ RPA	Percent change comparison	
							1995 Actual to 1996 Actual	1996 Actual to 2005 RPA
Appropriated accounts								
Forest pest management 3/								
Insect and disease management surveys	MM acres	661	661	100	657	NA	99	NA
Insect and disease suppression	MM acres	1.2			3.3	2.7	275	44
Insect and disease special projects	Projects	33			38	NA	115	NA
Forest management and utilization								
Forest resource management								
Forest land management plans	MM acres	3.2			3.8	7.8	119	41
Timber harvested	M cubic feet	318			199	NA	63	NA
Reforestation 4/	M acres	761			734	759	96	100
Timber stand improvement 5/	M acres	419			377	NA	90	NA
Woodland owners assisted	M owners	215			192	NA	89	NA
Wood utilization	MM cubic feet	NA			NA	NA	NA	NA
Seedling, nursery, and tree improvement	MM seedlings	482			401	NA	83	NA
Urban forestry assistance 6/	No. of assists	41,705			32,171	NA	77	NA
Transfer accounts								
	M approved							
Rural community fire protection, FmHA	applications	NA			2	NA		NA
Watershed and flood prevention, NRCS 7/	Projects	23			59	NA	257	NA
Watershed planning, NRCS	Plans	18			42	NA	233	NA
Resource conservation and development, NRCS	Projects	214			232	NA	108	NA
River basin surveys and investigations, NRCS	Plans	39			58	NA	149	NA
Forestry Incentives Program, ASCS								
Reforestation	M acres	107			136	NA	127	NA
Timber stand improvement	M acres	19			20	NA	105	NA
Agricultural Conservation Program, ASCS								
Reforestation	M acres	77			202	NA	262	NA
Timber stand improvement	M acres	23			33	NA	143	NA

1/ Information from Draft 1995 RPA Program.

2/ M = thousand, MM = million.

3/ Includes accomplishments on National Forest System and other Federal lands, as well as State and private lands.

4/ Includes Conservation Reserve Program, Forestry Incentives Program and Agricultural Conservation Program accomplishments.

5/ Includes Forestry Incentives Program and Agricultural Conservation Program accomplishments.

6/ Areas represent more than one assistance per community; e.g., New York, Philadelphia, etc.

7/ Accomplishments for 1996 are estimates; actual data is not available from NRCS.



Table 41--Acres of State and private lands burned--calendar year 1995

State, Commonwealth, or Territory	Acres Protected 1/ Number	Lightening fires Number	Person-caused fires Number	Total fires Number	Acres burned Number
Alabama		45	4,436	4,481	39,887
Alaska		29	298	327	16,585
Arizona		105	691	796	63,075
Arkansas		58	3,400	3,458	52,715
California		163	6,282	6,445	118,106
Colorado		245	1,979	2,224	32,011
Connecticut		0	0	0	0
Delaware		3	30	33	418
Florida		468	2,875	3,343	48,591
Georgia		242	7,853	8,095	24,572
Guam		0	622	622	5,726
Hawaii		0	217	217	9,568
Idaho		151	125	276	533
Illinois		1	814	815	6,070
Indiana		17	3,242	3,259	25,934
Iowa		0	1,244	1,244	4,446
Kansas		139	3,200	3,339	71,071
Kentucky		6	2,091	2,097	67,828
Louisiana		6	3,567	3,573	37,538
Maine		154	900	1,054	1,165
Maryland		12	1,052	1,064	5,376
Massachusetts		15	6,364	6,379	8,623
Michigan		22	532	554	4,394
Minnesota		23	1,121	1,144	19,840
Mississippi		4	3,479	3,483	39,888
Missouri		24	3,156	3,180	55,173
Montana		155	214	369	5,724
Nebraska		191	1,072	1,263	103,925
Nevada		23	91	114	11,522
New Hampshire		13	466	479	458
New Jersey		9	1,999	2,008	22,597
New Mexico		164	483	647	53,531
New York		17	391	408	8,546
North Carolina		48	5,200	5,248	20,897
North Dakota		27	229	256	2,590
Ohio		1	1,026	1,027	6,594
Oklahoma		11	2,526	2,537	89,967
Oregon		252	715	967	4,870
Pennsylvania		3	1,031	1,034	3,459
Puerto Rico		0	19,485	19,485	13,662
Rhode Island		0	132	132	120
South Carolina		80	3,487	3,567	17,215
South Dakota		44	449	493	31,425
Tennessee		24	3,445	3,469	42,032
Texas		22	1,511	1,533	18,879
Utah		253	326	579	35,733
Vermont		7	232	239	439
Virginia		16	1,640	1,656	9,240
Washington		115	771	886	4,036
West Virginia		16	1,217	1,233	42,540
Wisconsin		38	1,699	1,737	2,461
Wyoming		165	432	597	12,679
Virgin Islands		0	53	53	107
Total		3,626	109,892	113,518	1,324,381

1/ Information on Acres Protected is no longer used for Wildfire Statistics and is no longer used as a measure for GPRA. Therefore, it is being deleted from this table so the information will agree with the published statistics.



130 Table 42—Summary of forest stewardship plans and acres accomplished by State—fiscal years 1995-96

State or territory 1/	1996		1995		(1991-96)	
	Plans	Acres	Plans	Acres	Cumulative plans 2/	Cumulative acres
Alabama	195	49,094	232	58,077	1,520	275,411
Alaska	57	256,963	58	69,694	179	2,094,402
American Samoa	63	55	58	773	121	828
Arizona	24	4,869	22	3,490	100	231,031
Arkansas	336	53,574	247	51,167	1,093	239,792
California	1	25,150	116	27,209	431	245,082
Colorado	167	18,225	153	62,465	1,591	361,926
Connecticut	9	1,109	41	4,749	164	21,401
Delaware	56	2,974	94	5,016	317	23,181
Florida	122	36,699	168	52,490	718	322,049
Georgia	367	92,139	416	100,657	1,817	612,598
Guam	22	198	16	13	99	357
Hawaii	0	0	9	3,447	28	5,166
Idaho	84	4,589	174	5,936	1,071	61,236
Illinois	751	25,144	954	44,078	5,962	264,039
Indiana	1388	58,562	1,288	46,502	10,106	385,179
Iowa	730	26,236	862	32,857	5,632	178,963
Kansas	137	6,303	104	8,585	893	49,722
Kentucky	1327	172,176	1,008	110,085	6,447	699,419
Louisiana	90	10,811	241	27,096	670	71,134
Maine	244	20,481	643	38,623	2,304	203,136
Maryland	378	24,237	538	35,559	2,797	159,254
Massachusetts	219	18,951	242	22,714	1,889	174,373
Michigan	313	43,022	499	70,704	1,865	253,395
Minnesota	724	76,356	804	78,654	6,381	621,240
Mississippi	31	9,634	139	31,557	690	154,101
Missouri	206	29,032	264	37,872	1,701	218,802
Montana	94	38,490	111	63,925	552	342,166
Nebraska	58	6,833	475	8,684	1,019	42,272
Nevada	6	552	16	8,635	153	65,354
New Hampshire	112	26,993	210	46,194	1,613	300,458
New Jersey	47	4,445	96	13,629	282	40,596
New Mexico	46	36,482	50	35,000	232	245,314
New York	1221	133,493	1,338	135,997	10,918	937,110
North Carolina	226	35,356	306	50,277	1,085	185,857
North Dakota	132	5,151	214	8,217	869	44,971
Ohio	1506	68,481	1,072	70,731	9,741	466,869
Oklahoma	101	20,128	131	49,736	500	152,109
Oregon	97	28,669	199	72,680	917	211,522
Pennsylvania	214	26,185	302	48,985	1,039	161,256
Puerto Rico	1	932	0	0	1	932
Rhode Island	0	0	17	2,518	248	10,176
South Carolina	300	77,240	425	117,607	1,623	462,035
South Dakota	99	5,164	143	3,468	736	30,452
Tennessee	221	41,685	303	53,833	1,035	205,394
Texas	108	19,111	140	65,573	1,161	232,799
Utah	2	117,080	11	22,630	83	192,769
Vermont	242	30,705	294	43,940	1,369	202,717
Virginia	726	106,247	894	139,217	3,487	560,917
Washington	457	20,780	192	17,695	1,688	135,847
West Virginia	205	51,499	363	53,595	2,142	303,328
Wisconsin	968	104,697	2,627	155,160	17,999	869,075
Wyoming	73	11,224	144	21,388	1,017	89,718
Total	15,303	2,084,205	19,463	2,339,383	118,095	14,419,230

1/ Unlisted States had no data.

2/ Landowner forest stewardship plans.



**Table 43—Summary of selected cooperative forest management and processing program activities--  
selected fiscal years — 1945-96**

Fiscal year	Woodland owners assisted <i>Number</i>	Timber sale assistance-- volume marked <i>MBF 1/</i>	Loggers and processors assisted <i>Number</i>
1945	8,093	411,330	0
1950	22,828	518,566	0
1955	34,828	549,373	8,182
1960	82,188	569,178	8,099
1965	99,074	716,950	9,248
1970	115,197	1,225,520	13,620
1971	127,828	860,950	14,627
1972	274,001	955,627	5,290
1973	106,422	1,578,664	4,855
1974	117,990	907,311	5,353
1975	140,940	677,532	5,405
1976	105,184	596,599	15,318
1976 -77 (T.Q.) 2/	25,253	220,649	5,849
1977	133,619	921,171	29,101
1978	165,329	1,120,743	12,749
1979	183,585	755,103	11,393
1980	176,385	870,964	11,582
1981	164,279	683,181	18,609
1982	141,472	841,475	15,470
1983	136,265	872,125	8,717
1984	151,539	1,033,440	10,082 3/
1985	134,338	913,411	- 4/
1986	137,753	855,813	-
1987	158,353	1,225,896	-
1988	167,432	890,581	-
1989	153,855	1,242,564	-
1990	148,673	1,597,931	-
1991	153,090	1,697,861	-
1992	190,211	791,462	-
1993	190,256	950,178	-
1994	152,189	1,313,946	-
1995	192,618	1,274,902	-
1996	214,517	1,372,380	-

1/ MBF = thousand board feet.

2/ Transition quarter.

3/ Not all States reported.

4/ - = inadequate data due to lack of State grants in wood utilization program.



**Table 44—Summary of selected cooperative forest management and processing activities by region--  
fiscal year 1996**

Assistance activity	Unit of measure	Regions					
		R-1 Northern	R-2 Rocky Mountain	R-3 South- western	R-4 Inter- mountain	R-5 Pacific Southwest	IF Puerto Rico
Woodland owners assisted	Number	5,256	5,717	134	1,414	477	1,057
Forest management plans 1/ prepared	Number	668	357	21	31	67	311
	Acres	76,640	86,989	4,528	121,683	955	2,756
Reforestation:							
Planting	Acres	1,699	1,429	198	2,121	531	237
Seeding	Acres	15	3	0	0	3	0
Management for natural regeneration	Acres	1,802	3,861	1,664	50	7	0
Timber stand improvement	Acres	2,818	2,275	634	603	590	0
Outdoor recreation development	Acres	997	2,798	2,604	376	333	0
Wildlife habitat development	Acres	1,953	3,995	3,604	5,679	277	0
Forested range improvement	Acres	524	446	1,104	15	450	0
Timber sale assistance volume harvested	Thousand cubic feet	9,290	4,646	407	510	0	0
Urban forestry assistance activities	Urban areas assisted	260	678	114	32	255	352
Referrals to consulting foresters	Number	288	253	54	28	75	0

See footnote at end of table.



**Table 44--Summary of selected cooperative forest management and processing activities by region--  
fiscal year 1996--Continued**

Assistance activity	Unit of measure	Regions				Total
		R-6 Pacific Northwest	R-8 Southern	R-10 Alaska	NA Northeastern Area	
Woodland owners assisted	Number	12,542	117,122	154	70,644	214,517
Forest management plans 1/ prepared	Number	281	38,614	6	6,594	46,950
	Acres	9,144	2,454,308	190	411,659	3,168,852
Reforestation:						
Planting	Acres	36,985	515,117	0	63,045	621,362
Seeding	Acres	0	3,294	0	723	4,038
Management for natural regeneration	Acres	47,648	41,126	0	39,148	135,306
Timber stand improvement	Acres	169,454	186,510	0	56,225	419,109
Outdoor recreation development	Acres	8,285	206,761	0	69,601	291,755
Wildlife habitat development	Acres	18,996	415,456	0	134,763	584,723
Forested range improvement	Acres	5,494	34,651	0	16,970	59,654
Timber sale assistance volume harvested	Thousand cubic feet	119,435	107,071	280	76,333	317,972
Urban forestry assistance activities	Urban areas assisted	151	828	5	5,404	8,079
Referrals to consulting foresters	Number	744	10,304	9	10,453	22,208

1/ Forest stewardship program plans and acres separately recorded in table 42.



**Table 45—Summary of selected cooperative forest management and processing activities by State--  
fiscal year 1996**

State, Commonwealth, or Territory	Woodland owners assisted Number	Reforestation assistance Acres	Timber stand improvement assistance Acres	Timber sale assistance— harvest volume 1,000 cubic feet	State nursery production 1,000 trees
Alabama	10,638	53,851	50,786	0	26,147
Alaska	154	0	0	280	5
American Samoa	155	36	17	0	8
Arizona	71	562	537	407	0
Arkansas	15,816	8,805	1,972	540	10,029
California	185	207	488	0	1,479
Colorado	3,737	2,936	425	2,523	2,372
Comm. of N. Marianas	25	16	0	0	10
Connecticut	319	118	113	0	658
Delaware	474	687	20	200	0
Florida	2,462	29,530	7,278	246	21,857
Federated States of Micronesia	0	22	0	0	0
Georgia	9,571	62,814	20,734	25	46,491
Guam	30	55	8	0	34
Hawaii	82	216	74	0	346
Idaho	4,153	3,322	2,215	5,409	1,526
Illinois	15,655	8,638	4,061	2,966	0
Indiana	2,898	6,358	7,382	1,227	5,100
Iowa	1,513	6,537	3,538	889	3,000
Kansas	871	380	214	411	843
Kentucky	1,874	5,528	2,952	221	6,484
Louisiana	32,427	19,699	813	1,918	36,700
Maine	5,870	1,368	5,388	45	0
Maryland	4,971	5,932	5,807	9,182	2,659
Massachusetts	1,385	10,524	790	13,255	0
Michigan	22	97	16	0	6,267
Minnesota	5,171	14,716	3,087	17,660	10,436
Mississippi	21,330	112,656	48,914	600	110,000
Missouri	2,928	385	1,177	0	3,750
Montana	689	122	292	3,501	1,017
Nebraska	923	762	21	403	1,721
Nevada	1,039	208	603	50	249
New Hampshire	3,812	674	1,060	125	352
New Jersey	3,121	1,141	2,613	1,349	370
New Mexico	63	1,300	97	0	35
New York	2,810	15,919	4,302	13,936	1,303
North Carolina	8,065	108,508	5,368	48,000	21,675
North Dakota	414	72	311	380	1,356
Ohio	5,501	1,226	6,001	1,500	5,945
Oklahoma	640	2,372	308	41	4,860
Oregon	10,240	71,325	160,018	64,159	28,658
Palau	0	10	3	0	49
Pennsylvania	2,272	12,829	760	840	1,213
Republic of the Marshall Islands	0	15	0	0	0
Puerto Rico	1,057	237	0	0	161
Rhode Island	153	15	23	764	52
South Carolina	4,077	35,412	7,016	1,950	18,797
South Dakota	186	0	447	9	1,618
Tennessee	2,736	6,629	96	8,496	6,581
Texas	0	42,805	4,234	4,534	20,200



**Table 45--Summary of selected cooperative forest management and processing activities by State--  
fiscal year 1996--Continued**

State, Commonwealth, or Territory	Woodland owners assisted	Reforestation assistance	Timber stand improvement assistance	Timber sale assistance-- harvest volume	State nursery production
	<i>Number</i>	<i>Acres</i>	<i>Acres</i>	<i>1,000 cubic feet</i>	<i>1,000 trees</i>
Utah	375	1,963	0	460	759
Vermont	3,114	0	1,828	5,587	0
Virginia	7,486	70,928	36,039	40,500	38,262
Washington	2,302	13,308	9,436	55,276	11,850
West Virginia	4,724	3,749	4,981	2,200	0
Wisconsin	3,931	12,003	3,278	4,608	19,239
Wyoming	0	1,215	1,168	1,300	0
<b>Total</b>	<b>214,517</b>	<b>760,742</b>	<b>419,109</b>	<b>317,972</b>	<b>482,523</b>



**Table 46--Small watershed protection accomplishments--fiscal years 1992-96 (Watershed Protection and Flood Prevention Act of 1954) 1/**

	Unit of measure	1996	1995	1994	1993	1992
Land treatment 2/						
Forest land	Acres	2,193	1,905	16,806	38,322	15,480
Cropland	Acres	1,160	0	626	501	947
Pastureland	Acres	45	7,284	28	170	174
Total land treatment	Acres	3,398	9,189	17,460	38,993	16,601
Land owners assisted	Number	1,348	1,465	1,483	3,534	1,371

1/ Accomplishments are limited to activities accomplished solely by small watershed protection program funds.

2/ Reported in land use categories consistent with those reported by the Natural Resources Conservation Service.

**Table 47--Flood prevention accomplishments--fiscal years 1992-96 (Watershed Protection and Flood Prevention Act of 1954) 1/**

	Unit of measure	1996	1995	1994	1993	1992
Land treatment 2/						
Forest land	Acres	8,682	63,028	6,335	2,196	5,680
Cropland	Acres	1,668	575		- 3/	-
Pastureland	Acres	92	83	40	-	-
Total land treatment	Acres	10,442	63,686	6,375	2,196	5,680
Land owners assisted	Number	2,265	2,461	1,528	1,452	1,853

1/ Accomplishments are limited to activities accomplished solely by small watershed protection program funds.

2/ Reported in land use categories consistent with those reported by the Natural Resources Conservation Service.

3/ - = no accomplishments reported for FY 1992 and 1993 on cropland and pastureland.







Table 48--Research accomplishments--fiscal years 1993-96

Research Subject Area 2/	Research Accomplishments 1/			
	1996	1995	1994	1993
Environmental Research				
Watershed management	209	242	176	121
Wildlife	185	161	210	147
Range	53	63	81	38
Fisheries habitat	69	76	61	56
Atmospheric deposition and air pollution	73	59	50	60
Wetlands	44	44	45	19
Tropical forestry	42	38	51	40
Monitoring	46	36	47	23
Biodiversity & threatened and endangered	128	135	98	83
Subtotal	849	854	819	587
Insect and Disease Research				
Insect detection and evaluation	41	40	73	65
Insect biology	100	88	107	89
Insect control and management strategies	60	93	84	89
Disease detection and evaluation	28	35	82	49
Disease biology	38	48	64	45
Disease control and management strategies	36	33	16	41
Mycorrhizae	10	14	20	29
Wood products organisms	51	32	34	20
Subtotal	364	383	480	427
Fire and Atmospheric Sciences Research				
Fire physics, chemistry and behavior	16	25	34	42
Fire, economics and management	6	9	14	4
Fire ecology and effects	77	67	66	29
Meteorology and climatology	20	25	37	20
Air resource management	14	12	1	6
Global change research	95	93	116	81
Atmospheric deposition & air pollution	43	58	24	23
Subtotal	271	289	292	205
Forest Management Research				
Forest biology	249	190	275	166
Silviculture and management	210	289	242	208
Growth and yield	52	57	61	83
Genetics and tree improvement	32	92	83	77
Subtotal	543	628	661	534

See footnotes at end of table.



Table 48--Research accomplishments--fiscal years 1993-96--Continued

Research Subject Area 2/	Research Accomplishments 1/			
	1996	1995	1994	1993
Inventory, Economics & Recreation Research				
Forest inventory and analysis	166	102	122	105
Forest economics	187	175	200	168
Forest recreation	150	87	108	75
Urban and community forestry	51	40	60	49
Subtotal	554	404	490	397
Products and Engineering Research				
Forest operations and engineering	49	58	71	58
Wood structural engineering	35	47	61	43
Chemistry, fiber, and fuel products	128	123	115	96
Utilization potential and processing of wood	106	123	89	108
Protection of wood in use	24	17	19	27
Recycling	24	39	40	34
Subtotal	366	407	395	366
General	58	56	71	20
Grand total	3,005	3,021	3,208	2,536

1/ Research accomplishments include: books, papers in series, journal articles, proceedings, general technical reports, special reports, patents, videos, computer programs, dissertations and theses, and other similar accomplishments.

2/ All research is associated with the 1995 RPA strategic goal of "Ensuring Organizational Effectiveness," and the tactical goal of "Generating Knowledge."



Table 49--Forest Research funding--fiscal years 1992-96

	1996	1995	1994	1993 1/	1992
	1,000 actual dollars				
Appropriated funds					
Forest protection research			41,089	40,833	40,770
Resource analysis research			35,932	34,998	33,228
Forest management research			40,887	39,594	39,216
Forest environment research			41,978	41,755	41,655
Forest products and harvesting research			25,697	25,535	25,640
Ecosystem research			7,500	0	0
Research foundation program 2/		111,376			
Forest resources and management research 2/		74,178			
Ecosystem research 2/		7,955			
Forest and Rangeland Research 3/	177,854				
Subtotal	177,854	193,509	193,083	182,715	180,509
Transfer from timber salvage sales 4/	0	0	1,963	0	0
Research construction (subtotal)	2,000	4,316	4,910	3,572	3,558
Total appropriated accounts	179,854	197,825	199,956	186,287	184,067
Reimbursable accounts (subtotal)	14,898		19,578	13,713	22,857
Grand total	194,752	197,825	219,534	200,000	206,924

1/ Numbers in FY 1993 column have been corrected from numbers published in 1993 Annual Report

2/ In FY 1995, the budget structure was revised from six major budget line items to three. The three BLI's for FY 1995 overlap those used the previous years.

3/ In FY 1996, the budget structure was revised from three BLI's to one.

4/ FY-1994 transfer from timber salvage sale funds to cover cost of Voluntary Separation Incentive (Buyout).



Table 50—Extramural research funded through Forest Service Research appropriations--fiscal years 1995-96

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Type of recipient	1996		1995	
	1,000 dollars	Number of grants	1,000 dollars	Number of grants
Domestic grantees				
Universities and colleges:				
Land Grant research institutions	6,711	238	16,216	563
1890 Land Grant and predominately black institutions	388	16	321	17
Other non-Land Grant institutions	5,620	209	6,428	259
Subtotal, universities and colleges	12,719	463	22,965	839
Other domestic				
Profit organizations	12	2	10	2
Nonprofit institutions and organizations	759	27	1,369	55
Federal, State, and local governments	997	18	594	17
Private individuals	96	10	156	12
Small business innovation research	0	0	39	2
Industrial firms	0	0	10	1
Subtotal, other domestic	1,864	57	2,178	89
Total, domestic	14,583	520	25,143	928
Foreign grantees				
Universities and colleges	0	0	576	20
Profit & nonprofit institutions and organizations	15	5	68	4
Private individuals	20	7	77	11
Total, foreign grantees	35	12	721	35
Grand total	14,618	532	25,864	963



Table 51—Summary of Forest Service human resource programs--fiscal year 1996

	Program funding	Value of work accomplished	Persons served			Work accomplished	Placement	Return per dollar invested
	Million dollars	Million dollars	Number	Women Percent	Minority Percent	Person years	Percent	Dollars
Youth Conservation Corps 1/	Unfunded	1.7	624	41	17	103	NA	1.42
Job Corps 2/	95.7	21.5	9,060	18	45	3,874	77.4 3/	NA
Senior Community Service Employment Program 2/	25.8	40.9	5,128	41	22	2,455	14.2	1.58
Volunteers in the National Forests 4/	Unfunded	34.9	80,095	36	10	1,985	NA	NA
Hosted programs	Unfunded	22.2	10,428	18	28	999	NA	NA
Youth forest camps 5/	Unfunded	0.1	53	40	32	6	NA	NA
Total	121.5	121.3	105,388	NA	NA	9,422	NA	NA

1/ Funds were not directly appropriated for Youth Conservation Corps; the Congress earmarked not less than \$1 million to be expended from funds available to the Forest Service. The Forest Service operated a \$1.2 million YCC program.

2/ Statistics for 1995 program year (July 1, 1995, through June 30, 1996).

3/ Placement rate includes all students that enrolled in the program.

4/ Statistics include 222 Touch America Project (TAP) enrollees and 92 international volunteers.

5/ Operated as a summer program through partnership with the National Forest Foundation.



**Table 52—Number and percent of all permanent and excepted-conditional employees by race/national origin and gender as of September 28, 1996 1/**

Race/National Origin	Women	Men	Total	Percent
American Indian/Alaskan Native	570	880	1,450	4.8
Asian/Pacific Islander	233	235	468	1.5
African American	652	613	1,265	4.1
Hispanic	605	1,080	1,685	5.5
Caucasian	9,972	15,679	25,651	84.0
<b>Total</b>	<b>12,032</b>	<b>18,487</b>	<b>30,519</b>	<b>100.0</b>
Targeted Disabilities	—	—	397	1.3
<b>Percent by Gender</b>	<b>39.4</b>	<b>60.6</b>		

1/ Excepted-conditional include cooperative education students and excepted appointments of people with disabilities.



GS Pay Level	Race/National Origin											
	American Indian/ Alaskan Native		Asian/ Pacific Islander		African American		Hispanic		Caucasian		Total	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
GS-1	0	0	0	0	0	0	1	0	1	1	2	1
GS-2	0	0	0	0	0	0	0	0	3	2	3	2
GS-3	9	6	0	0	7	8	3	3	76	30	95	47
GS-4	67	31	19	8	50	32	73	56	630	197	839	324
GS-5	134	133	34	12	83	82	110	170	1,436	971	1,797	1,368
GS-6	56	81	16	7	90	38	60	65	900	654	1,122	845
GS-7	100	148	32	22	116	107	128	150	1,646	1,867	2,022	2,294
GS-8	18	16	5	0	24	7	11	20	316	226	374	269
GS-9	100	175	46	53	98	120	97	200	2,064	3,350	2,405	3,898
GS-10	0	9	1	1	0	2	1	7	13	177	15	196
GS-11	49	119	39	47	63	61	63	155	1,545	3,282	1,759	3,664
GS-12	18	55	20	41	70	53	35	93	1,728	1,907	1,871	2,149
GS-13	10	35	19	25	36	48	16	66	411	1,437	492	1,611
GS-14	0	12	2	9	4	9	1	19	108	471	115	520
GS-15	0	2	0	0	5	4	2	8	30	225	37	239
GS-18& SES	0	0	0	0	2	5	1	0	8	35	11	40
Total	561	822	233	225	648	576	602	1,012	10,915	14,832	12,959	17,467

1/ Grand total is 30,426 (includes permanent full-time and permanent part-time employees only)



Table 54—Number of paid employees by occupational category for selected fiscal years 1/

Occupation	1996	1995	1994	1993	1992
Professional	11,327	11,441	11,830	12,987	13,318
Administrative	4,519	4,627	4,330	4,684	4,663
Technical	20,172	21,970	23,094	25,165	24,812
Clerical	3,050	3,234	3,312	3,962	4,274
Other	312	353	558	673	828
Wage System	2,042	2,060	2,446	2,480	2,681
Total	41,422	43,685	45,570	49,951	50,576
Full-time equivalents (FTE's) 2/	37,205	38,330	40,612	42,798	43,427

1/ The above data include permanent, summer, seasonal, cooperative education students, stay-in-school, and many other types of employees. These data do not include some Human Resource Programs (HRP) such as volunteers (who are not paid salary) and the Senior Community Service Employment Program (who are paid by the Department of Labor).

2/ One Full-Time Equivalent (FTE) equals 2,080 paid hours of employment. These data include emergency FTE's.

Table 55—Number of paid employees by type of appointment for selected fiscal years

Type of Appointment	1996	1995	1994	1993	1992
Permanent 1/	30,347	30,676	30,978	34,588	35,425
Temporary/Excepted 2/	11,075	13,009	14,592	15,363	15,151
Total	41,422	43,685	45,570	49,951	50,576

1/ Permanent are those employees who have career or career-conditional appointments. Term employees were included as temporary in 1994, 1995, and 1996.

2/ Temporary/excepted are any non-permanent employee who is paid from agency funds. Includes summer, seasonal, cooperative education students, stay-in-school, and many other types of employees. These data do not include some HRP Programs such as volunteers (who are not paid salary) and the Senior Community Service Employment Program (who are paid by the Department of Labor).



Table 56--Summary statement of receipts and obligations--fiscal years 1995-96 1/

	1996		1995		Percent change 1995 to 1996	
	Receipts	Obligations	Receipts	Obligations	Receipts	Obligations
<i>1,000 constant 1996 dollars</i>						
National Forest programs						
Cash receipts:						
Sale of timber and use of other forest resources	257,202		373,671	0	(45)	0
Use of National Grasslands & land utilization areas	16,333		20,810	0	(27)	0
Timber sale area betterment (K-V) 2/	157,897		181,510	0	(15)	0
Cooperative work for others	42,803		37,991	0	11	0
Brush disposal	17,821		16,458	0	8	0
Miscellaneous (sales, rentals, damages, etc.) 3/	6,803		8,203	0	(21)	0
Restoration of forest lands and improvements	4,920		991	0	80	0
Golden Eagle passports	230		204	0	11	0
Timber salvage sales	181,243		138,353	0	24	0
Operation and maintenance of quarters	6,468		6,634	0	(3)	0
Gifts, donations, and bequests	1,303		506	0	61	0
Subtotal	693,023	0	785,331	0	(13)	0
Cash receipts from NFS lands collected in conjunction with, and deposited to, accounts of other agencies	171,171		260,486	0	(52)	0
Non-cash income (roads built by timber purchasers)	41,291		48,854	0	(18)	0
Total cash receipts	905,485	0	1,094,670	0	(21)	0
Obligations						
Operating costs		3,186,423	0	2,912,683	0	9
Capital outlay		9,209	0	16,652	0	(81)
Total obligations	0	3,195,632	0	2,929,335	0	8
Other Forest Service programs						
Forest Research programs:						
Forest research		188,489	0	215,014	0	(14)
Research construction		(12)	0	(62)	0	(419)
Cooperative research work		(2)	0	(1,367)	0	(68,240)
Gifts, donations, and bequests for forest rangeland research	5	1,259	5	426	0	66
Tongass Timber Supply Fund		0	0	(1)	0	(100)
Subtotal	5	189,734	5	214,010	0	(13)

See footnotes at end of table.



Table 56—Summary statement of receipts and obligations—fiscal years 1995-96--Continued

	1996		1995		Percent change 1995 to 1996	
	Receipts	Obligations	Receipts	Obligations	Receipts	Obligations
	<i>1,000 constant 1996 dollars</i>					
State and Private Forestry programs						
State and Private Forestry cooperation	0	157,480	0	154,680	0	2
Rural community fire protection	0	1,999	0	3,419	0	(71)
Flood prevention and watershed protection	0	1,860	0	567	0	70
Licensee programs (Woodsy Owl and Smokey Bear)	46	61	124	94	(171)	(54)
Forestry Incentives and other programs 4/	0	1,389	0	2,155	0	(55)
Subtotal	46	162,789	124	160,915	(171)	1
International Forestry Programs						
International Forestry	0	535	0	0	0	100
Subtotal	0	535	0	0	0	100
Human Resource programs						
Job Corps	0	87,255	0	89,951	0	(3)
Senior Community Service Employment	0	19,083	0	25,686	0	(35)
Subtotal	0	106,338	0	115,636	0	(9)
Grand total, all programs	905,536	3,655,028	1,094,800	3,419,897	(21)	6
Cash receipts distributed to States, counties and Puerto Rico						
Payments to States and Puerto Rico		254,443	0	277,660	0	(8)
Payment to Minnesota		1,276	0	1,292	0	(1)
Payments to counties (National Grasslands and Land Utilization Areas)		5,114	0	3,925	0	30
Total	0	260,833	0	282,878	0	0
Internal equipment and supply service (Working Capital)	118,644	133,649	159,019	170,966	(25)	(22)
Reimbursements for work performed for government and others included above	0	373,596	0	278,844	0	34

1/ Obligations were incurred on a "charged-as-worked" basis.

2/ K-V = Knutson-Vandenberg.

3/ Includes sale of personal property and acquisitions of lands to complete land exchanges.

4/ Includes Resource Conservation and Development, and Pesticide Impact assessment funds transferred from Agricultural Research Service.



Table 57--Statement of receipts--fiscal years 1992-96

	1996	1995	1994	1993	1992
<i>1,000 dollars actual</i>					
Receipts from sale and use of forest resources					
Timber and forest products	195,000	303,046	431,615	425,105	520,003
Grazing	7,352	8,756	11,056	10,518	10,780
Land uses	4,664	6,246	5,960	5,455	5,244
Recreation	47,618	46,427	47,762	49,396	46,605
Power	1,894	1,607	1,657	1,435	1,254
Minerals	17,007	20,663	16,817	11,669	30,402
Subtotal	273,535	386,745	514,867	503,578	614,288
Receipts from deposits for expenditures on national forests					
Timber sale area betterment	157,897	177,951	225,381	269,056	251,267
Timber salvage sales	181,243	135,640	163,281	193,747	171,831
Brush disposal	17,821	16,135	22,498	23,849	30,271
Restoration of Forest Service lands and improvements	4,920	972	358	940	140
Cooperative work	42,803	37,246	43,023	41,134	52,110
Operation and maintenance of quarters	6,468	6,504	6,452	6,879	6,531
Gifts, donations, and bequests	1,303	496	965	1,222	742
Subtotal	412,455	374,944	461,958	536,827	512,892
Other receipts					
Miscellaneous (sales, rents, etc.)	6,390	6,644	6,552	12,360	6,202
Golden Eagle passports	230	200	133	9	8
Sale of personal property	0	0	0	8	0
Royalties from sale of Smokey Bear and Woodsy Owl products	46	122	82	34	34
Acquisition of lands to complete land exchanges	413	1,398	212	151	154
Gifts, donations, and bequests for forest rangeland research	5	5	18	6	7
Subtotal	7,084	8,369	6,997	12,568	6,405

See footnotes at end of table.



Table 57--Statement of receipts--fiscal years 1992-96--Continued

	1996	1995	1994	1993	1992
<i>1,000 dollars actual</i>					
Other income					
Estimated collections by Department of Energy for power licenses on proclaimed national forest land	1,931	1,778	2,159	4,317	1,874
Estimated collections by Department of the Interior for mineral leases on proclaimed national forest land	169,240	253,600	213,812	207,861	170,000
Value of roads built by timber purchasers applied in lieu of cash payment for timber	41,291	47,896	68,275	64,747	88,880
Subtotal	212,462	303,274	284,246	276,925	260,754
Total	905,536	1,073,332	1,268,068	1,329,898	1,394,339
Other net deposits					
Monies advanced on active timber sales 1/					
Balance from previous year	193,563	190,554	217,585	173,835	209,729
Deposited current year	568,106	644,347	873,321	954,989	1,019,725
Transferred to other accounts	(610,528)	(641,338)	(900,352)	(911,239)	(1,055,619)
Balance on deposit	151,141	193,563	190,554	217,585	173,835
Amounts deposited pending disposition 2/					
Balance from previous year	29,868	18,680	25,079	43,530	28,045
Deposited current year	(8,065)	13,195	(5,411)	(17,208)	17,039
Transferred to other accounts	(2,511)	(2,008)	(988)	(1,243)	(1,554)
Balance on deposit	19,292	29,867	18,680	25,079	43,530
Subtotal	170,433	223,430	209,234	242,664	217,365
Total	1,075,969	1,296,762	1,477,302	1,572,562	1,611,704

1/ Timber sale deposits made by timber purchasers.

2/ Budget clearing account.



Table 58--Statement of receipts--fiscal year 1996

	National forests	Oregon and California grant lands	National grasslands & L.U. Areas 1/ 1,000 dollars	Other	Total
Receipts from sale and use of forest resources					
Timber and forest products	186,776	8,222	2		195,000
Grazing	6,572	2	778		7,352
Land uses	4,485	5	174		4,664
Recreation	47,503	100	15		47,618
Power	1,885	0	9		1,894
Minerals	1,652	0	15,355		17,007
Subtotal	248,873	8,329	16,333	0	273,535
Receipts from deposits for expenditures on national forests					
Timber sale area betterment	157,897				157,897
Timber salvage sales	181,243				181,243
Brush disposal	17,821				17,821
Restoration of Forest Service lands and improvements	4,920				4,920
Cooperative work	42,803				42,803
Operation and maintenance of quarters	6,468				6,468
Gifts, donations, and bequests	1,303				1,303
Subtotal	412,455	0	0	0	412,455
Other receipts					
Miscellaneous (sales, rents, etc.)				6,390	6,390
Golden Eagle passports				230	230
Royalties from sale of Smokey Bear and Woodsy Owl products				46	46
Acquisition of lands to complete land exchanges				413	413
Gifts, donations, and bequests for forest rangeland research				5	5
Subtotal	0	0	0	7,084	7,084

See footnote at end of table.



Table 58--Statement of receipts--fiscal year 1996--Continued

	National forests	Oregon and California grant lands	National grasslands & L.U. Areas 1/	Other	Total
			1,000 dollars		
Other income					
Estimated collections by Department of Energy for power licenses on proclaimed national forest land	1,931				1,931
Estimated collections by Department of the Interior for mineral leases on proclaimed national forest land	169,240				169,240
Value of roads built by timber purchasers in lieu of cash	41,291				41,291
Subtotal	212,462	0	0	0	212,462
Total	873,790	8,329	16,333	7,084	905,536
Other net deposits					
Monies advanced on active timber sales					
Balance from previous year	193,563				193,563
Deposited current year	568,106				568,106
Transferred to other accounts	(610,528)				(610,528)
Balance on deposit (subtotal)	151,141	0	0	0	151,141
Amounts deposited pending disposition					
Balance from previous year	29,868				29,868
Deposited current year	(8,065)				(8,065)
Transferred to other accounts	(2,511)				(2,511)
Balance on deposit (subtotal)	19,292				19,292
Total	170,433	0	0	0	170,433
Grand total	1,044,223	8,329	16,333	7,084	1,075,969

1/ Land utilization projects.



Table 59--Statement of obligations--fiscal year 1996 1/

	Total 2/	Work for other public agencies (reimbursables) 1,000 dollars
National Forest System		
Protection and management	990,725	79,596
Wildland Fire Management	835,428	252,383
Cooperative work for others	40,416	0
Cooperative law enforcement	65,956	0
Flood prevention and watershed protection	43	0
Restoration of forest lands and improvements	2,801	0
Reforestation and timber stand improvement	30,370	0
Timber sale betterment (K-V) 3/	390,187	0
Brush disposal	23,942	0
Timber salvage sales	204,649	0
Range betterment	4,621	0
Acquisition of lands, Forest Service	1,410	0
Acquisition of lands, Land and Water Conservation Fund	38,142	0
Construction of forest roads and trails	183,873	7,047
Timber purchaser roads constructed by the Forest Service	6,209	0
Restoration of roads, Federal Highway funds	27,030	0
Road construction, Mount St. Helens, highway trust	0	0
Trail maintenance	17,482	0
Tongass Timber Supply Fund	200	0
General Administration	253,402	0
Operation and maintenance of quarters	6,284	0
Hazardous waste management	7,519	0
Resource management timber receipts	182	0
Strawberry Valley land transfer	13	0
Emergency Pest Suppression	13,623	0
L&WCF Recreation fees	1,129	0
Southeast Alaska Economic Disaster	50,000	0
Subtotal 2/	3,195,636	339,026
Research		
Tongass Timber Supply Fund	0	0
Forest research	188,489	14,841
Construction of research facilities	(12)	(28)
Cooperative research	(2)	0
Gifts, donations, and bequests for forest and rangeland research	1,259	0
Subtotal 2/	189,734	14,813

See footnotes at end of table.



Table 59--Statement of obligations--fiscal year 1996--Continued

	Total 2/	Work for other public agencies (reimbursables) 1,000 dollars
State and Private Forestry		
Cooperation and general forestry assistance	157,480	464
Resource conservation and development	422	0
Rural community fire protection grants	1,999	0
Flood prevention and watershed planning	1,860	0
Licensee programs - Smokey Bear and Woodsy Owl	61	0
Pesticide Impact Assessment	357	0
Forestry incentives	610	0
Subtotal 2/	162,789	464
International Forestry Programs		
International Forestry	535	140
Subtotal 2/	535	140
Human Resource Programs		
Job Corps	87,255	70
Senior Community Service Employment Program	19,083	19,083
Subtotal 2/	106,338	19,153
Total 2/	3,655,032	373,596
Internal equipment and supplies service		
Working Capital Fund (subtotal)	133,649	133,649
Grand total 2/	3,788,681	507,245

1/ Obligations were incurred on a "charged-as-worked" basis.

2/ May not add due to rounding.

3/ K-V = Knutson-Vandenberg Act.



Table 60—Statement of obligations--fiscal years 1992-96

	1996	1995	1994	1993	1992
<i>Million dollars actual</i>					
National Forest System	3,195.6	2,871.8	3,436.1	2,553.2	2,828.5
Forest Research	189.7	209.9	218.6	300.1	296.1
State and Private Forestry	162.8	157.8	179.0	182.0	195.1
International Forestry	0.6	5.5	7.6		
Human Resource Programs	106.3	113.3	102.3	90.1	95.2
Working Capital Fund	133.7	167.6	140.4	119.8	118.4
<b>Total</b>	<b>3,788.7</b>	<b>3,525.9</b>	<b>4,084.0</b>	<b>3,245.2</b>	<b>3,533.3</b>



Table 61--Summary statement of values and obligations--fiscal year 1996

Item	Units	1/	Quantity	Average value per unit	Total value
			Number		Million dollars
Value					
Minerals 2/					
Common variety	-	3/	-	-	25.0
Locatable	-	3/	-	-	900.0
Leasable					
Oil	BBL		10,000,000.0	14.00	140.0
Gas	MCF		300,000,000.0	1.42	426.0
Coal	Tons		115,000,000.0	10.57	1,215.6
Others	-	3/	-	-	235.8
Timber Harvested	MBF		3,724,600.0	146.14 4/	544.3
Recreation	RVD		341,199,900.0 5/	32.03 6/	10,928.0 6/
Wilderness and primitive areas	RVD		14,512,000.0	40.94	594.2
Wildlife and fish					
Recreation	AD		86,083,000.0	41.55	3,576.4
	Pounds		150,000,000.0	1.50	226.4
Range 7/	HM		7,918,309.0	1.01	8.0
Total value					18,819.7
Expenditures					
National Forest System					3,195.6
Forest Research					189.7
State and Private Forestry					162.8
International Forestry					0.6
Human Resource Programs					106.3
Working Capital Fund					133.7
Total expenditures					3,788.7
Net value, total					15,031.0
Net value, National Forest System only					15,624.1

1/ BBL=barrels; MCF=thousand cubic feet; MBF=thousand board feet; RVD=recreation visitor day; AD=activity day; HM=head month

2/ Minerals data estimated.

3/ Units for common variety and locatable minerals are not standard.

4/ Actual value at time of sale.

5/ Includes wilderness, wildlife, and fish.

6/ Average value per unit and total value for M RVD's excludes recreation related M WFUD's and wilderness M RVD's.

7/ A head month is 1 month's occupancy by an adult animal. The fee for an adult sheep is 1/5 the fee for cattle.



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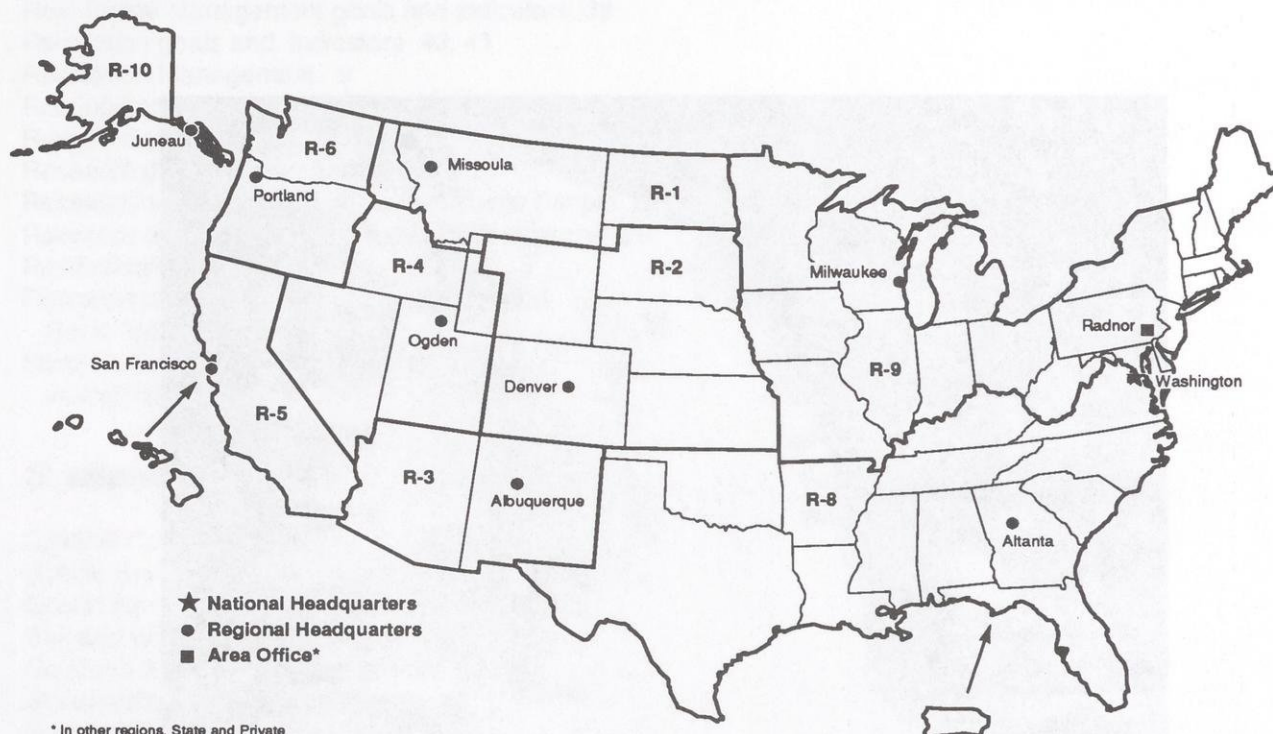
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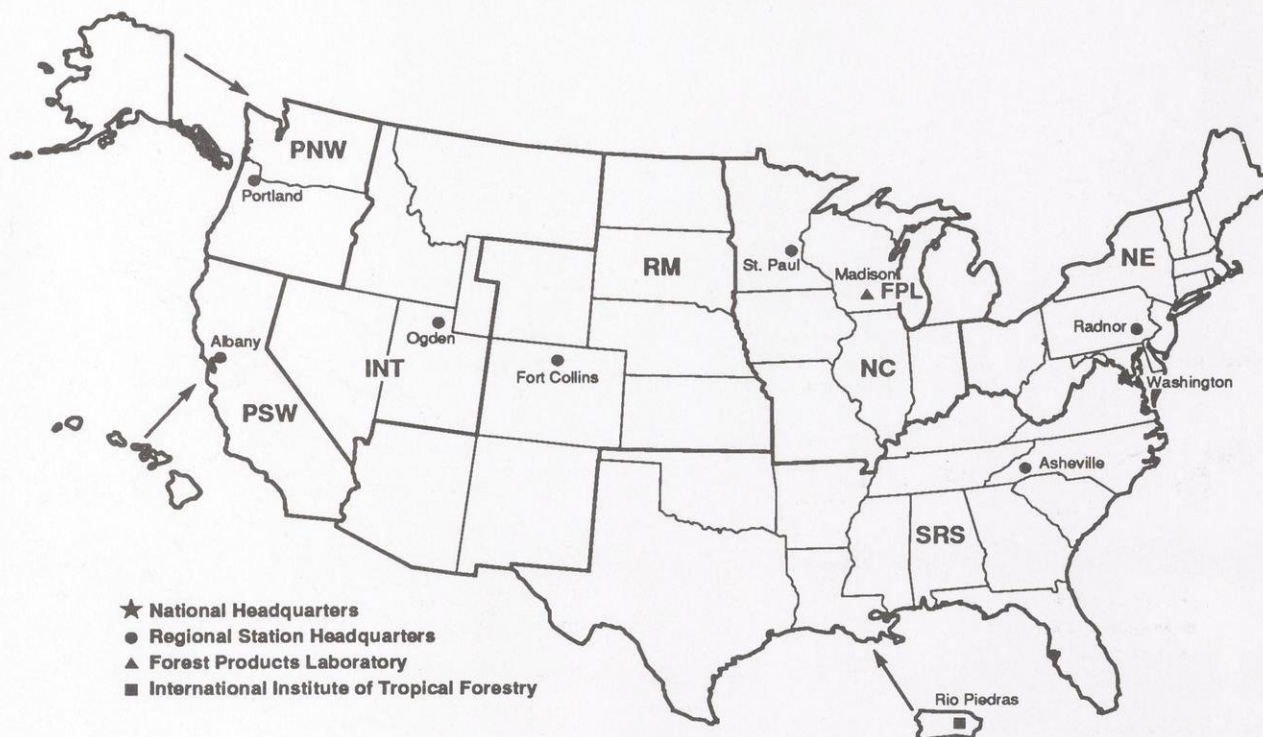
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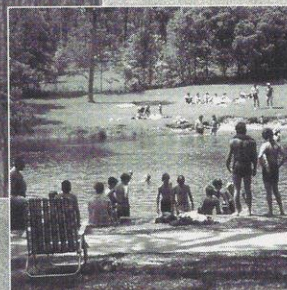
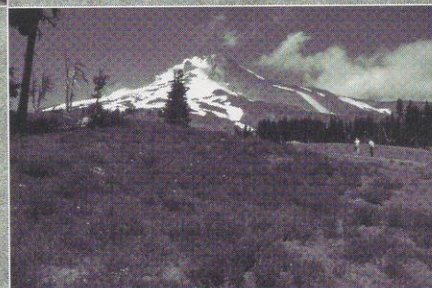
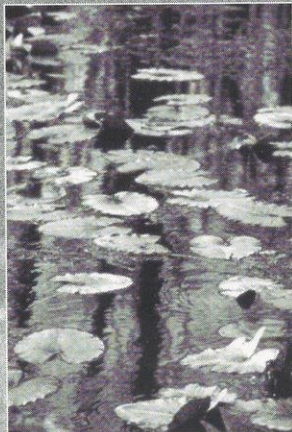
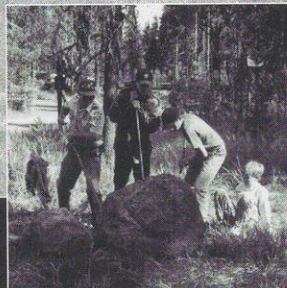






United States Department of Agriculture

# Report of the Forest Service Fiscal Year 1997



...healthy watersheds, healthy communities



# USDA Forest Service

The Forest Service, U.S. Department of Agriculture, provides leadership in the management, protection, and use of the Nation's forests and rangelands. The agency takes an ecological approach to the implementation of multiple use management, providing sustained yields of renewable resources such as water, forage, wildlife, wood, and recreation. The Forest Service has embraced ecosystem management as its operating philosophy and is committed to the preservation of wilderness, biodiversity, and landscape beauty as well as the protection of the basic resources of soil, water, and air quality.

The Forest Service is responsible for the 191.8-million-acre National Forest System, with its 155 national forests and 20 grasslands in 44 States, Puerto Rico, and the Virgin Islands. In addition, the agency works with State land management organizations to help private landowners apply good natural resource management practices on their lands. The International Forestry program of the Forest Service enables the agency to share its technical expertise and managerial skills with other nations. The Research program of the Forest Service conducts extensive research to enhance and protect productivity on all of America's forests and rangelands, with special attention to long-term natural resource issues of national and international scope.

Key laws guiding Forest Service programs and activities are:

- ◆ Multiple-Use Sustained-Yield Act of 1960.
- ◆ The Wilderness Act of 1964.
- ◆ Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974, as amended.
- ◆ National Forest Management Act (NFMA) of 1976.
- ◆ Forest and Rangeland Renewable Resources Research Act of 1978, as amended.
- ◆ Cooperative Forestry Assistance Act of 1978.
- ◆ Chief Financial Officer's Act of 1990.
- ◆ Food, Agriculture, Conservation, and Trade Act of 1990 (Farm Bill).
- ◆ International Forestry Cooperation Act of 1990.
- ◆ Government Performance and Results Act of 1993.

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# REPORT of the FOREST SERVICE

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*Fiscal Year 1997*





## Selected FY 1997 Statistics

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<b>National Forest System</b>	191.8 Million Acres
National Scenic Byways	8,000 Miles
National Wild and Scenic Rivers System	4,348 Miles Within National Forests
Insect and Disease Suppression	1.2 Million Acres
Wilderness	34.7 Million Acres
Watershed Improvements	65,570 Acres
Wildlife and Fish Habitat Restored/Enhanced	338,810 Acres
Reforestation	321,498 Acres
Livestock Grazing Permitted	9.3 Million Head Months
Grazing Allotments Administered to Standard	4,735 Allotments
Energy Operations Processed	455 Operations
Bonded Non-energy Operations Processed	961 Operations
Timber Volume Offered	4.0 Billion Board Feet
Timber Harvested	3.3 Billion Board Feet
Road System	378,996 Miles
Landline Boundary System	256,000 Miles
<b>Woodland Owners Assisted</b>	186,824
<b>Research Accomplishments</b>	2,616 (Includes books, papers, articles, reports, audio-visual materials, and other documents.)
<b>Human Resource Programs</b>	134,792 Persons Served



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Chief Dombeck and other Forest Service employees preparing to paint windows.

USDA, Forest Service

Forest Service employees working in the community.



USDA, Forest Service





## Chief's Message

The Forest Service is responsible for managing our Nation's public forests and grasslands. These aquatic and terrestrial ecosystems encompass tropical and boreal forests, vast grasslands, over 200,000 miles of fishable streams, and approximately one-third of our public wetland and riparian resources. They provide drinking water, sustainable flows of commodities, and habitat for thousands of animal species; hundreds of migratory birds, mountain lions, buffalo, wild horses and burros, fish species with important subsistence, recreation, and commercial values; and hundreds of rare plants, fish, and wildlife.

Our mission is to sustain the health, productivity, and diversity of these resources to help us meet the needs of present and future generations. The phrase, "Caring for the Land and Serving People" expresses the spirit of this mission and reflects our commitment to working with the American people to better steward our natural resources. We recently outlined a natural resources agenda for the Forest Service that emphasizes watershed health and restoration, sustainable forest ecosystem management, recreation, and forest roads. These priorities will be addressed in the coming years. Economic prosperity and social well-being are inextricably linked to managing healthy public lands. We simply cannot meet the needs of people without securing the health of the land.

Improving and protecting the health of the land while providing benefits to people continues to be our priority in strategic planning, budgeting, and management. In fiscal year (FY) 1997, we have taken great strides to improve water quality and quantity; protect and restore riparian areas, forests and grasslands; increase partnerships; and promote environmentally sound recreation. For example, as part of our Recreational Fisheries Conservation Plan, we expanded partnerships with agencies and local communities helping us to improve 15,827 acres and 2,898 miles of aquatic habitat critical to recreational fishing. We also restored forest resources by treating over 1.5 million acres for insect and disease infestations. Last year, we worked with State and private landowners to monitor 54 percent of forested lands, compared to 40 percent in 1996.

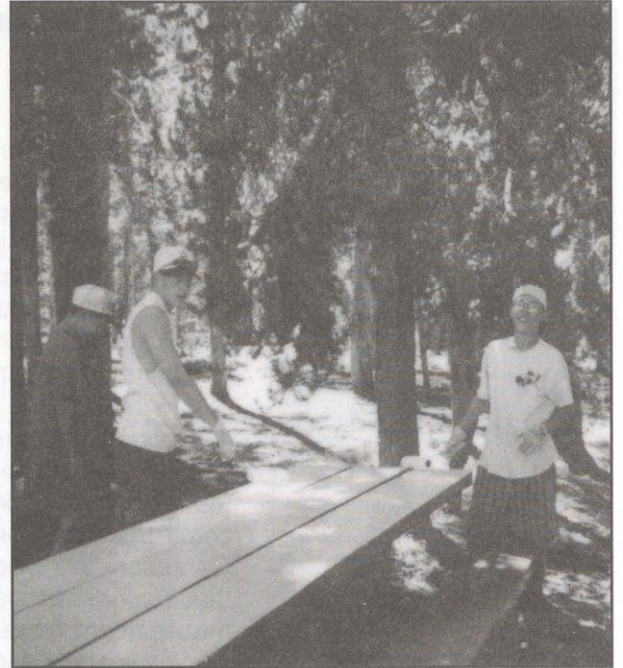
These are clearly steps in the right direction. But we must do more. Through implementation of the Government Performance and Results Act (GPRA) and the Forest Service natural resources agenda, we will expand the number of riparian acres restored, significantly reduce hazardous fuels on NFS lands, and restore native vegetation on rangelands by eliminating noxious weeds. If we increase our use of recycled fibers in paper to 45 percent and in housing to 20 percent, we could offset timber harvest by about 1.5 million cubic feet per year. That is enough wood to build about 800,000 homes.

A key to our success in implementing our agenda will be our work with the people who use and care about the land. As the Chief of the Forest Service, I look forward to building upon our collaborative efforts.

A handwritten signature in dark ink that reads "Mike Dombeck". The signature is fluid and cursive, with the first name "Mike" and last name "Dombeck" clearly legible.

MIKE DOMBECK  
Chief





USDA, Forest Service

*Boyscouts painting picnic tables at a Forest Service recreation site.*



USDA, Forest Service

*Big Fall Creek Lake trail reconstruction.*



# OVERVIEW

## INTRODUCTION

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

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

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

Ensure Sustainable ecosystems	Accomplishments	
	1996	1997
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
<b>Provide multiple benefits for people within the capabilities of ecosystems</b>		
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
<b>Ensure organizational effectiveness</b>		
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.*

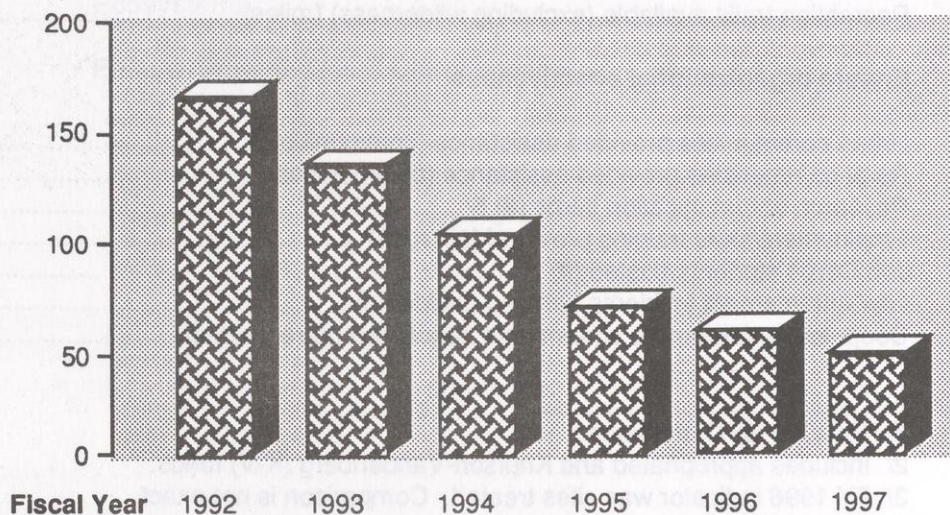
A total of 321,498 acres of NFS lands were reforested in FY 1997, primarily using genetically improved seedlings, compared to 357,512 acres in FY 1996. Aggressive reforestation practices continue to ensure that NFS lands remain productive to provide for healthy ecosystems and to meet stated management 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

Thousand Acres





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

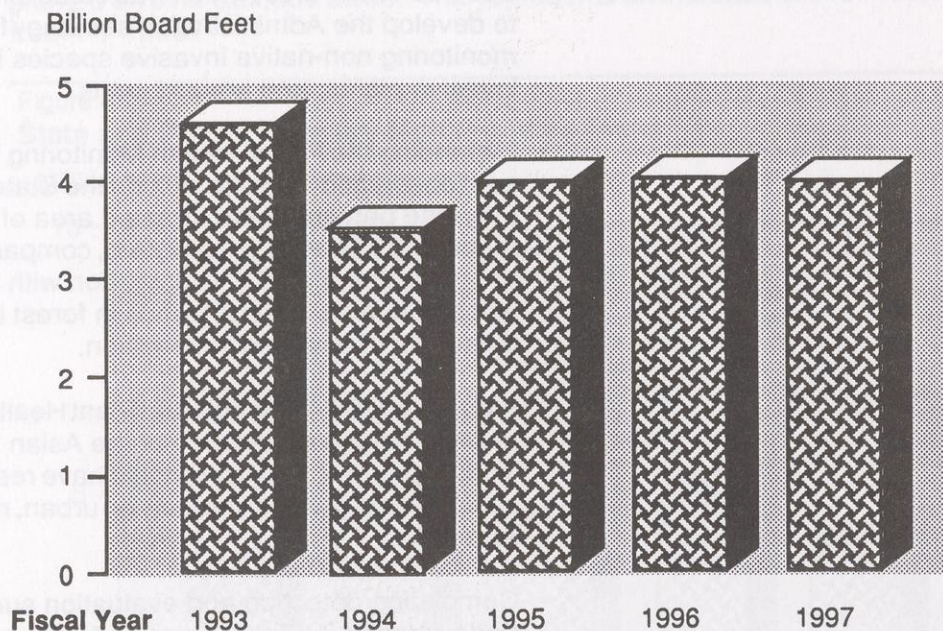
In FY 1997, emphasis remained focused on the management and control of noxious weeds by treating 72,357 acres. As the designated lead agency for noxious weed management activities within USDA, the Forest Service coordinates the noxious weed strategy. The strategy identifies priority action items and 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.

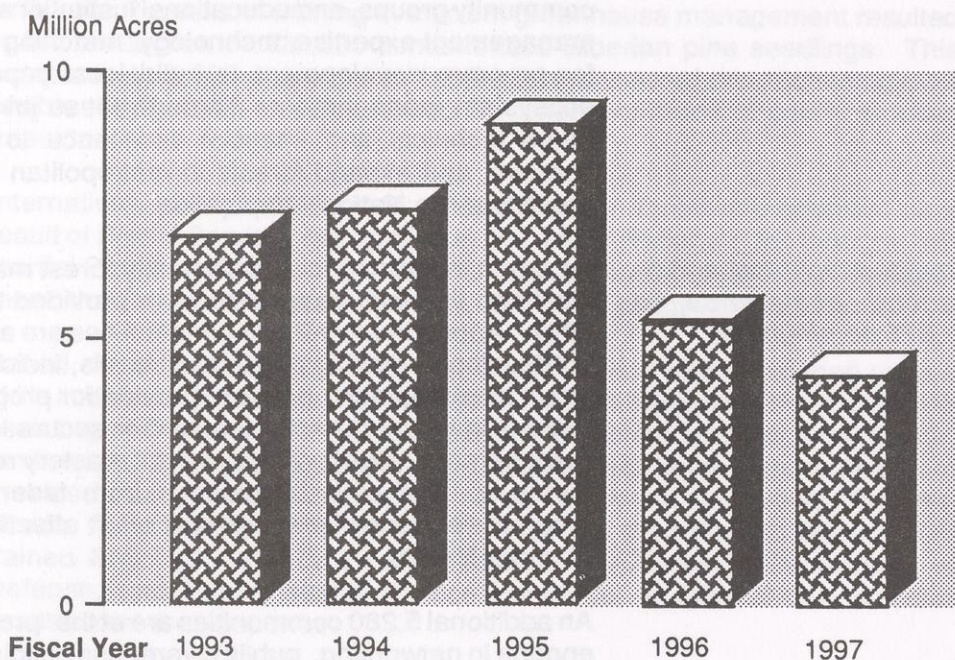
### Landowner Assistance to Provide for Healthy Ecosystems and Vital Communities

*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.

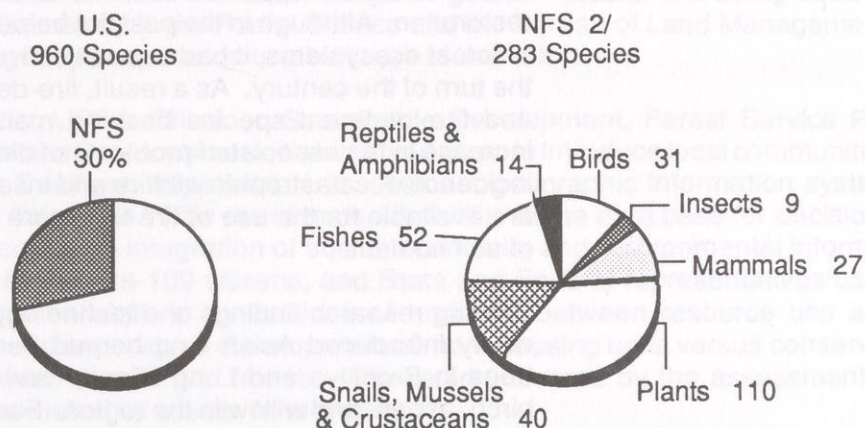
In 1997, the Forest Service restored or enhanced 6,631 lake acres and 950 stream miles of inland fish habitat, and an additional 3,713 lake acres and 900 stream miles of anadromous fish (saltwater fish that migrate upriver to spawn) habitat. These accomplishments were achieved through a variety of structural 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 mussels.

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**

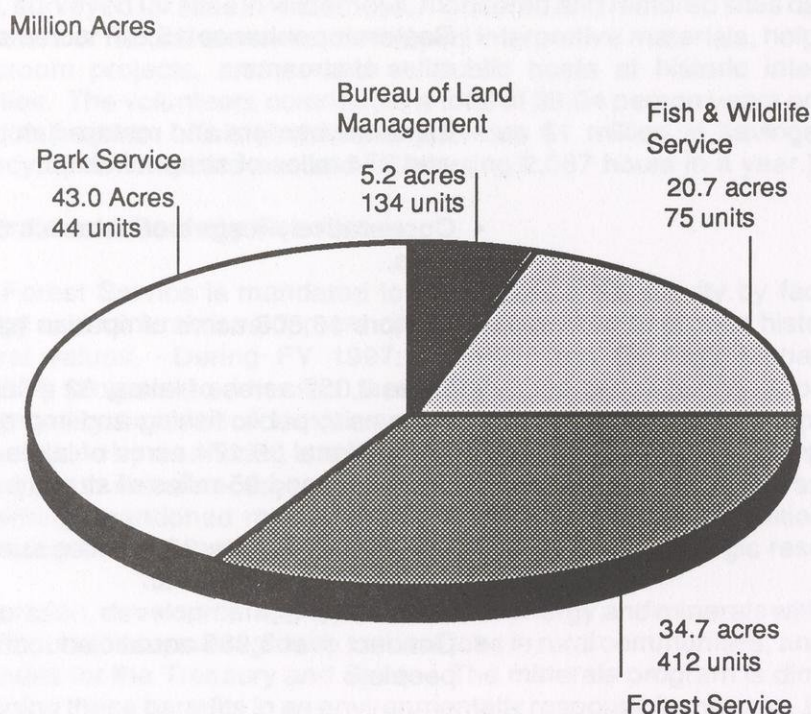
Almost 23 percent of the NFS is included in specially designated congressional areas, such as wilderness, wild and scenic rivers, national recreation areas, and national monuments. These areas encompass some 43 million acres of NFS lands that are managed under specific congressional mandates.

*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



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*

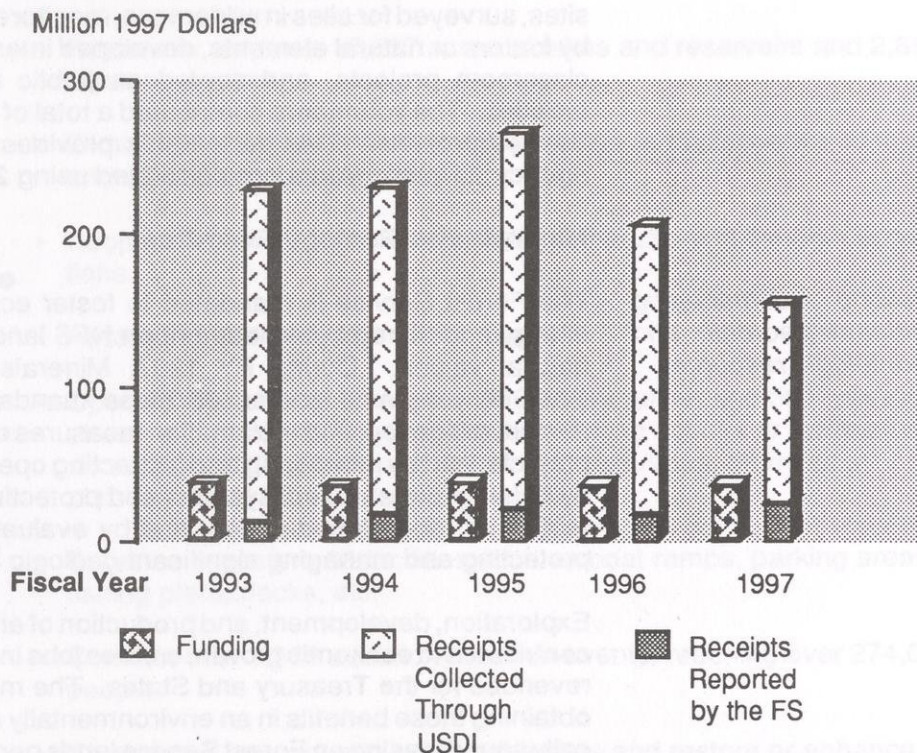
The Forest Service is mandated to foster economic activity by facilitating energy and mineral development on NFS lands, and to protect historic and natural values. During FY 1997, Minerals and Geology Management (M&GM) programs addressed these mandates by requiring appropriate design, mitigation, and 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.

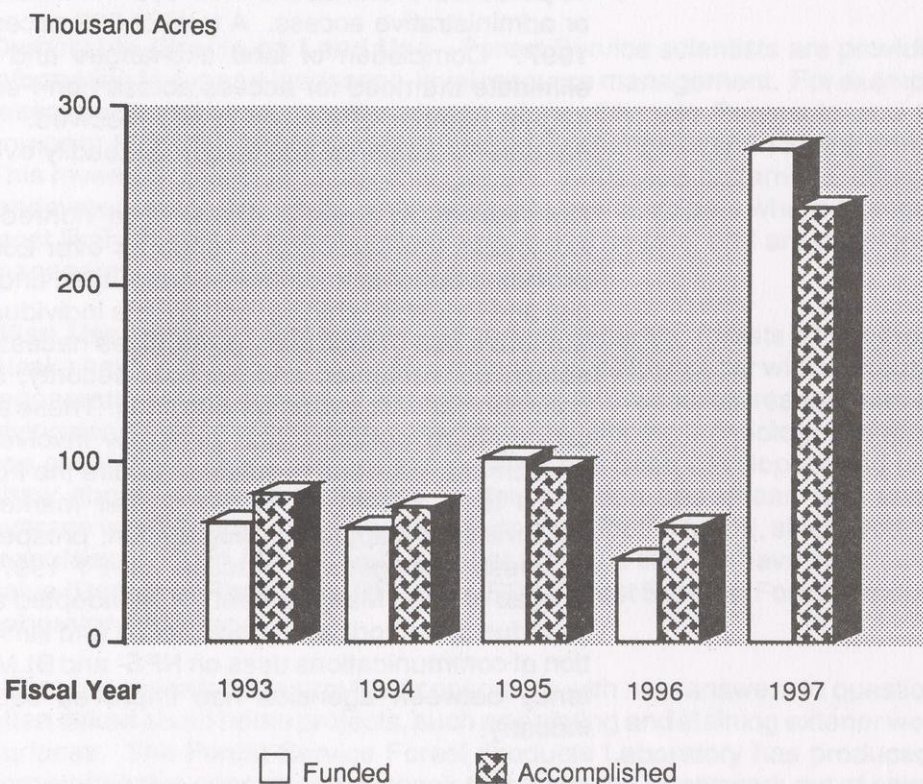
The Hydropower Relicensing Initiative was adopted in April 1997 to respond to a significant workload increase due to the relicensing of over 180 Federal Energy Regulatory Commission (FERC) projects on NFS lands. Beginning in 1998, the Forest Service will be faced with a workload of 78 such projects. 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 (NFLF). Beginning in FY 1995, the boundary management program was funded with NFLF 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.

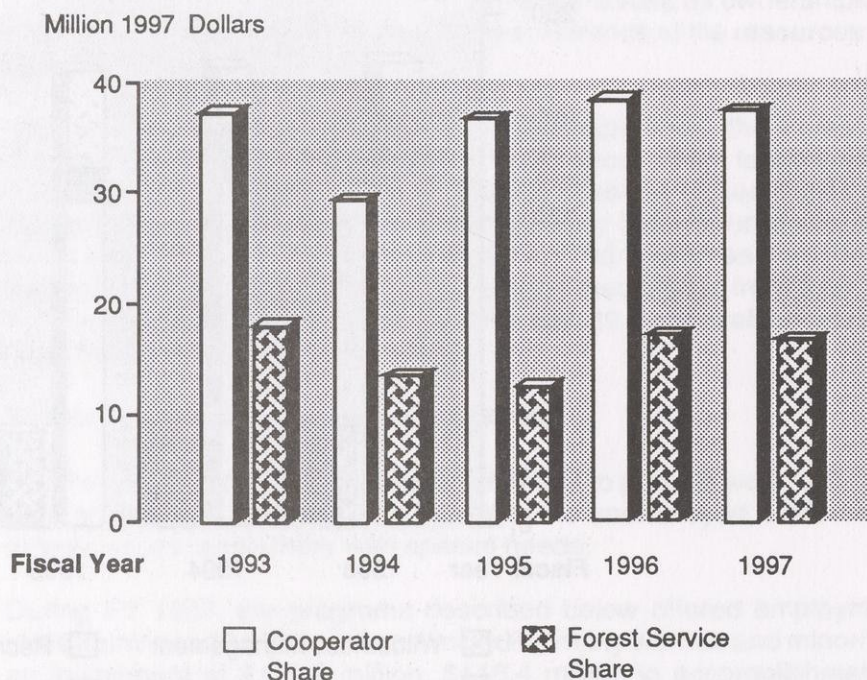
The Arthur Carhart National Wilderness Training Center is funded and staffed by all four Federal wilderness managing agencies. In FY 1997, the center trained about 200 people in the specifics of wilderness management and wilderness issue resolution. It also registered 100 new participants for the Wilderness 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.



**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.

Figure 9.  
Recreation Use—Challenge Cost-Share Funding



**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.

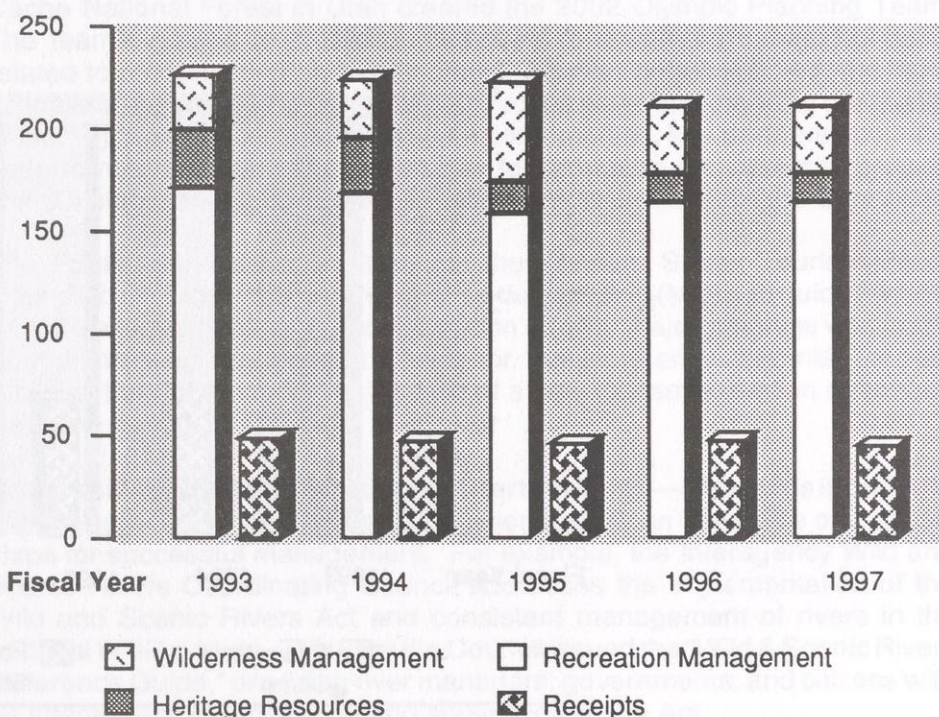
**Infrastructure**—The implementation of the integrated information system for the Recreation, Heritage, and Wilderness Resources programs is progressing. FY 1997 saw completion of a real property inventory for these program areas giving managers the opportunity to see a comprehensive picture of the 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.



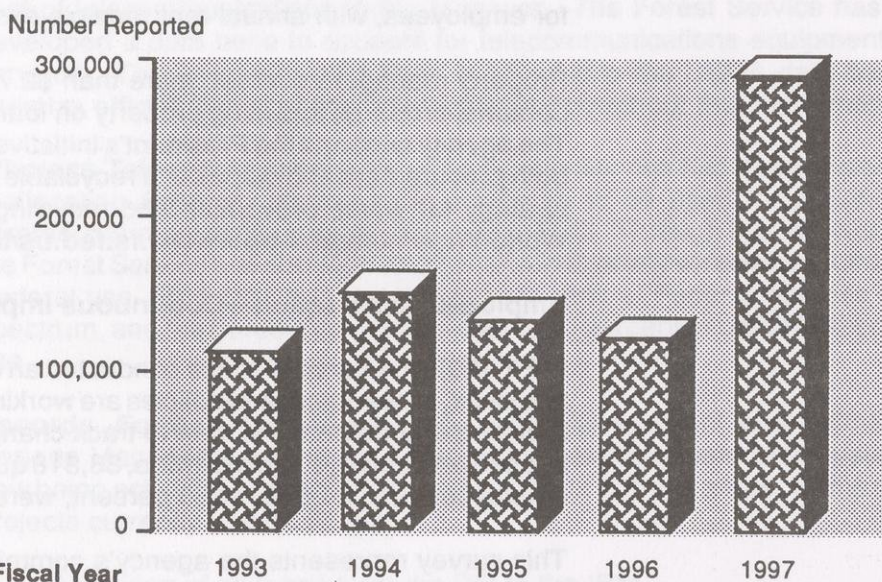
## Law Enforcement and Investigations

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.

Figure 11.

### Law Enforcement Incidents and 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.



# GPRA Appendix

## Forest Service FY 1997 Government Performance and Results Act (GPRA) Performance Report



# Fiscal Year 1997 Government Performance and Results Act (GPRA) Performance Report

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## INTRODUCTION

This GPRA report, measuring fiscal year (FY) 1997 performance, is the final report produced by the Forest Service under the pilot phase of the Government Performance and Results Act (GPRA) of 1993. It represents an interim approach to compliance with the Act.

**Report Linkages:** The content of this report links the FY 1997 annual performance goals and indicators to the agency budget emphases, as expressed in the FY 1997 Agency Request and Department Allowance, which in turn reflect the Course Elements and Actions in the Draft 1995 RPA Program. The recently approved GPRA Strategy Plan, annual performance plans, and this report are based on the following strategic goals:

- Ensure Sustainable Ecosystems
- Provide Multiple Benefits for People within the Capabilities of Ecosystems
- Ensure Organizational Effectiveness

**Outcome Analysis:** An assessment of achievement, determined by accomplishment of performance measures, is included for each annual goal. When data is available, a graphic displaying a trend of accomplishment is included.

When an annual goal was not achieved, an explanation is included.

Whenever indicators were added, modified, or dropped after the FY 1997 Annual Performance Plan was published, it is addressed in this report.

Wherever FY 1997 accomplishment data is not available, it is noted.

**Lessons Learned and Applied to the FY 1998 Performance Plan:** FY 1998 is the first year in which the agency is operating under the GPRA Strategic Plan. Although an annual performance plan is not legally required until FY 1999, a working document for FY 1998 has been developed to introduce concepts and components that will be used in subsequent budget cycles.

Within each program area, following congressional intent and the Chief's national emphases, the objectives and indicators related to GPRA performance expectations are listed. In future years, this section will include both funding and expected accomplish-

ment levels disaggregated to each field unit. The indicators will also be used in individual performance standards, linked to allocation criteria, and reported through Management Attainment Reports (MAR) and other data bases for use in the Annual Report.

**Role of External Stakeholders:** Consistent with the spirit of GPRA, the development of this performance report has been viewed as being an "inherently governmental function." No external stakeholders were directly involved in the development of this report.



## STRATEGIC GOAL #1: ENSURE SUSTAINABLE ECOSYSTEMS

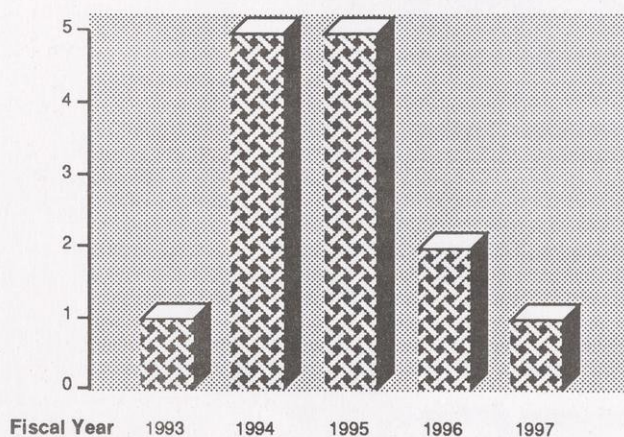
**Annual goal A4a1.** Complete statewide plans in States joining forest legacy.

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
Number of statewide plans	1-3	At least 20	1

**Outcome analysis:** The State of Utah joined the Forest Legacy Program and completed a plan in FY 1997. Four other States are actively working on statewide plans.

GPRA Figure 1.

Number of Statewide Plans Completed



**Annual Goal A6\_1.** Maintain healthy forested ecosystems.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Harvest treatments (acres) 1/ 2/	500,000	100% of planned	457,848
Reforestation (acres) 1/ 3/	328,900	100% of planned	321,498
Timber stand improvement (acres) 1/ 3/	388,200	100% of planned	257,881

1/ Data comes from annual Reforestation and TSI Needs Report (2400-K).

2/ Not included in MAR.

3/ Includes accomplishments using appropriated and K-V funding.

**Outcome Analysis:** Consistent with what is reported in the tables in the back of each Annual Report of the Forest Service, the figures above for reforestation and stand improvement do not coin-

cide with what is reported in MAR because they do not include acres accomplished with contributed funding. Even so, the FY 1997 planned outputs for MAR for reforestation and stand improvement were exceeded. However, the planned GPRA output for harvest treatments, reforestation, and timber stand improvement were not achieved. This is, in large part, due to constrained funds for forest land management, coupled with our limited ability to predict accomplishments accurately more than 1 year in advance when actual funding available has not yet been determined.

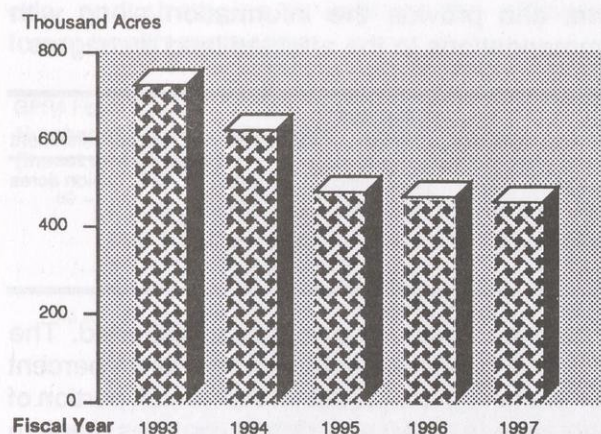
These accomplishments, although not meeting the GPRA planned levels, do make significant progress towards responding to the annual GPRA goal of maintaining healthy forested ecosystems. Reforestation and stand improvement treatments continue to decline as a result of timber harvest reductions and lower funding levels. Aggressive reforestation practices continue to ensure that NFS lands remain productive to provide for healthy ecosystems and to meet stated management objectives. Reforestation is expected to continue to decrease because timber sales that require tree planting following harvest are declining. Stand improvements will continue to be a second priority, behind reforestation. The level of timber stand improvement indicates our continuing ability to improve forest health through treating young stands where the value of the product is not a strong consideration.

Acres of harvest treatments are indicative of our workload and accomplishments in vegetative management for multiple purposes, such as commercial thinnings that improve the growth of the remaining stand and remove less-desirable species and trees. Harvest treatments also continue to decline, reflecting a reduced timber sale program. Harvest treatments are expected to continue at approximately the levels experienced in FY 1995 and 1996.

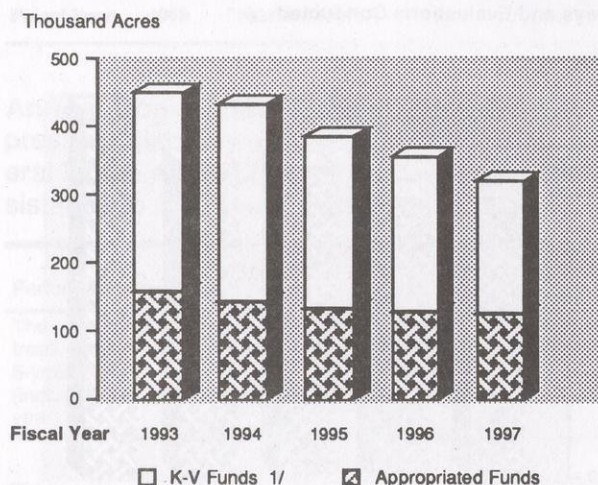
The number of acres treated annually through the regular and salvage timber sale program is indicative of the extent of maintenance and restoration of forested ecosystems on NFS lands and the implementation of forest plan goals and objectives. Timber sales are usually designed to incorporate multiple objectives, which may include insect and disease control, fuels treatment, and habitat restoration in addition to the production of wood. Providing a continuing supply of forest products while complying with applicable laws and regulations provides goods and employment that benefit the public.



GPRA Figure 2.  
Harvest Treatments

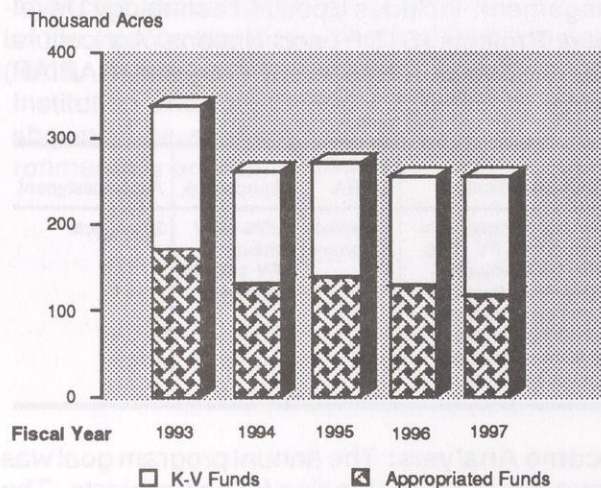


GPRA Figure 3.  
Acres Reforested



1/ The Knutson-Vandenberg Act (KV) as amended, authorizes use of portion of timber sale receipts for reforestation, timber stand improvement, and improvement of other resources on timber sale areas.

GPRA Figure 4.  
Acres Receiving TSI Treatments



## Annual Goal: A6\_2. Maintain Healthy Rangeland Ecosystems

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
The number of acres on which management activities are being conducted to achieve rangeland vegetation objectives and be in compliance with applicable forest plan standards and guidelines.	43,350 acres	20% increase over FY 1996	36,856 acres

**Outcome Analysis:** The decision to plan for 43,350 acres was made in 1995. In 1996, the number was revised to 34,622 acres to reflect a more accurate goal. The outputs achieved under the indicators are consistent with the annual and strategic goals. The effects of restoring rangeland acres are moving us toward maintaining healthy rangeland ecosystems.

Management activities to achieve rangeland vegetative objectives are conducted in compliance with applicable forest plan standards and guidelines and implemented through allotment management plans. At the end of FY 1997, 36,856 acres of rangelands were restored through vegetative treatments to meet forest plan objectives.

**Annual Goal A6a1.** Maximize opportunities in monitoring and evaluation through implementation of tasks outlined by the Inventory and Monitoring Task Team (i.e., quality assurance, standards/definitions, and sampling protocols) and the development of a shared information environment for natural resources.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Integrated inventories and assessments, and monitoring and evaluation that provide analysis, mapping and computer-generated products used in decision-making.	Planned assessments and inventories integrated with other agencies	Complete as planned	Completed as planned
The number of national forests that annually monitor and evaluate forest plans to determine adequacy to guide the management of the national forests for the next year.	123 forest plans evaluated	100% of planned	89 published monitoring reports or 72% of planned
Implementation of tasks approved in the Natural Resource Focus Area Strategy Report.	Planned tasks implemented	Complete as planned	Completed as planned
Integration of inventories and assessments with other agencies.	Planned assessments integrated	Complete as planned	Completed as planned



**Outcome Analysis:** Assessments have been developed that utilize integrated inventories and provide maps and computer-generated products for planning. Three ecoregional assessments are underway: the Great Lakes Assessment, the Northern Great Plains Assessment, and the Ozark/Ouachita Highlands Assessment, and are currently projected for completion in FY98. All three assessments have States and universities as partners and are designed to provide input into planning processes.

While all 123 national forests accomplished some level of monitoring and evaluation during FY 1997, only 89 (72 percent) have reported on the accomplishment in published form. While this falls short of planned accomplishment, this is the first year for the requirement, and many forests were unable to gear up for the effort. We anticipate continued improvement in this indicator in subsequent years.

The Corporate Resource Implementation Plan to improve resource information in support of ecosystem management is complete. The Ecosystem Classification Inventory and Monitoring Information System, the Forest Service Vegetation Data Base, and the Water Data Base are in development.

In addition to integrated assessments, the Forest Service has been working closely with the Natural Resources Conservation Service on integrating our respective natural resource inventories. An action plan has been developed and initiated. A regional demonstration project was successfully integrated. This will be an ongoing effort for several years.

**Annual Goal A6a2.** Provide land management planning guidance and direction.

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
Complete development of FSM & FSH which correspond with the forest plan regulations.	Complete FSM & FSH direction	Direction completed	Draft revisions

**Outcome Analysis:** The Planning and Handbook revision effort was established to delete burdensome, repetitive, outdated, and unnecessary procedural direction for preparation, amendment, and revision of forest plans, within current regulations. Additional goals are to increase the consistency of direction among resource areas; provide for a high level of collaboration with forest stakeholders; integrate applicable process requirements from other laws and regulations; and incorporate the principles of ecosystem management.

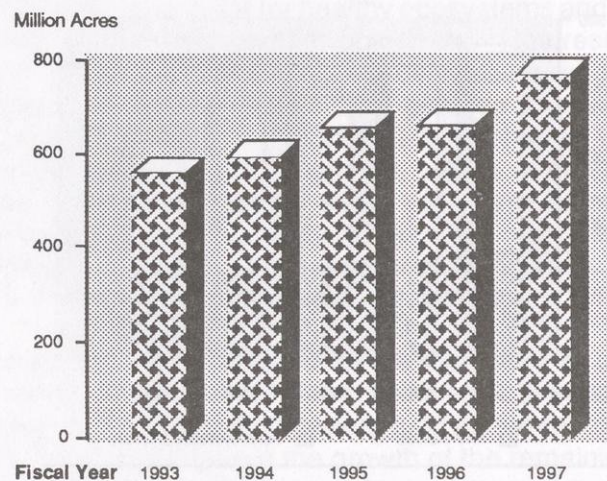
**Annual Goal A6b1.** Conduct detection surveys and evaluations of insects, diseases, and abiotic factors, and provide the information along with recommendations to the affected land managers.

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
The number of acres surveyed and evaluated will be within plus/minus 10% of the 5-year average.	662 million acres	10% below FY 1991-95 5-year average (628 million acres)	772 million acres

**Outcome Analysis:** The goal was exceeded. The output for surveys and evaluations was 24 percent higher than the planned 622 MM acres. A portion of this increase (41 MM) was due to changes made to the reporting system, and increased acres reported in the East on State and private lands.

GPRA Figure 5.

#### Surveys and Evaluations Conducted



**Annual Goal A6b2.** Develop, improve, and demonstrate new technologies, materials, methods, and strategies to improve the efficiency of forest pest management: includes Special Technology Development Projects (STDP) and National Agricultural Pesticide Impact Assessment Program (NAPIAP) projects.

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
The number of projects in progress during FY 1996--including new projects, continuing long-term projects, and projects concluded during the year--will be within plus/minus 25% of the 5-year average.	Complete 51 projects	25% plus/minus FY 1991-95 average	32 projects

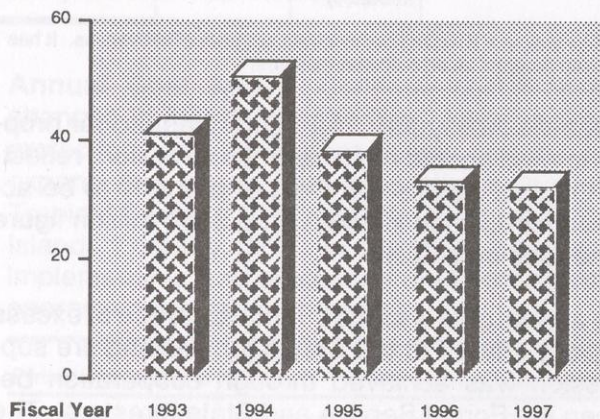
**Outcome Analysis:** The annual program goal was not met due to limited funding for new projects. The



program will continue to develop, improve, and demonstrate new technologies, materials, methods, and strategies to improve the efficiency of forest health protection.

GPRA Figure 6.

#### Number of Projects in Progress (Insect and Disease)



**Annual Goal A6b3.** Conduct prevention and suppression activities of insect and diseases on Federal lands, and provide technical and financial assistance to non-Federal land managers.

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
The number of acres treated plus/minus the 5-year average (including current year).	3.4 million acres	10% plus/minus of FY 1991-95 5-year average (2.6 million acres)	1.5 million acres treated

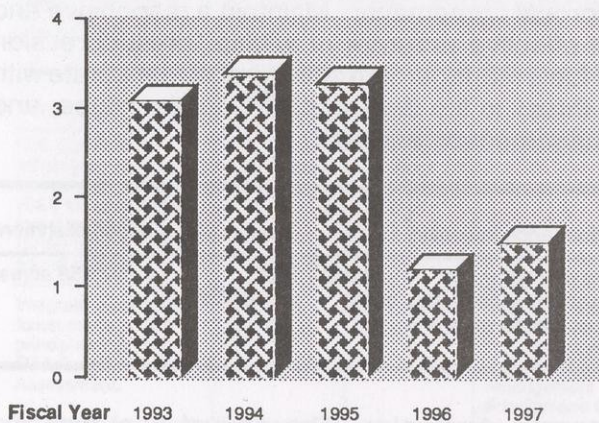
**Outcome Analysis:** The annual goal for FY 1997 was met. Acres treated were affected by a drastic gypsy moth decline in the East, and a decline in the southern pine beetle population in the South.

Financial assistance was provided to all Federal agencies, including the Forest Service, Department of the Interior and Department of Defense Installations, Bureau of Reclamation, and Smithsonian Institution and to States for treatments that were shown to be economically, biologically, and environmentally sound.

GPRA Figure 7.

#### Prevention and Suppression Treatment Activities (Insect and Disease)

Million Acres



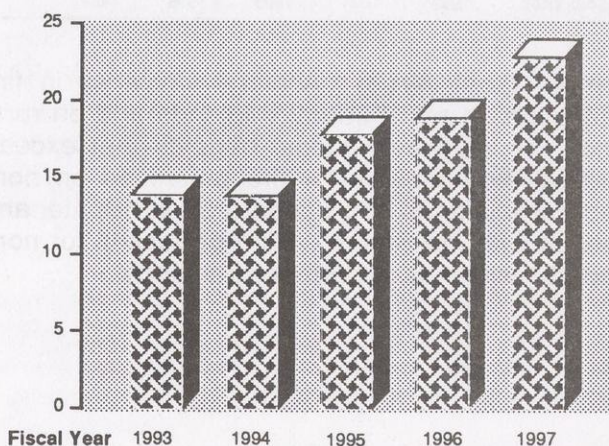
**Annual Goal A6c1.** For FY 1997, have 28 States participating in the Forest Health Monitoring Program.

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
Number of States participating	Monitor 28 States	No less than 28 States participating	23

**Outcome Analysis:** The goal was not met due to decreased budgets. This program will continue to identify and test environmental indicators, and provide data to evaluate the health of the Nation's forest. Fifty-four percent of the forested area of the lower 48 States was monitored as part of the Forest Health Monitoring program. This is the last year the number of States participating will be reported. The percentage of monitored forested area will be reported.

GPRA Figure 8.

#### Number of States Participating





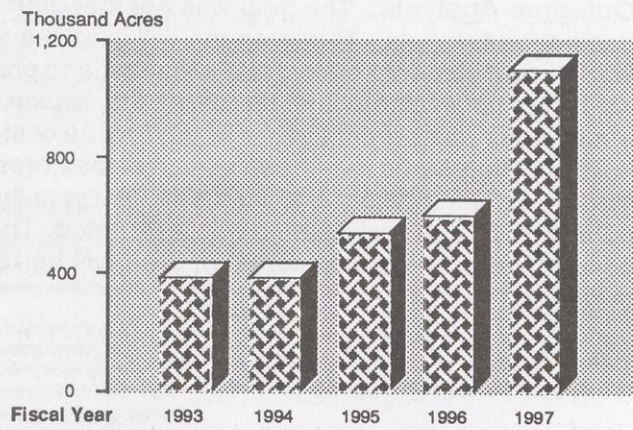
**Annual Goal A7a1.** Protect life, property, and natural resources from wildfire on the 191.6 million acres of NFS land and an additional 20 million acres of adjacent State and private land through fee or reciprocal agreements. Maintain a responsive and cost-effective program of wildfire presuppression and fuels management activity, commensurate with the threat to life and property, public values, and management objectives.

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
Fuels management through prescribed fire or mechanical means (acres)	648,000 acres	100% accomplished	1,097,658 acres

**Outcome Analysis:** The annual goal was exceeded. The implementation of fuel treatment emphasized ecosystem maintenance and restoration to achieve forest health and reduce the threat of wildfire on Federal and adjacent lands. The program accomplishments reduced the threat of severe wildfire in certain key areas where personnel, private property, and resources at risk were identified.

GPRA Figure 9.

#### Fuels Management through Prescribed Fire or Mechanical Means



**Annual Goal A7b1.** Achieve efficiency in fire protection on non-Federal wildlands and on rural lands. To achieve national benefits that exceed Federal expenditures for fire protection on non-Federal wildlands. To cooperate, participate, and consult with the States on fire protection for non-Federal wildlands and other rural lands.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Non-Federal acres protected by States	1,051+ acres	100% accomplished	1/
Property loaned to States for fire suppression (million \$)	\$880 million (acquisition value of property loaned to States)	Meets FY 1991-95 5-yr average (468 million)	\$124 million

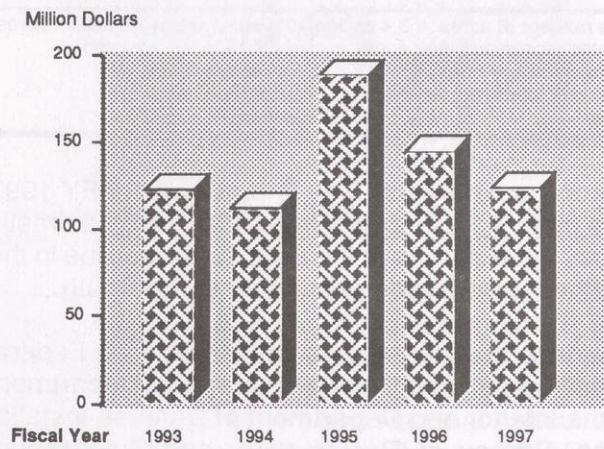
1/ This indicator does not demonstrate program effectiveness. It has been dropped as an outcome measure.

**Outcome Analysis:** The figure planned for property loaned should have been \$115 million, reflecting Original Acquisition Cost of property to be acquired for this use in 1997. The \$880 million figure is the total inventory.

The annual goal was met. Innovative use of excess property loaned to the States for wildland fire suppression was achieved through cooperation between the Forest Service and State foresters. The program continues to improve the local fire districts' capability to provide wildland/urban interface fire protection. Improved fire capability at the local level effectively reduces the loss of life, property, and resources due to wildland fires.

GPRA Figure 10.

#### Property Loaned to the States



**Annual Goal A8a1.** Complete legacy land acquisition cases.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Cases closed	10+	10+ cases closed	14
Acres brought into program	10,000+	Increase program total acreage to 82,000 acres or more	43,503



**Outcome analysis:** The goal was exceeded, with one conservation easement of over 31,000 acres skewing the results for this year. Some States are encouraging landowners to work with a range of programs, in order to benefit from easements to maintain lands for agriculture, rural development, and range purposes in addition to forestry. This is likely a trend that will continue.

**Annual Goal A9a1.** Continue cooperative exchanges in forest management, forest pests, fire protection, and plantations in key countries; and expand the role of the International Institute of Tropical Forestry (IITF) and the Institute of Pacific Islands Forestry (IPIF) in planning, coordinating, implementing, and evaluating the international cooperative program of the agency.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Reduced deforestation rate in Brazil, better forest management practices in Indonesia, increased participation in Mexico working groups, and better forest management practices in the Siberian Pilot project areas.	Upward trend in statistical indicators	Planned activities	Ongoing
Agreements are signed and initial exchanges accomplished for new Sister Forest partnerships.	At least 5 agreements signed and exchanges accomplished.	New Sister Forest relationships begun.	Program reduced by Congress. Little activity is occurring.
Integrate IITF and IPIF into FY 1997 program planning for IF project work in Latin America and Caribbean (LAC) and Asia Pacific and new LAC tropical at IITF.	IITF and IPIF involved in planning and information system begun.	Work planning reflects IITF & IPIF involvement and information system initiated.	International Programs, IITF, and IPIF work planning is now integrated. Lack of funds to establish an IITF information system precluded work to establish a data base.
Increase in person-years (PY) of training, technical assistance, and program development; and number of international partnerships & communications.	Provide at least 204 PY of training, 41 PY of technical assistance, 1,267 communications, and support 304 partnerships.	Show an upward trend when compared to FY 1996.	PY's of international assistance stayed at 1996 levels due to funding.

**Outcome Analysis:** The indicators only roughly reflect accomplishments in advancing sustainable forest management domestically and internationally. The performance highlights illustrate specific significant accomplishments in promoting and gaining acceptance of sustainable forest management principles in key forested countries around the world. In addition, the U.S. has reorganized the working groups it participates in with Mexico to increase their efficiency.

**Annual Goal A9a2.** The Forest Service will provide professional leadership within the U.S. Government for the development and institutionalization of policies that advance sustainable forest management (SFM) in the United States and in key partner countries.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
U.S. Government officially agrees to criteria and indicators (C&I) for sustainable forest management (SFM) based on sound science.	U.S. Government agrees to criteria and indicators.	U.S. Government in agreement	Accomplished
Integrate sustainable forest management principles into the RPA Program and Assessment.	Principles incorporated into RPA.	Integration completed	Draft 1995 RPA Program principles incorporates sustainable forest management direction and C&I.
Key State and private organizations accept SFM and attempt to measure results on non-Federal lands.	At least 5 State and private organizations accept policies.	Document acceptance	50 State forest management policies have accepted SFM principles and the use of C&I in principle. Three States are currently implementing use of C&I. All Federal forest management agencies have endorsed SFM principles.
Upward trend in international assistance provided by the FS.	Provide at least 13 person years (PY) of policy assistance.	Show upward trend when compared to FY 1996 (13 PY)	5 person-years of policy assistance were provided by the FS. Downsizing prevented more involvement.

**Outcome Analysis:** On the domestic front, C&I to measure national progress toward sustainable forest management were used at the G-8 Economic Summit discussions in Denver attended by President Clinton. The National Association of State Foresters is a strong advocate of the C&I and has asked to become partners with Federal agencies in their implementation. The Federal Government, in collaboration with the States and non-governmental organizations, produced a First Approximation Report on the sustainable management of U.S. forests that is being used as a model for the next GPRA and agency performance standards. The FS provided technical policy advice to international forums such as the United Nations' Intergovernmental Panel on Forests, Convention on International Trade in Endangered Species or Wild Fauna and Flora, and Convention on Biodiversity.

**Annual Goal A12\_1.** Develop adaptive management strategies that will provide both 1) short-term technical assistance and knowledge, and 2) tools for implementing a long-term vision of ecosystem management.



Performance Indicators	Planned GPRA	Benchmark	Accomplishments
President's Plan for the Pacific Northwest	Produce, test, evaluate guides, models, and handbooks for watershed analysis and management in support of the PNW Plan.	Complete as planned	Accomplished
Inventory and monitoring	a. Develop planning, inventory, & monitoring system compatible with adaptive management.  b. Develop a multi-ownership resource inventory & monitoring system to assess forest health.	Complete as planned	The Forest Inventory and Analysis program worked with 13 States to inventory 42 million acres. Findings are located in 90 publications on status, condition, and trends in areas inventoried. The Forest Health Monitoring program worked with 23 States covering 53% of the Nation's forest land across all ownerships. Findings are reported in five major regional and national assessments of forest health.
Conservation assessments	a. Complete Sierra Nevada Ecosystem and Interior Columbia River Basin projects.  b. Use results from conservation assessments to identify ecosystem status and information gaps.	Complete as planned  Complete as planned	Both assessments have been completed.  Accomplished
Sustainable development	Three established long-term site productivity studies with NFS.	Site studies established	Seven long-term site studies established.
Forest health	Expand exotic pest research with a new rangeland pest program.	Rangeland pest program begun	Rangeland exotic pest/weed program underway.

**Outcome Analysis:** Overall, the annual goal was successfully achieved. Under the President's Pacific Northwest Plan accomplishments, the agency drafted a riparian management handbook that is being field tested. Studies were completed on the long-term effects of timber harvest and road construction on stream flows and sediment delivery to streams, on the wildlife and abiotic components of headwaters streams, on changes in harvest levels, and a survey of marbled murrelets in inland areas.

The National Long-Term Site Productivity (LTSP) study provides a coordinated network of more than two dozen installations representing a wide range of soil and vegetation conditions across the United States. LTSP allows comparisons for understanding differences between ecosystems. In FY 1997, one additional site was established in Idaho, three sites in West Virginia, and three in Texas. The Province of British Columbia, Canada, has also installed sites.

The Sierra Nevada and Interior Columbia River Basin assessments are complete and associated

data bases are available to other planners to use in forest plan revisions. The Research recommendations and data bases provide direction for changes in research programs for these ecosystems.

The inventory and monitoring program is expanding. Annualized forest inventory has started to give forest managers information between inventory cycles. Coordination across the Forest Inventory and Analysis, Forest Health Monitoring, and Aerial Pest Survey programs has improved.

The rangeland exotic weed program is now operating. The Forest Service is also an active participant in the national exotic weed program, allowing better use of existing research resources between agencies.

These accomplishments are relevant to the Forest Service commitment of providing scientific information and new technologies needed to manage and sustain the natural resources at both national and international levels.

**Annual Goal B1a1.** Using a watershed approach and ecosystem management principles, improve watershed condition on the national forests and grasslands.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Percent of NFS watersheds in Condition Class I (Regimen Attainment). Percent of watersheds in Condition Class III (Investment Emphasis).	Achieve 35% of watersheds in Classes I and Class III.	100% of planned	51% of watersheds in Classes I and III
Completed watershed assessments.	Complete 10%	100% of planned	142 assessments completed
Abandoned mine sites treated.	500 treated	100% of planned	296 sites reclaimed

**Outcome Analysis:** Over one-half of 6,100 NFS watersheds are in Condition Class I and III, with 31 percent of the watersheds in the high-quality class (I). Significant acreage remains in Condition Class II and additional emphasis is needed to improve the condition of Class II watersheds.

Class II watersheds are the top priority for assessment. In FY 1997, 142 assessments were completed, which is almost 50 percent of the total 3,000. As assessment methodology matures, the quality of the assessments has improved. In the future it may be necessary to simplify assessment methodology for some NFS watersheds.



Reclamation of abandoned mine sites is a higher level of accomplishment than treatment of sites. Differences in wording between the performance indicator and the actual accomplishment (e.g., "treated" versus "reclaimed") forgo detailed comparison between indicator and accomplishment.

**Annual Goal B1b1:** Restore wetland and riparian area functions and values, including soil productivity, stream channel stability, fish and wildlife habitat, and natural vegetation.

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
Stream miles/riparian acres in unsatisfactory condition restored.	Restore 5% of area reported in unsatisfactory condition	Inventory and restore 75% of total needs by the year 2000.	1,850 miles of inland and anadromous fish streams restored or enhanced

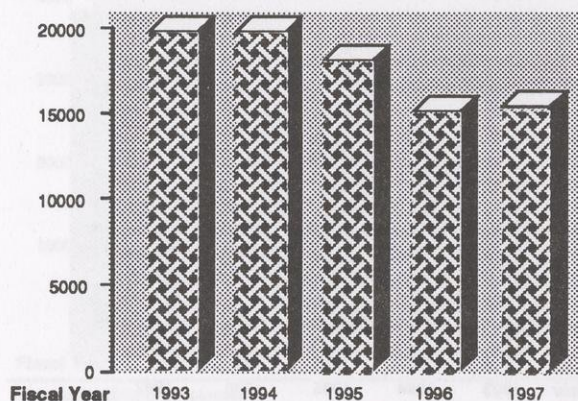
**Outcome Analysis:** The indicator does not provide enough information to assess progress toward the annual goal. The total number of riparian miles in unsatisfactory condition has not yet been determined, and therefore, the percentage of acres restored is not available.

**Annual Goal B2a1.** Encourage landowners to better manage their lands by increasing the number of landowners with quality land management plans. Enroll as many or more landowners in FY 1997 as were enrolled in FY 1995.

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
Number of landowners enrolled in the Stewardship Program	22,975	90% of FY 1996 cumulative (25,300 landowners)	15,357

**Outcome Analysis:** The goal was not met for FY 1997. The actual accomplishment of 15,357 landowners was less than planned due to reduced funding.

GPRA Figure 11.  
Number of Landowners Enrolled in the Stewardship Program



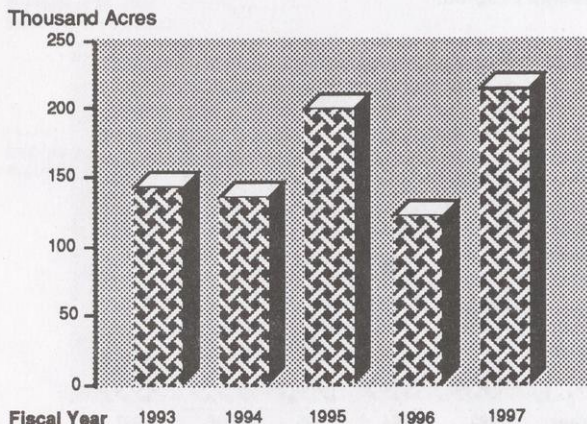
**Annual Goal B2a2.** In FY 1997, assuming constant funding, equal or exceed the number of acres not previously enrolled in FY 1996 in the forest stewardship program and associated stewardship incentives program practices.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Acres of nonindustrial private forest (NIPF) land involved in multi-resource stewardship efforts	3.3 million	Equals/exceeds 3.3 million acres	2.1 million (FSP & SIP)
The enrolled average cost per acre is less than or equal to the enrolled average cost per acre in previous years	Cover 300,000+ acres	100% of planned covered at or below FY 1996 costs	215,273 acres
Cost per acre planning SIP treatments	6.72 29.72	N/A	3.84 45.37

**Outcome Analysis:** The goal was partially met. These GPRA planned outputs were predicated on higher funding levels than the actual appropriated amounts (from \$26.5 million planned to \$6.5 million actual).



GPRA Figure 12.  
Stewardship Incentives Program



**Annual Goal B3a1.** In FY 1997 the goal of the Urban and Community Forestry program is to provide technical and financial assistance to communities equal to or greater (provided funding level is greater than FY 1996) than the level of support provided in FY 1996.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Number of technical assists to communities	Provide 23,000+ technical assists	100% of planned	1/
Numbers of communities assisted	8,079	N/A	11,675
Number of communities having municipal plans that include green infrastructure elements	Complete 1,700	Increase FY 1996 (1,400 communities) by at least 20%	2,608
Number of communities with tree ordinances	N/A	N/A	2,608 2/

1/ During FY 1997 the indicator was changed to "numbers of communities assisted." No data was collected for number of technical assists.

2/ FY 1997 was the first time data was collected for this indicator.

**Outcome Analysis:** The goal was successfully achieved. The Performance Measurement Accountability System (PMAS), set in place in FY 1997, allows managers to account for the numbers of communities participating in the program at various levels of sophistication. The accomplishment of 11,675 communities assisted represents a 44 percent increase over FY 1996. This reflects an increase in funding, as well as the capability of a well-established program infrastructure to meet the needs of the public.

The number of communities having municipal plans reflects an 86 percent increase over FY 1996, well above the benchmark of 20 percent.

## STRATEGIC GOAL #2: PROVIDE MULTIPLE BENEFITS FOR PEOPLE WITHIN THE CAPABILITIES OF ECOSYSTEMS

**Annual Goal C1a1.** Conserving opportunities for cultural and social use while conserving ecosystem sustainability.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
T&E species delisted or reclassified	No planned accomplishment	Reduction in total T&E species listed	None
Sensitive species downlisted	No planned accomplishment	Reduction in total sensitive species listed	None
Acres of terrestrial/aquatic (lakes) habitat protected	25,300 acres	100% of planned	Data no longer collected
Stream miles of aquatic habitat protected	2,550 miles	100% of planned	Data no longer collected
Acres of terrestrial habitat restored or enhanced	142,160 acres	100% of planned	Data no longer collected
Hunting, fishing, and NatureWatch activity days	88.3 million activity days	100% of planned	1/
Head months (HM's) of livestock grazing permitted on NFS rangelands will equal or exceed 8.9 million	8.9 million HM's	100% of planned	9.3 million HM's
Percent of seasonal recreation capacity available to standard	60%	100% of planned	2/

1/ FY 1997 data not available.

2/ Due to work implementing the INFRASTRUCTURE data base, this data was not collected in FY 1997.

**Outcome analysis:** Based on the cumulative effects of the outputs, the annual goal was successfully achieved. The primary focus of the indicators addressing habitat restoration and/or enhancement is to mitigate the impact caused by other resource uses. In FY 1997, the program focused on ecosystem sustainability by minimizing the impact of resource disturbance and conserving opportunities for social use.

**Annual Goal C1a2.** The public's title and interests in the National Forest System are fairly and effectively protected and managed.



Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Land use activities authorized (non-Rec)	85,200+ permits	100% of planned	85,000 permits
Land use activities administered to standard and terms agreed to	27,970 permits	100% of planned	4,200 permits
Miles of boundary legally and physically identified	945 miles	100% of planned	1,119 miles
Number of landownership adjustments that effectively meet public interest objectives	100 cases	100% of planned	73 cases
Number of forests reporting accurate information on condition and cost to maintain FS infrastructure	80%	100% of planned	1/
Number of opportunities for heritage experiences provided to the public	130	100% of planned	935 new interpretive projects; 1,318 new public outreach efforts

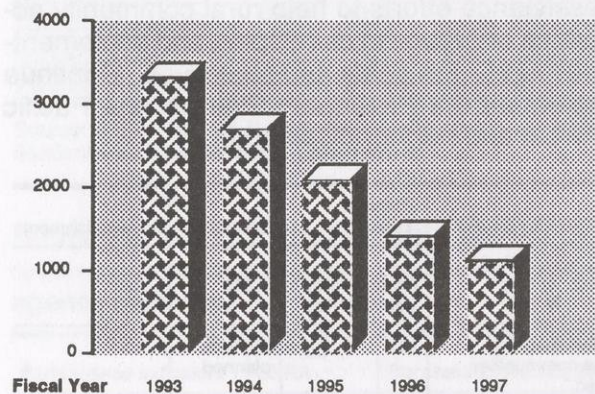
1/ Data not collected

**Outcome Analysis:** This goal was not met because the special use permits are expiring under their own terms and are not being renewed, even though private or commercial use continues. Legal and regulatory requirements require extensive analytical work and justification to renew permits. Reductions in the program funding and FTE's over the past several years have required the use of untrained and inexperienced staff, preventing the needed action to reauthorize the use.

Former permitholders are using Government land and facilities without authorization or payment as required by OMB Circular A-25 and FLPMA. Expired permits for a single private activity on one national forest alone is resulting in a loss to the Treasury of over \$150,000 annually.

Since 1992, the Forest Service has reported as a Material Management Control Weakness under the Federal Managers Financial Integrity Act and OMB Circular A-123, that certain activities under the Real Estate Management Program violate regulations, agency policy, and the law.

GPRA Figure 13.  
National Forest System Boundaries  
Surveyed 1/



1/ Includes all funding sources.

**Annual Goal C3\_1.** Provide technical assists and/or applied studies in urban and community waste wood utilization, wood recycling technology, and value-added wood products utilization. Develop publications and articles and make technical presentations. Provide technical assistance to Wood in Transportation and Rural Community Assistance program efforts.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Number of technical assists/studies in urban and community wood utilization/recycling technology	150 or more	100% of planned	167
Number of publications/articles	Complete 15	100% of planned	N/A
Number of technical presentations at workshops or symposia	20	100% of planned	N/A
Number of technical assists to WIT and RCA programs	175	100% of planned	223

**Outcome Analysis:** The goal was achieved. In addition, 310,000 cubic feet of increased volume were recovered through better processing techniques, and 155,000 cubic feet of underutilized species were processed and marketed. Businesses started, expanded, or retained a total of 117 jobs during FY 1997 as a result of FPC&R assistance. The number of publications and/or articles completed was not collected because the indicator was changed to reflect the number of articles and presentations disseminated. This change was made to reflect technology transfer rather than research and development. In FY 1997, FPC&R disseminated 16,429 copies of technical papers and other literature and recorded 16,880 hits on the technology marketing unit home page.



**Annual Goal C4a1.** Meet or exceed the level of commitments in the previous year's rural community assistance efforts to help rural community action teams or groups in developing and implementing their long-term goals and objectives. Continue to implement the President's Plan for the Pacific Northwest and northern California.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Rural communities assisted: a) total b) new	Assist 200 new communities	1,200 cumulative	2,205 304
Minority/tribes/low-income communities assisted	130	100% of planned	132
Projects: a) completed b) ongoing	Complete 300 new projects	1,000 cumulative	575 1,930
Communities strategic plans 1/ (plans in progress)	N/A		538
Communities using outcome measures 2/	N/A		151

1/ New performance indicator added in FY 1996 Report and was inadvertently left out of FY 1997 planning document.

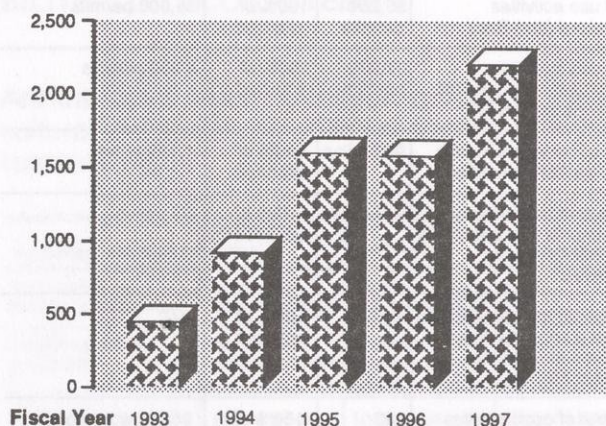
2/ New performance indicator added during FY 1997.

**Outcome Analysis:** The goal was achieved. The focus on strategic planning as the basis for long-term progress in achieving sustainable development continued at a steady pace. In addition, the agency initiated a "community-based outcome measures" process and methodology to build the capacity of rural communities to monitor and evaluate progress towards their long-term goals. Over 150 communities have developed indicators to track outcomes in one or more of the following categories:

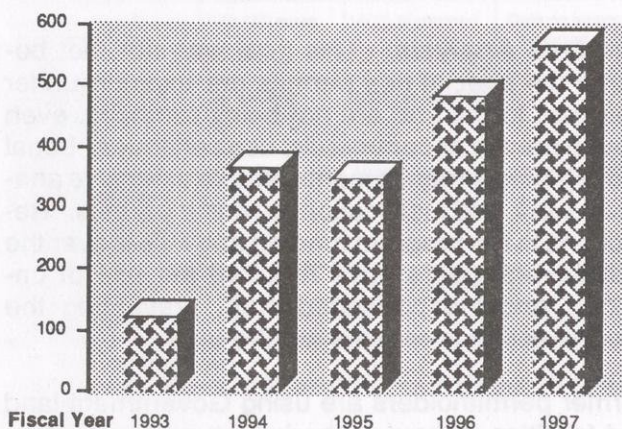
- Increased use of the skills, knowledge, and ability of local people;
- Improved community initiative, responsibility, and adaptability;
- Strengthened relationships and communications;
- Sustainable, healthy ecosystems with multiple community benefits; and
- Appropriately diverse and healthy economies.

Within a few short years, this methodology will allow the agency to determine trends and outcomes related to the progress of rural communities in managing change and becoming self-sufficient.

GPRA Figure 14.  
Number of Rural Communities Assisted



GPRA Figure 15.  
Number of Projects Completed



**Annual Goal C4a2.** Within the context of the Wood in Transportation Program, complete demonstrations of modern timber bridge technology in commercial applications and special projects advancing the wood in transportation concept and focusing on underutilized and/or local tree species. (Commercial value stimulates interest in and provides market-based incentives for management among private landowners.)

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
Number of demonstrations of modern timber bridge technology and special projects advancing wood in transportation for underutilized and/or local tree species	40 demonstrations	100% of planned	6

**Outcome Analysis:** The annual goal was not achieved. The planned accomplishment level was based on a higher budget; however, funding for this program was reduced approximately 75 percent. Even with limited funding, 57,000 publications and



12,000 Internet hits transferred information to users, and 144 technical assists were provided.

### STRATEGIC GOAL #3: ENSURE ORGANIZATIONAL EFFECTIVENESS

**Annual Goal D1\_1.** The Forest Service provides leadership and direction in becoming a multicultural organization in accordance with the vision set forth in "Toward a Multicultural Organization" and related task force reports and recommendations.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Proportion of employees in underrepresented groups increases	Net gain compared to FY 1996	Gain achieved	Decrease from 48.7% in FY 1996, to 48.5% in FY 1997
Increase in the number of women or minority employees and people with disabilities in leadership positions	Increase compared to FY 1996	Increase achieved	Increased from 25.9% in FY 1996 to 28.1% in FY 1997, for GS-14 and above, including SES
Increase in the percent of favorable responses to the Continuous Improvement Process (CIP) dimension on multicultural organization	Upward trend in favorable responses to CIP Survey compared to FY 1996	Increase achieved	Reliable baseline data was gathered in FY 1997 to measure changes in employee satisfaction with the work environment in FY 1998

**Outcome Analysis:** In FY 1997 the Forest Service conducted the CIP employee survey to assess organizational effectiveness in key areas related to the work environment. The FY 1997 questionnaire was given to 38,318 employees agencywide. The number of questionnaires returned was 21,508, or 56 percent. This is the first year that reliable baseline data and information were gathered from which future changes will be tracked over time, using subsequent surveys. The 1998 survey will provide data needed to measure progress toward these goals.

GPRA Figure 16.  
Composition of the Agency's Work Force

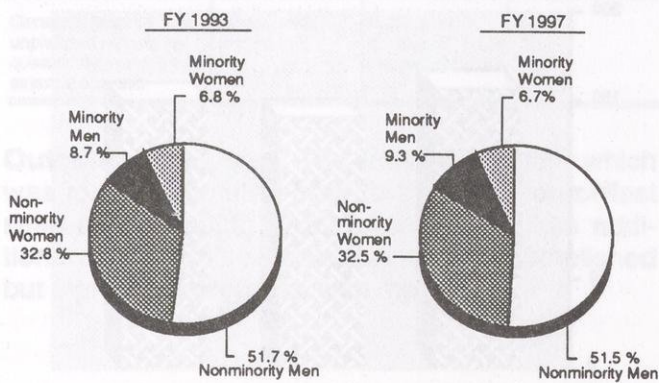


Table A.

Fiscal Year	1993	1994	1995	1996	1997
Nonminority men	51.7%	50.9%	51.0%	51.4%	51.5%
Nonminority women	32.8%	33.2%	32.9%	32.7%	32.5%
Minority men	8.7%	8.9%	9.3%	9.2%	9.3%
Minority women	6.8%	7.0%	6.9%	6.8%	6.7%
Permanent work force	34,942	31,536	31,135	30,519	29,699

Source: USDA DN-714 Report; includes Cooperative Education Students and other seasonal appointments.

**Annual Goal D1\_2.** The Forest Service employees receive adequate training to effectively carry out the agency mission.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
There is a percentage increase in favorable responses to the Continuous Improvement Process dimension on employee development when compared to FY 1996 results	Increase from FY 1996	Increase observed	Data not available
There is an increase in the number of employees receiving training and in the number of hours of training provided when compared with FY 1996	Increase from FY 1996	Increase observed	Data not available

**Outcome Analysis:** The best measurement of success of hiring, placement, and training is the degree to which the agency accomplishes its overall program mission, objectives, and targets. This entire report describes our ability to meet program targets, and thereby demonstrates organizational effectiveness and employee competency.

The agency plans to analyze the effectiveness of employee development programs, but the development of an automated tracking system, Training Integrated Personnel System (TIPS), is not complete due to a delay in transitioning to the IBM computer system. We project that TIPS will be operational in FY 1999, and at that time we will be able to collect baseline data, conduct needs analyses, and determine the overall cost and effectiveness of employee development programs.

**Annual Goal D2\_1.** Provide technical skill development training and applications to effectively implement ecosystem management.



Performance Indicator	Planned GPRA	Benchmark	Accomplishment
Monitor development and implementation of training and certification program as part of the management review process to provide skills identified as needed in FY 1997	Monitor skill tracking & needs management process	Activities conducted to monitor process; training sessions provided; participants certified	Completed as planned

**Outcome Analysis:** Basic training in implementing ecosystem management was provided to all forests through a CD-ROM package. Interactive CD players were provided to all forests for on-site capability. Various courses were offered throughout the agency, such as Community-Based Partnerships and Ecosystems For a Healthy Environment.

**Annual Goal D2\_2.** Implement Meaningful Measures Process.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Number of constructed feature types included in the Meaningful Measures Process (MPP)	All construction feature types included in the MPP	All in compliance	1/
Percent of units using MPP	100%	All units using MPP	100%

1/ Data not yet available

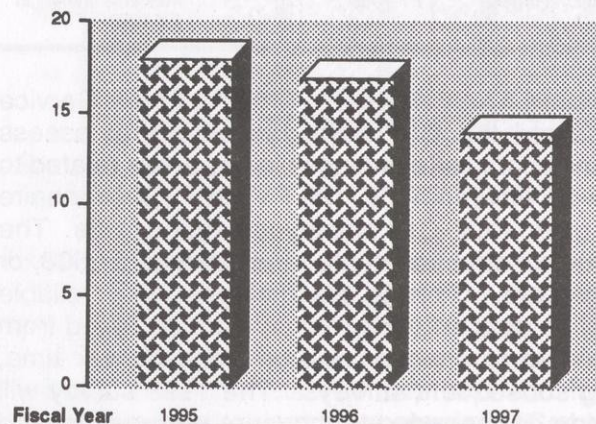
**Outcome Analysis:** The annual goal planned for FY 1997 was achieved. Meaningful Measures for Quality Recreation Management is a recreation management concept that sets standards of quality for all aspects of the recreation program (facilities, sites, areas, etc.), determines realistic costs, helps to prioritize work, assists in budget allocation, and sets the stage for effective monitoring of results. The number of constructed feature types included in the Meaningful Measures Process (MMP) will not be available until all units have fully implemented the MMP. All units are using the MMP, however full implementation is not planned until the end of FY 1998. The MMP refinement and implementation at the forest level continues while other components are intended to be completed in FY 1998. FY 1999 will be the first year of full implementation.

**Annual Goal D3b1.** Continue national management and oversight in the investigation of civil and criminal activities and internal and whistleblower complaints related to the National Forest System.

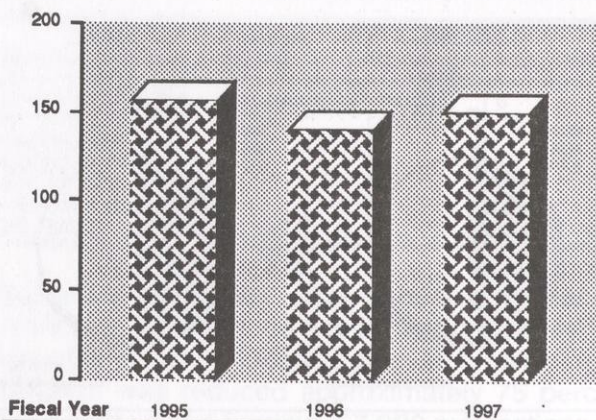
Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Provide resources and resource coordination through the WO to the field	15-20 cases (estimated)	100% compliance	2
Maintain tracking, oversight, monitoring, and investigating of all whistleblower and internal complaints	15 internal; less than 127 whistleblower complaints	Less than 20 cases; reduce whistleblower complaints trend by 10%	14 internal; 150 whistleblower
All investigations will be entered into the interim Case Tracking System	Maintain Case Tracking System	System is up to date	100% up to date

**Outcome Analysis:** The goal was achieved. However, the Washington Office (WO) has responsibilities for oversight of national investigations, and it is not practical to track every type of assistance provided to the field. Thus, this indicator will no longer be included. The WO maintains oversight of all internal and whistleblower investigations successfully; this is an excellent indicator of centralized management. The Case Tracking System has been fully implemented in all regions and provides updated information to WO managers.

GPRA Figure 17.  
Internal Complaints



GPRA Figure 18.  
Whistleblower Complaints





### Annual Goal D3b2. Continue integration of the LE&I organization within the Forest Service.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Continue implementing actions that were developed by the core team and Chief at the March 1994 meeting	Three actions in progress or completed	Documentation of actions is available	2 completed
The LE&I organization complements agency reorganization by implementing the personnel and fleet contracts	Implement personnel and fleet contracts for LE&I	Both contracts implemented	Neither implemented
Conduct regional management reviews to ensure compliance with the law, regulation, and staff effectiveness	Complete at least two reviews	Two or more reviews completed	One partial review completed

**Outcome Analysis:** The annual goal was accomplished. Two of the three actions developed in 1994 have been completed; the third (release of the GS 11/12 Supervisory Law Enforcement Officer position description) has been put on hold. The "contracting in" concept was not implemented due to excessive cost and improved regional support services; this concept will not be pursued any further. Due to budget reductions, only a financial review was conducted at the Federal Law Enforcement Training Center.

### Annual Goal D3b3. Continue to evaluate test sites and begin full implementation of the first permanent phase for the Law Enforcement Case Management System (LECMS) to meet the Uniform Crime Reporting requirements as mandated by Congress.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Complete Request Determination Study to select permanent sites for installation of system	Complete study and evaluate locations and test sites	Complete evaluation and select at least two sites	None selected
Provide the FBI with the required information	Produce reports and submit them to the FBI	Reports submitted on time for FBI to complete report	N/A
Generate planned and unplanned reports requested by internal and external sources	30 requests (estimated)	Fulfill all requests; will track request statistics	N/A

**Outcome Analysis:** The feasibility study, which was to be completed prior to the selection of test sites and reporting of information, requires additional analysis. The goal was not fully accomplished but significant progress was made.

### Annual Goal D4a1. Create/maintain State conservation education plans that further overall environmental education goals of each State.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
No. of State-level conservation plans completed	45 plans	Plans for all States	45 plans
No. people educated directly on ecosystems/natural resources	200,000 people	100% planned	2,376,271 people
No. educators trained to teach about ecosystems/natural resources	10,000 teachers	100% planned	118,256 teachers

**Outcome Analysis:** The annual goal was accomplished. More people were reached than planned because cooperation with States, partners, and stakeholders has strengthened outreach. Program achievements rely upon significant financial and professional input from educators, the private sector, and other partnerships. The demand for natural resource education programs exceeds current program capability.

### Annual Goal: D5\_1. Policy analysis in key theme areas (green trade, sustainable forest management, criteria and indicators); host international visitors; provide opportunities for FS staff training through cooperative exchange.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Forest Service meets obligations to host international visitors and dignitaries.	400 visitors hosted in WO	All international visitors hosted	1,186 person-days of visitor time logged
International policy assistance provided by the FS is cited by partners and provides input to key decisions.	Provide policy	Policy for key decisions is available	Achieved
Staff gain experience from exchanges that can utilize and make their work more effective and enjoyable.	Person-years (PY) of exchanges gained	Key staff gain experience	About 80% of the 119 PY of international assistance was provided by FS personnel

**Outcome Analysis:** Forest Service participation in international activities is continuing to enhance appreciation of the globalization of forest and rangeland management issues. Forest Service management decisions frequently address the international context of domestic forest management issues and lessons that can be learned from them. Forest and rangeland resources are enhanced through collaboration with governments on common forest management problems.



**Annual Goal: D6\_1.** The Forest Service makes progress in building an innovative, creative, people-oriented work environment as evidenced through the results of the Continuous Improvement Process (CIP) survey.

Performance Indicator	Planned GPRA	Benchmark	Accomplishment
The results of the FS's all-employee CIP survey show an overall increase in employee satisfaction with the work environment	Increased employee satisfaction with the work environment when compared to FY 1996	Results show increased satisfaction	Reliable baseline data gathered to measure FY 1998 changes in employee satisfaction

**Outcome Analysis:** In FY 1997 the Forest Service conducted the CIP employee survey to assess organizational effectiveness in key areas related to the work environment. The survey questionnaire was given to 38,318 employees agencywide, with 21,508 returned. This is the first year that reliable baseline data and information were gathered to assess improvements over time. The 1998 survey will provide data to measure accomplishments against the 1997 baseline information. The GPRA strategic goal for this indicator results in a delay of 1 year, necessary in order to have credible survey data.

**Annual Goal: D8a1.** Continued implementation of Project 615 (Strategy 6) and data and applications migration (Strategy 4).

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Number of fully operational migrated systems in the Project 615 environment	150 fully operational systems	100% of planned	Assessment of 490 mission-critical applications were completed. Migration and year 2000 compliance status:  Fully operational on IBM: 15 Fully compliant (DG/IBM): 34 Being repaired: 320 Being retired: 98 New under development: 38 Completion target: Feb. 1999
Capabilities for public access to the agency's information	The public has access to agency information	Public can access information	Information in the FS homepage is available on Internet:  E-FOIA on homepage FS manuals, handbooks, forms
Establish two centers of excellence (COE's) 1) National Information Mgt. Repository COE 2) Geographic Information Systems (GIS)	Establish centers of excellence	Centers established	The two COE's have been established and are operational
Establish a prototype national natural resource inventory data base	Establish prototype	Prototype established	Development for ECIMIS prototype has been accomplished
Develop a GIS model that standardizes attribute data characteristics, levels, and file contents and structures	20% completed	100% of planned	Implementation of Metadata Tracking Vehicle II (MTV II) is 90% completed
Create integrated applications and data bases for FS Business Systems	Integrated applications and data bases are operational	Operational applications and data bases	175 data bases are being integrated into 6 systems. Most of the 175 systems will be retired or replaced by 1999, and composed of 60+ business-oriented applications

**Outcome Analysis:** All planned goals were accomplished. Plans are in place to "migrate" all existing systems to the IBM. The IBM and the telecommunication systems provide the technology infrastructure to meet our goal to have an integrated information environment. This environment enhances organizational effectiveness by providing the ability to handle spatial data, run improved administrative processes, and provide broad access to other governmental entities and the public.

This agency is implementing an integrated user interface using "browsers" to access information through the Internet, Intranet and Extranet. More information is becoming available via "Web technologies."

This agency is moving toward the centralization of telecommunications and application management, which improves our ability to manage the investments made in these areas.



The Forest Service is "sharing" opportunities in different arenas. This involves sharing IRM people resources, technology, and telecommunications facilities such as networks, applications, contracts, data, information, and radio systems across agency boundaries. To ensure consistency we are setting standard policies and processes.

**Annual Goal D10a1.** Assure that quality financial information is available in a timely and user-friendly manner and is integrated into the agency decisionmaking process. The budget decisionmaking process is driven by timely and accurate financial and resource information.

Performance Indicators	Planned GPRA	Benchmark	Accomplishments
Action items completed from the 5-year CFO Plan to improve financial systems on schedule	Complete action items	Action items completed	Action items completed
Credible and reliable financial information formation as measured by an improved auditor's opinion of financial statements	Receive an unqualified opinion on FY 1997 agency financial review	Auditor's opinion received	OIG issued progress report noting significant progress in cleanup of invalid accounting and in accounts maintenance
Training needs analysis is completed	Training needs analysis implementation is on schedule	Needs analysis completed	Analysis completed

**Outcome Analysis:** The annual goal was partially accomplished. In 1997, the Office of the Inspector General (OIG), provided consulting services in the form of reviews of financial management transactions processed by national forests. These reviews analyzed the problems indicated in the 1995 Financial Statement Audit. In progress reports issued by the OIG, the Forest Service was noted as making significant progress in cleaning up invalid accounting data and accounts maintenance.

A Forest Service Financial Health Desk Guide was developed, issued, and distributed to field offices in May 1997. The guide is focused on improving and maintaining financial accountability in management, accounts payable, accounts receivable and revenues, cash and unexpended appropriations, personal property, real property, and reimbursements. Each Region and Station developed an Action Plan to execute and monitor the work to be done.

An effort was initiated in 1997 to develop core competencies for financial managers. The Training Needs Analysis is the basis for the financial core competencies.





*Scientist studying growth process.*

USDA, Forest Service



## NATIONAL FOREST SYSTEM

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Table 1—Summary of National Forest System accomplishments compared to funded output levels and 5-year average--fiscal year 1997

Resource area	Activity	Units 1/	1997 Funded	1997 Actual 2/	1997 Actual to Funded	1996 Actual 2/	1996 Actual to 1997 Actual	1993-97 average accomp.
Resource								
Recreation	Visitor use	MM RVD's 3/				341.2		262.4
		MM Visits 3/				859.3		
Wilderness	Management	MM acres		34.7	N/A	34.7	100	34.7
Wildlife & fish	Habitat restored/enhanced							
	Appropriated funds	M acres	173,770.0	338.8	0	166.6	49	218.8
	K-V funds 4/	M acres	0.0	312.9	N/A	168.5	54	219.9
	Habitat improvement							
	Appropriated funds	Structures	4,909.0	6,351.0	129	5,689.3	90	10,771.6
	K-V funds	Structures	0.0	32,954.0	N/A	25,288.0	77	25,873.2
	Strm. Habitat restored/enhanced 5/							
	Appropriated funds	Miles	636.0	2,006.0	315	1,881.5	94	1,781.0
	K-V funds	Miles	0.0	729.0	N/A	488.9	67	
Range	Forage improvement							
	Appropriated funds	M acres	34.6	36.9	107	41.7	113	46.5
	K-V funds	M acres	0.0	12.5	N/A	8.3	66	
	Forage improvement							
	Appropriated funds	Structures	1,323.0	1,718.0	130	2,144.5	125	2,092.6
	K-V funds	Structures	0.0	328.0	N/A	271.0	83	367.4
Forest Management	Sales offering	B bd. ft.	4.3	4.0	93	4.0	100	4.0
	Reforestation 6/							
	Appropriated funds	M acres	106.3	128.1	121	129.9	101	139.5
	K-V funds	M acres	0.0	193.4	N/A	227.6	118	250.7
	Timber stand improvement							
	Appropriated funds	M acres	80.3	118.9	148	130.4	110	138.3
	K-V funds	M acres	0.0	139.0	N/A	128.4	92	139.4
Soil & water	Resource improvements							
	Appropriated funds	M acres	25.3	46.1	182	25.4	55	31.2
	K-V funds	M acres	0.0	17.5	N/A	9.1	52	11.6
Minerals	Bonded non-energy ops. 5/	Ops. processed	1,487.0	961.0	65	1,744.0	181	2,678.7
	Energy operations 5/	Ops. processed	386.0	455.0	118	493.0	108	646.3

See footnotes at end of table.



**Table 1--Summary of National Forest System accomplishments compared to funded output levels and 5-year average--fiscal year 1997--  
Continued**

Resource area	Activity	Units 1/	1997 Funded	1997 Actual 2/	1997 Actual to Funded	1996 Actual 2/	1996 Actual to 1997 Actual	1993-97 average accomp.
Support	Trail construction/reconstruction	Miles	0.0	1,673.7	N/A	1,695.8	101	1,919.7
	Road construction							
	Appropriated funds							
	Construction	Miles	0.0	8.2	N/A	16.7	204	23.6
	Reconstruction	Miles	0.0	384.3	N/A	486.7	127	416.0
	Purchaser credit							
	Construction 7/	Miles	0.0	391.6	N/A	446.2	114	509.8
	Reconstruction 7/	Miles	0.0	3,209.6	N/A	2,366.7	74	2,265.0
	Fuel management							
	Appropriated funds	M acres	816.1	887.1	109	599.5	68	559.1
	Brush disposal funds	M acres	0.0	131.3	N/A	165.8	126	190.1
	Land acquired							
	Purchase and donation	M acres	86.9	103.0	119	56.3	55	87.0
	Exchanges	M acres	277.3	244.2	88	65.8	27	113.2
	Landline location	Miles	799.0	1,117.0	140	1,424.0	127	2,073.8

1/ M = thousand, MM = million, B = billion, RVD = recreation visitor day.

2/ Does not include accomplishments from contributed funding sources.

3/ Data not available for FY 1997.

4/ K-V = Knutson Vandenberg Act.

5/ New indicator in FY 1995. Average is based on 3 years of accomplishments.

6/ Includes natural regeneration without site preparation.

7/ Includes miles turned back to the Forest Service for construction or reconstruction (purchaser election program).



Table 2--National Forest System funding--fiscal years 1993-97

	1997	1996	1995	1994	1993
<i>1,000 dollars actual</i>					
Ecosystem Planning, Inventory, and Monitoring 1/	130,088	130,088	149,732		
Minerals and geology management	35,767	35,017	38,932	33,017	34,812
Real estate management	43,047	43,047	45,621	34,880	36,024
Landline location	14,006	14,006	15,945	28,783	30,873
Maintenance of facilities	23,008	23,008	26,304	26,476	26,495
Law enforcement operations	59,637	59,637	63,516	55,130	15,479
Forest road maintenance	81,019	81,019	83,784	79,180	81,936
Timber sales management	196,000	188,641	108,555	184,606	219,033
Forestland vegetation management 2/	86,168	82,138 3/	84,907	62,339	92,306
Recreation use	211,151	211,151	220,136	224,522	229,742
Wildlife and fish habitat management	85,811	85,561	93,182	121,130	116,364
Rangeland management	38,012	27,012	18,473	44,127	44,443
Soil, water and air management	42,114	42,014	48,282	77,984	72,325
Subtotal	1,045,828	892,251	847,637	972,174	999,832
General Administration (subtotal)	259,353	263,698	296,982	298,174	305,941
Preparedness and fire use	319,315	295,315	160,010	190,108	189,163
Suppression operations	510,701	90,170	225,628	190,222	185,411
Emergency contingency	0	100,000			
Subtotal	830,016	485,485	385,638	380,330	374,574
Youth Conservation Corps (subtotal) 4/	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Construction					
Construction of facilities 5/	59,974	46,029	61,588	94,437	83,868
Forest road and trail construction 6/	115,000	114,951	98,185	97,345	140,586
Forest trail construction	0	-	32,448	32,310	27,233
Emergency supplemental	32,895	60,800			
Forest roads purchaser construction 7/	(36,854)	(41,291)	(50,000)	(60,000)	(110,669)
Transfer to salvage	0	0	0	0	(2,750)
Watershed restoration	0	0	0	20,000	
Subtotal	207,869	221,780	192,221	244,092	248,937

See footnotes at end of table.



Table 2--National Forest System funding--fiscal years 1993-97--Continued

	1997	1996	1995	1994	1993
	<i>1,000 dollars actual</i>				
Land acquisition	40,575	39,392	63,873	64,250	62,412
Acquisition of lands for National Forests, special acts	1,048	1,069	1,247	1,212	1,180
Acquisition of lands to complete land exchange	364	341	794	203	151
Gifts, donations and bequests	55	87	4	96	5
Range betterment	3,453	4,647	1,149	4,600	4,647
Permanent appropriations	484,868	512,001 8/	506,289	542,774	539,240
Trust funds	206,703	205,597 9/	222,953	298,404	310,191
Total	3,080,132	2,626,348	2,518,787	2,806,309	2,847,110

1/ Ecosystem Planning, Inventory, and Monitoring was introduced as a budget line item in FY 1995.

2/ Includes reforestation trust fund dollars.

3/ Number has been revised from that published in the FY 1996 Report of the Forest Service to include reforestation trust fund dollars.

4/ Appropriations Act required minimum level of funding from National Forest funds; amounts not included in totals.

1992 - operated a \$2.5 million program from available funds.

1993 - operated a \$2.1 million program from available funds.

1994 - operated a \$1.7 million program from available funds.

1995 - operated a \$1.3 million program from available funds.

1996 - operated a \$1.2 million program from available funds.

1997 - operated a \$1.8 million Program from available funds.

5/ Excludes construction of research facilities.

6/ In FY 1996, road and trail construction EBLI's were combined.

7/ This account was taken off budget in 1982. For comparison, the amounts are shown as non-add items.

8/ Number has been revised from that published in the FY 1996 Report of the Forest Service to include Payments to States.

9/ Number has been revised from that published in the FY 1996 Report of the Forest Service to reflect program level funding.



Table 3—National Forest System lands administered by the Forest Service as of September 30, 1997

State, Commonwealth, or Territory	National forests, purchase units, research areas, and other areas	National grasslands	Land utilization projects	Total	National Wilderness Preservation System 1/ <i>Acres</i>
		<i>Acres</i>			
Alabama	664,849	0	40	664,889	32,167
Alaska	21,969,321	0	0	21,969,321	5,752,298
Arizona	11,251,701	0	0	11,251,701	1,345,008
Arkansas	2,576,852	0	0	2,576,852	116,578
California	20,628,717	18,425	0	20,647,142	4,432,634
Colorado	13,879,728	628,380	0	14,508,108	3,147,101
Connecticut	24	0	0	24	0
Florida	1,147,246	0	0	1,147,246	74,495
Georgia	864,942	0	0	864,942	114,537
Hawaii	1	0	0	1	0
Idaho	20,413,018	47,756	0	20,460,774	3,961,578
Illinois	277,506	0	0	277,506	25,638
Indiana	195,625	0	0	195,625	12,945
Kansas	0	108,175	0	108,175	0
Kentucky	693,126	0	0	693,126	16,779
Louisiana	604,138	0	0	604,138	8,679
Maine	53,040	0	0	53,040	12,000
Michigan	2,856,060	0	959	2,857,019	91,891
Minnesota	2,837,488	0	0	2,837,488	809,772
Mississippi	1,158,172	0	0	1,158,172	6,046
Missouri	1,494,217	0	0	1,494,217	63,198
Montana	16,877,005	0	0	16,877,005	3,371,881
Nebraska	257,653	94,480	0	352,133	7,794
Nevada	5,823,676	0	0	5,823,676	787,085
New Hampshire	724,740	0	0	724,740	102,932
New Mexico	9,190,278	136,417	240	9,326,935	1,388,262
New York	16,068	0	0	16,068	0
North Carolina	1,243,520	0	0	1,243,520	102,634
North Dakota	743	1,105,009	0	1,105,752	0
Ohio	227,187	0	0	227,187	0
Oklahoma	345,925	46,286	0	392,211	14,543
Oregon	15,543,987	111,508	856	15,656,351	2,072,494
Pennsylvania	513,264	0	0	513,264	8,938
Puerto Rico	27,831	0	0	27,831	0
South Carolina	612,390	0	0	612,390	16,671
South Dakota	1,144,990	868,134	0	2,013,124	9,826
Tennessee	634,073	0	0	634,073	66,349
Texas	637,363	117,620	0	754,983	38,483
Utah	8,112,730	0	0	8,112,730	773,818
Vermont	366,406	0	0	366,406	59,421
Virgin Islands	147	0	0	147	0
Virginia	1,656,986	0	0	1,656,986	87,064
Washington	9,176,333	0	738	9,177,071	2,572,977
West Virginia	1,032,625	0	0	1,032,625	80,852
Wisconsin	1,521,104	0	0	1,521,104	42,294
Wyoming	8,688,151	559,591	0	9,247,742	3,111,232
	187,940,946	3,841,781	2,833	191,785,560	34,738,894

1/ Includes all changes to the Wilderness Preservation System through the 105th Congress.



Table 4--Miles of landline location by region--fiscal year 1997 1/

Region	Total miles boundary	Miles Surveyed 1997	Miles Surveyed To Date	Maintained 1997
Northern (R-1)	27,725	216	9,700	168
Rocky Mountain (R-2)	48,850	138	8,787	97
Southwestern (R-3)	18,053	66	5,836	23
Intermountain (R-4)	20,960	141	5,122	20
Pacific Southwest (R-5)	26,700	106	12,719	78
Pacific Northwest (R-6)	25,627	99	16,573	205
Southern (R-8)	41,234	106	36,899	2,443
Eastern (R-9)	42,071	199	12,990	156
Alaska (R-10)	2,602	48	1,843	20
<b>Total</b>	<b>253,822</b>	<b>1,119</b>	<b>110,469</b>	<b>3,210</b>

1/ Totals include accomplishment from the NFLL appropriation, all contributing benefiting functions, and cooperative and cost sharing activities.

Table 5--Land acquisition and exchange--fiscal years 1996 and 1997

	1997 Acres	1996 Acres
Purchase	103,023	56,333
Exchange	244,178	65,848



Table 6--Wildlife and fish habitat restoration and enhancement by region--fiscal year 1997 1/

Region	Wildlife	Inland fish	Anadromous fish	Threatened, endangered & sensitive species	Total
Northern (R-1)					
Terrestrial acres restored/enhanced	11,994	N/A	N/A	4,664	16,658
Lake acres restored/enhanced	N/A	85	0	10	95
Stream miles restored/enhanced	N/A	125	30	22	177
Structures	66	N/A	N/A	124	190
Rocky Mountain (R-2)					
Terrestrial acres restored/enhanced	18,804	N/A	N/A	3,165	21,969
Lake acres restored/enhanced	N/A	20	0	1	21
Stream miles restored/enhanced	N/A	35	0	16	51
Structures	137	N/A	N/A	25	162
Southwestern (R-3)					
Terrestrial acres restored/enhanced	15,454	N/A	N/A	4,666	20,120
Lake acres restored/enhanced	N/A	185	0	20	205
Stream miles restored/enhanced	N/A	26	0	20	46
Structures	230	N/A	N/A	90	320
Intermountain (R-4)					
Terrestrial acres restored/enhanced	88,490	N/A	N/A	53,564	142,054
Lake acres restored/enhanced	N/A	53	10	68	131
Stream miles restored/enhanced	N/A	189	330	34	553
Structures	132	N/A	N/A	198	330
Pacific Southwest (R-5)					
Terrestrial acres restored/enhanced	9,218	N/A	N/A	1,083	10,301
Lake acres restored/enhanced	N/A	363	0	18	381
Stream miles restored/enhanced	N/A	119	148	26	293
Structures	422	N/A	N/A	108	530
Pacific Northwest (R-6)					
Terrestrial acres restored/enhanced	17,397	N/A	N/A	939	18,336
Lake acres restored/enhanced	N/A	54	1	1	56
Stream miles restored/enhanced	N/A	75	169	25	269
Structures	839	N/A	N/A	423	1,262
Southern (R-8)					
Terrestrial acres restored/enhanced	29,892	N/A	N/A	45,501	75,393
Lake acres restored/enhanced	N/A	2,543	0	0	2,543
Stream miles restored/enhanced	N/A	95	0	10	105
Structures	800	N/A	N/A	735	1,535
Eastern (R-9)					
Terrestrial acres restored/enhanced	14,129	N/A	N/A	8,698	22,827
Lake acres restored/enhanced	N/A	2,951	0	0	2,951
Stream miles restored/enhanced	N/A	280	163	8	451
Structures	818	N/A	N/A	1,209	2,027
Alaska (R-10)					
Terrestrial acres restored/enhanced	689	N/A	N/A	0	689
Lake acres restored/enhanced	N/A	377	3,702	0	4,079
Stream miles restored/enhanced	N/A	6	60	0	66
Structures	0	N/A	N/A	0	0
Total					
Terrestrial acres restored/enhanced	206,067	0	0	122,280	328,347 2/
Lake acres restored/enhanced	0	6,631	3,713	118	10,462 3/
Stream miles restored/enhanced	0	950	900	161	2,011 4/
Structures	3,444	0	0	2,912	6,356 5/

1/ Includes activities accomplished with appropriated funds.

2/ In addition, 310,282 terrestrial acres were restored or enhanced with contributed, K-V, or other funds.

3/ In addition, 2,732 lake acres were restored or enhanced with contributed, K-V, or other funds.

4/ In addition, 729 stream miles were restored or enhanced with contributed, K-V, or other funds.

5/ In addition, 32,954 structures were completed with contributed, K-V, or other funds.



Table 7--Total recreation visits on National Forest System lands by State--fiscal years 1993-97

State, Commonwealth, or Territory 2/	1997 1/	1996	1995	1994	1993
1,000 Visits 3/					
Alabama		1,406.0	1,242.9	1,277.3	1,337.1
Alaska		17,181.0	10,648.2	12,912.9	9,088.0
Arizona		72,044.0	72,196.9	80,471.8	81,609.1
Arkansas		5,909.0	5,448.8	5,260.3	5,314.2
California		195,880.0	181,032.6	178,676.2	177,047.3
Colorado		60,488.1 4/	60,488.1	62,741.5	49,684.5
Florida		8,878.0	9,472.0	9,472.3	9,371.1
Georgia		8,332.0	8,768.4	8,456.1	8,511.8
Idaho		23,201.0	22,252.6	21,526.7	19,795.1
Illinois		1,034.0	985.0	985.0	980.0
Indiana		525.0	510.0	230.0	664.0
Kansas		184.0	181.3	180.0	28.0
Kentucky		5,670.0	5,590.7	5,380.4	5,269.7
Louisiana		1,748.0	1,737.1	1,951.8	1,828.1
Maine		1,000.0	1,000.0	397.3	397.3
Michigan		9,997.0	8,943.6	9,317.0	9,469.9
Minnesota		12,833.0	8,896.9	8,743.8	5,079.9
Mississippi		3,827.0	2,632.2	2,517.0	2,318.5
Missouri		7,299.0	6,467.6	6,041.6	5,758.0
Montana		31,836.0	30,820.8	27,106.4	21,808.0
Nebraska		528.0	618.3	766.8	932.5
Nevada		21,423.0	24,169.0	22,867.3	23,504.0
New Hampshire		5,500.0	5,500.0	11,347.0	11,347.0
New Mexico		12,644.0	12,685.5	12,438.5	6,052.4
New York		19.0	51.7	17.2	17.5
North Carolina		20,935.0	19,905.8	18,043.8	18,127.3
North Dakota		387.0	385.0	375.0	415.0
Ohio		900.0	900.0	1,000.0	679.5
Oklahoma		1,868.0	1,790.3	1,799.6	1,763.3
Oregon		97,465.7 5/	97,465.7	97,465.7	73,072.8
Pennsylvania		13,837.0	14,795.5	11,630.0	11,981.0
Puerto Rico		630.0	700.0	963.5	963.5
South Carolina		2,532.0	2,549.4	2,519.8	2,499.0
South Dakota		6,173.0	6,022.3	6,082.4	4,927.2
Tennessee		9,911.0	9,504.6	8,875.8	8,870.7
Texas		3,712.0	3,852.8	3,715.9	3,285.3
Utah		44,105.0	43,554.5	46,178.5	34,314.8
Vermont		2,699.0	2,698.0	3,434.7	3,429.2
Virginia		18,755.0	17,862.4	17,861.4	17,465.3
Washington		97,456.0 5/	97,456.0	97,456.0	67,778.0
West Virginia		4,284.0	4,156.3	4,413.2	3,801.0
Wisconsin		9,981.0	10,134.4	9,425.6	7,492.3
Wyoming		14,266.0	13,683.9	12,915.8	11,396.0
Total		859,282.8	829,757.1	835,238.9	729,474.2

1/ FY 1997 data unavailable.

2/ Unlisted States have no Forest Service recreation programs.

3/ One Visit is an entry of one person upon a national forest for the purpose of participating in one or more recreation activity for an unspecified period of time. Only the "primary" activity of the recreation visitor is recorded.

4/ Visits for Colorado are for 1995; data not available for 1996.

5/ Visits for Oregon and Washington are 1994 data; 1995 and 1996 data not available.



Table 8--Trail miles on the National Forest System by State--fiscal years 1995-97

State, Commonwealth, or Territory 2/	1997 1/			1996			1995		
	Total	Const/Reconst 3/	Maintained	Total	Const/Reconst 3/	Maintained	Total	Const/Reconst 3/	Maintained
Alabama				294.0	21.0	160.0	278.8	12.5	138.0
Alaska				861.0	34.0	394.0	878.7	35.3	426.6
Arizona				4,537.0	74.0	1,110.0	4,601.0	81.1	1,127.2
Arkansas				961.0	12.0	536.0	939.1	46.0	563.5
California				18,158.0	316.0	8,662.0	15,144.7	321.3	7,088.0
Colorado				9,551.0	75.0	5,233.0	9,795.6	127.6	3,842.7
Florida				442.0	4.0	420.0	444.7	23.0	405.6
Georgia				760.0	4.0	427.0	721.0	4.2	174.0
Idaho				20,269.0	377.0	8,704.0	18,947.3	207.0	8,289.8
Illinois				302.0	24.0	64.0	301.7	35.0	69.9
Indiana				225.0	6.0	225.0	195.5	8.0	118.0
Kansas				56.0	0.0	31.0	70.0	0.0	0.0
Kentucky				511.0	12.0	142.0	529.6	22.3	129.6
Louisiana				323.0	30.0	167.0	247.9	112.0	186.0
Maine				134.0	0.0	134.0	133.5	0.0	133.5
Michigan				2,711.0	6.0	1,446.0	2,653.2	29.5	1,660.8
Minnesota				2,198.0	18.0	2,198.0	1,739.6	24.2	1,463.1
Mississippi				352.0	6.0	145.0	352.5	27.5	224.3
Missouri				747.0	36.0	747.0	761.0	59.0	761.0
Montana				18,024.0	137.0	10,399.0	15,596.7	184.1	10,316.5
Nebraska				82.0	2.0	82.0	80.0	2.0	74.2
Nevada				1,665.0	39.0	182.0	1,659.7	45.6	181.3
New Hampshire				1,543.0	18.0	1,543.0	1,543.5	42.7	1,543.5
New Mexico				4,389.0	28.0	926.0	4,208.2	40.6	551.7
New York				38.0	2.0	38.0	38.4	3.0	38.4
North Carolina				1,713.0	6.0	97.0	1,630.8	20.8	433.2
North Dakota				53.0	14.0	35.0	57.4	19.0	41.1
Ohio				323.0	12.0	263.0	323.0	20.0	323.0
Oklahoma				195.0	1.0	123.0	194.0	16.0	134.4
Oregon				11,494.0	115.0	7,905.0	11,493.8	109.6	7,908.6
Pennsylvania				655.0	1.0	655.0	654.0	10.0	654.0
Puerto Rico				24.0	1.0	7.0	21.1	2.0	10.0
South Carolina				431.0	7.0	166.0	371.9	11.6	183.2
South Dakota				403.0	11.0	292.0	274.4	41.0	274.4
Tennessee				741.0	6.0	79.0	740.7	7.0	78.5

See footnotes at end of table



Table 8--Trail miles on the National Forest System by State--fiscal years 1995-97--Continued

State, Commonwealth, or Territory 2/	1997 1/			1996			1995		
	Total	Const/Reconst 3/	Maintained	Total	Const/Reconst 3/	Maintained	Total	Const/Reconst 3/	Maintained
Texas				275.0	50.0	43.0	299.9	45.0	81.0
Utah				6,431.0	74.0	3,351.0	6,430.8	121.1	3,350.8
Vermont				1,027.0	21.0	832.0	1,028.0	49.0	832.7
Virginia				1,867.0	11.0	249.0	1,860.9	26.0	240.4
Washington				9,117.0	38.0	6,873.0	9,125.3	62.5	6,890.9
West Virginia				983.0	0.0	742.0	977.2	7.5	732.2
Wisconsin				1,699.0	12.0	1,133.0	1,686.5	23.0	1,120.5
Wyoming				6,523.0	35.0	2,547.0	6,390.5	54.8	3,397.3
Total				133,087.0 4/	1,696.0	69,507.0	125,422.1 5/	2,139.4	66,193.4

1/ FY 1997 data unavailable.

2/ Unlisted States have no Forest Service recreation programs.

3/ Miles constructed include construction of new trails and reconstruction of existing trails. The predominant activity is reconstruction, funds used are appropriated.

4/ In FY 1996, does not include 454 contributed miles.

5/ In FY 1995, does not include 265.7 contributed miles.



Table 9--Fuels treatment acreage accomplished by appropriation--fiscal year 1997

Region	Accomplishment		Total
	Fire preparedness	Brush disposal funds	
		Acre	
Northern (R-1)	51,041	19,619	70,660
Rocky Mountain (R-2)	30,098	4,929	35,027
Southwestern (R-3)	109,523	10,918	120,441
Intermountain (R-4)	60,525	7,421	67,946
Pacific Southwest (R-5)	49,082	21,822	70,904
Pacific Northwest (R-6)	81,998	64,066	146,064
Southern (R-8)	706,701	0	706,701
Eastern (R-9)	8,490	2,791	11,281
Alaska (R-10)	200	0	200
Total	1,097,658	131,566	1,229,224



Table 10--Pesticide use report-fiscal year 1997

Common name	Management Objective	Treatment unit	Units treated	Quantity used
				Pounds 1/
Fungicides and fumigants:				
Benomyl	Nursery disease control	Acres	28.00	28.00
	Nursery disease control	Greenhouses	0.50	0.21
	Nursery disease control	Seedlings	35.00	30.00
	Nursery disease control	Trees	612.00	57.00
Borax	Disease control	Acres	31,730.00	16,465.77
Bromacil	Noxious Weed control	Acres	2.00	48.00
Captan	Nursery disease control	Acres	31.16	36.42
Carboxin/Thiram	Nursery disease control	Pounds of seed	30.00	0.11
Chaetorelia	Nursery disease control	Acres	0.02	0.30
Chloropicrin	Nursery disease control	Acres	47.70	14,415.00
Chlorothalonil	Disease control	Acres	28.60	11.00
	Fungus control	Acres	36.00	37.53
	Nursery disease control	Acres	103.79	176.30
	Nursery disease control	Greenhouses	1.00	1.28
Copper compounds	Aquatic vegetation control	Acres	6.00	2.00
DCNA	Nursery disease control	Acres	0.01	0.01
Daconil	Fungus control	Acres	10.00	0.10
Dazomet	Fungus control	Acres	14.23	5,530.00
	Nursery disease control	Acres	61.18	21,989.00
	Soil fumigation	Acres	13.00	4,999.50
Dicloran	Nursery disease control	Greenhouses	15.00	9.00
Dimethyl 4,4-0 phenylenebis	Nursery disease control	Acres	1.21	5.30
Dodine	Fungus control	Acres	7.00	9.10
	Nursery disease control	Acres	0.62	1.00
	Nursery disease control	Trees	1.00	8.40
Etridiazole	Nursery disease control	Acres	0.52	4.35
Etridiazole/Thiophanate Methyl	Nursery disease control	Acres	137.50	158.80
Glyphosate	Site preparation	Acres	15.00	0.50
Iprodione	Disease control	Greenhouses	15.31	18.00
Maneb	Nursery disease control	Acres	2.00	0.11
Metalaxyl	Disease control	Greenhouses	4.00	2.00
	Nursery disease control	Acres	22.18	5,960.00
	Nursery disease control	Acres	22.20	7,520.00
Methyl bromide	Soil fumigation	Acres	29.70	3.57
Methyl bromide/Chloropicrin	Nursery disease control	Greenhouses	0.50	0.10
Propiconazole	Nursery disease control	Acres	40.00	40.00
	Nursery disease control	Greenhouses	0.20	0.10
	Fungus control	Acres	40.00	40.00
Thiophanate Methyl	Nursery disease control	Greenhouses	5,285.00	100.00
	Animal damage control	Acres	400.00	16.00
	Fungus control	Seedlings	2.24	2.60
Thiram	Nursery disease control	Acres	1.00	0.10
	Disease control	Greenhouses	14.70	38.60
	Nursery disease control	Acres	2,059.00	16.00
Triadimefon	Nursery disease control	Pounds of seed		
	Nursery disease control	Pounds of seed		
	Nursery disease control	Pounds of seed		
	Nursery disease control	Pounds of seed		
	Nursery disease control	Pounds of seed		
Total 1997 fungicides and fumigants		Acres	37,693.87	
		Greenhouses	35.20	
		Pounds of seed	2,089.00	
		Seedlings	435.00	
		Trees	613.00	

77,741.16 Lbs

See footnotes at end of table.



Table 10--Pesticide use report--fiscal year 1997--Continued

Common name	Management Objective	Treatment unit	Units treated	Quantity used
				Pounds 1/
Herbicides, algicides, and plant growth regulators:				
2,3,6-TCA	Nursery disease control	Acres	0.02	0.40
2,4-D	Housekeeping/facilities maint.	Acres	0.12	0.13
	Noxious weed control	Acres	7,513.05	2,520.41
	Noxious weed control	Trees	21.00	42.10
	Nursery weed control	Acres	31.90	3.51
	Recreation improvement	Acres	4.00	5.00
	Right-of-way vegetation mgmt.	Acres	3.00	3.02
	Seed orchard protection	Acres	35.40	34.85
	Vegetation management	Acres	50.00	12.00
2,4-D Amine	Noxious weed control	Acres	1,641.00	1,648.50
2,4-D/Clpyralid	Noxious weed control	Acres	1,352.70	2,061.83
2,4-D/Dicamba	Noxious weed control	Acres	4,930.00	5,767.30
2,4-D/Dicamba/Picloram	Noxious weed control	Acres	427.00	320.90
	Nursery disease control	Acres	7.00	0.50
2,4-D/Glyphosate	Noxious weed control	Acres	32.00	30.50
2,4-D/Metsulfuron Methyl	Noxious weed control	Acres	121.00	185.50
2,4-D/Metsulfuron-me./Picloram	Noxious weed control	Acres	2.00	0.12
2,4-D/Picloram	Agriculture weed control	Acres	75.00	71.20
	Noxious weed control	Acres	7,901.90	5,866.41
2,4-D/Picloram/Clpyralid	Noxious weed control	Acres	148.00	11.40
2,4-D/Triclopyr	Noxious weed control	Acres	2.00	0.26
	Right-of-way vegetation mgmt.	Acres	77.00	70.00
Aphthona lacertosa	Noxious weed control	Acres	700.00	25.00
Benefin	Noxious weed control	Acres	5.00	1.50
Bromacil/Diuron	Housekeeping/facilities maint.	Acres	968.10	5.00
	Noxious weed control	Acres	0.25	2.00
Chlorsulfuron	Noxious weed control	Acres	22.50	8.41
Clpyralid	Housekeeping/facilities maint	Acres	8.00	0.12
	Noxious weed control	Acres	2,755.80	296.50
	Nursery weed control	Acres	1.44	1.44
	Right-of-way vegetation mgmt.	Acres	91.00	5.36
	Wildlife habitat improvement	Acres	0.30	0.01
Cyanazine/Metolachlor	Agriculture weed control	Acres	40.00	120.00
DCPA	Vegetation mgmt.	Acres	13.00	13.00
Dicamba	Noxious weed control	Acres	1,595.58	525.14
	Vegetation mgmt.	Acres	241.00	22.00
Dicamba/Picloram	Noxious weed control	Acres	25.00	1.50
Diuron	Housekeeping/facilities maint.	Acres	5.00	11.60
Diuron/Sulfometuron Methyl	Right-of-way vegetation mgmt.	Acres	40.00	198.00
EPTC	Agriculture weed control	Acres	15.00	26.50
Fosamine ammonium	Noxious weed control	Acres	295.00	137.40
	Recreation improvement	Acres	16.00	120.00
Fosamine ammonium/Imazapyr	Right-of-way vegetation mgmt.	Acres	10.90	70.00
Fosamine ammonium/Triclopyr	Right-of-way vegetation mgmt.	Acres	409.00	1,800.00
Glyphosate	Conifer release	Acres	8,223.30	12,996.40
	Hardwood control	Acres	5.00	4.00
	Hardwood release	Acres	4.00	4.00
	Housekeeping/facilities maint.	Acres	65.05	84.48
	Noxious weed control	Acres	1,233.85	1,278.81

See footnotes at end of table



Table 10--Pesticide use report--fiscal year 1997--Continued

Common name	Management Objective	Treatment unit	Units	Quantity
			treated	used
Pounds 1/				
Herbicides, algicides, and plant growth regulators: (Continued)				
Glyphosate	Nursery weed control	Acres	599.73	1,037.04
	Recreation improvement	Acres	67.00	239.10
	Right-of-way vegetation mgmt.	Acres	15.00	7.50
	Right-of-way vegetation mgmt.	Acres	84.00	263.00
	Seed orchard protection	Acres	143.50	102.40
	Site preparation	Acres	2,618.00	2,991.22
	Vegetation mgmt.	Acres	50.00	25.00
	Weed control	Acres	172.00	281.00
	Wildlife habitat improvement	Acres	432.00	1,161.60
	Wildlife improvement	Acres	69.00	87.00
Glyphosate/Sulfometuron Methyl	Conifer release	Acres	13.50	12.40
	Research	Acres	6.00	5.50
	Site preparation	Acres	950.00	963.90
	Weed control	Acres	40.00	130.90
Glyphosate/Triclopyr	Conifer release	Acres	1,251.50	2,212.50
	Site preparation	Acres	731.50	2,386.00
Hexazinone	Conifer release	Acres	1,543.00	3,748.40
	Site preparation	Acres	8,701.50	25,349.22
	Wildlife habitat improvement	Acres	150.00	27.00
Hexazinone/Sulfometuron Methyl	Conifer release	Acres	331.00	14.30
	Site preparation	Acres	2,098.00	3,127.50
Imazapyr	Conifer release	Acres	1,840.00	265.00
	Hardwood release	Acres	198.00	16.00
	Noxious weed control	Acres	56.00	9.25
	Site preparation	Acres	195.00	37.00
	Imazapyr/Triclopyr	Conifer release	Acres	2,458.00
	Hardwood control	Acres	53.00	6.10
	Site preparation	Acres	5,456.00	2,427.80
	Noxious weed control	Acres	2,131.61	38.12
Metsulfuron Methyl	Housekeeping/facilities maint.	Acres	3.00	10.00
Oryzalin	Housekeeping/facilities maint.	Acres	3.00	1.00
Oxyfluorfen	Nursery weed control	Acres	325.35	288.06
Picloram	Noxious weed control	Acres	24,786.33	13,983.06
	Right-of-way vegetation mgmt.	Acres	60.00	1.00
	Weed control	Acres	105.00	35.00
	Wildlife habitat improvement	Acres	106.00	26.50
Picloram/Triclopyr	Noxious weed control	Acres	30.00	142.50
Pramitol	Right-of-way vegetation mgmt.	Acres	2.00	10.00
Sethoxydim	Nursery weed control	Acres	45.63	50.64
Simazine	Nursery weed control	Acres	0.13	1.90
Sulfometuron Methyl	Housekeeping/facilities maint.	Acres	3.00	1.00
	Noxious weed control	Acres	20.00	0.13
	Site preparation	Acres	681.50	65.60
	Thiophanate Methyl	Nursery disease control	Acres	1.90
	Nursery disease control	Greenhouses	15.00	4.50

See footnotes at end of table.



Table 10--Pesticide use report--fiscal year 1997--Continued

Common name	Management Objective	Treatment unit	Units treated	Quantity used Pounds 1/
Herbicides, algicides, and plant growth regulators: (Continued)				
Triclopyr	Conifer release	Acres	4,819.79	3,644.75
	Hardwood control	Acres	604.00	377.30
	Hardwood release	Acres	1,263.00	1,029.30
	Noxious weed control	Acres	243.80	234.30
	Nursery weed control	Acres	0.60	0.31
	Recreation improvement	Acres	85.00	148.00
	Right-of-way vegetation mgmt.	Acres	68.00	11.00
	Seed orchard protection	Acres	1.90	1.93
	Site preparation	Acres	8,301.00	5,698.40
	Thinning	Acres	812.00	64.90
	Vegetation mgmt.	Acres	154.00	56.50
	Weed control	Acres	1,101.00	723.00
	Wildlife habitat improvement	Acres	870.00	1,225.00
	Wildlife improvement	Acres	680.00	52.70
Total 1997 herbicides, algicides, and plant growth regulators		Acres	119,024.59	
		Greenhouses	15.00	
		Trees	21.00	
				112,385.80 Lbs.

See footnotes at end of table.



Table 10--Pesticide use report--fiscal year 1997--Continued

Common name	Management Objective	Treatment unit	Units treated	Quantity used Pounds 1/	
Insecticides, acaricides, and pheromones:					
4-allylanisole	Research	Acres	0.01	0.31	
Acephate	Insect suppression	Greenhouses	3.00	0.36	
Bacillus thuringiensis	Insect suppression	Acres	61,500.00	1,980,000.00	BIU
			90.00	450.00	
Bifenthrin	Insect eradication	Acres	16.00	2.00	
	Insect suppression	Greenhouses	1.00	0.10	
Carbaryl	Insect suppression	Acres	160.00	803.00	
	Insect suppression	Greenhouse	1.00	0.19	
	Nursery insect control	Acres	5.39	2.00	
Chlorpyrifos	Housekeeping/facilities maint.	Buildings	5.00	0.28	
	Insect eradication	Acres	16.00	20.00	
	Insect suppression	Acres	24.00	20.30	
	Nursery insect control	Acres	27.36	32.40	
Cuomaphos	Cattle protection	Head of Cattle	3,800.00	160.00	
Crop oil	Recreation improvement	Acres	30.00	1,420.00	
Cyfluthrin	Housekeeping/facilities maint.	Buildings	5.00	0.08	
Diazinon	Nursery insect control	Acres	35.00	4.00	
	Vector/plague suppression	Acres	1,689.00	52.43	
Dimethoate	Insect suppression	Acres	12.50	9.38	
Disodium octaborate tetrahydrat	Housekeeping/facilities maint.	Acres	1.00	1.50	
Dormant oil	Insect eradication	Acres	16.00	160.00	
Esfenvalerate	Nursery insect control	Acres	12.94	0.65	
	Seed orchard protection	Acres	8.00	0.50	
Fenbutatin-oxide	Insect suppression	Greenhouses	1.00	0.02	
Fenvalerate	Nursery insect control	Acres	65.50	6.55	
Hydramethylnon	Insect suppression	Acres	15.50	11.70	
Lambda cyhalothrin	Housekeeping/facilities maint.	Acres	1.00	0.20	
Malathion	Nursery insect control	Greenhouses	0.50	1.54	
Nucleopolyhedrosis virus	Insect suppression	Acres	4,284.00	6,000,009.60	x 10^9 PIB
Orthene	Nursery insect control	Greenhouses	0.50	0.50	
Permethrin	Housekeeping/facilities maint.	Buildings	4.00	0.31	
	Seed orchard protection	Trees	16.24	2.64	
Pheromone	Insect suppression	Acres	374.00	25.00	
Potassium salts of fatty acids	Nursery insect control	Acres	0.14	1.80	
	Nursery insect control	Greenhouses	1.00	2.49	
	Recreation improvement	Acres	35.00	1,562.00	
Pyrethrins	Housekeeping/facilities maint.	Buildings	2.00	0.28	
Total 1997 insecticides, acaricides, and pheromones			Acres	68,763.34	
			Buildings	16.00	
			Greenhouses	8.00	
			Head of Cattle	3,800.00	
			Trees	16.24	
				1,980,000.00	BIU
				6,000,009.60	x10^9 PIB
				4,779.50	Lbs

See footnotes at end of table.



Table 10--Pesticide use report--fiscal year 1997--Continued

Common name	Management Objective	Treatment unit	Units treated	Quantity used Pounds 1/
Predacides, piscicides, and repellents:				
Aluminum phosphide	Animal damage control	Acres	5,270.00	8.00
Bromadiolone	Housekeeping/facilities maint.	Buildings	4.00	0.08
Fintrol	Fish eradication	Acres	12.00	2.00
Putrescent egg solids	Animal damage control	Acres	15,644.00	5,398.94
Rotenone	Fish eradication	Acres	8.00	1.12
Strychnine	Animal damage control	Acres	48,655.12	111.90
	Seed orchard protection	Acres	204.00	1.42
Zinc phosphide	Animal damage control	Acres	2,378.12	104.45
Total 1997 predacides, piscicides and repellents			72,171.24	
			Buildings	4.00
				5,932.90 Lbs

See footnotes at end of table.



Table 10--Pesticide use report--fiscal year 1997--Continued

Common name	Management Objective	Treatment unit	Units treated	Quantity used Pounds 1/
Rodenticides:				
Diphacinone	Animal damage control	Acres	21.00	1.50
	Seed orchard protection	Acres	181.00	0.17
	Vector/plague suppression	Acres	25.00	0.04
Total 1997 rodenticides			Acres	227.00
				1.71 Lbs
Grand total 1997 units treated			Acres	297,880.04
			Buildings	20.00
			Greenhouses	58.20
			Head of Cattle	3,800.00
			Pounds of Seed	2,089.00
			Seedlings	435.00
			Trees	650.24
Grand total 1997 amounts active ingredient used				1,980,000.00 BIU
				6,000,009.60 x10^9 PIB
				200,841.08 Lbs

1/ Pounds of active ingredient unless other units are indicated: BIU = (billion international units), PIB = (polyhedral inclusion bodies), Insects

NOTE: Totals may not be exact due to rounding.



Table 11--Reforestation expenditures and accomplishments by funding source--fiscal years 1993-97 1/

	Appropriated	Knutson-Vandenberg	Total
1993			
Million dollars 2/	40.1	83.6	123.7
1,000 acres	159.3	292.9	452.2 3/
Constant dollars/acre	251.7	285.4	273.6 4/
1994			
Million dollars 2/	35.4	69.7	105.1
1,000 acres	146.1	288.8	434.9 5/
Constant dollars/acre	242.3	241.3	241.7 4/
1995			
Million dollars 2/	37.9	80.5	118.4
1,000 acres	136.1	250.9	387.0 6/
Constant dollars/acre	278.5	320.8	305.9 4/
1996			
Million dollars 2/	32.7	63.5	96.2
1,000 acres	129.9	227.6	357.5 7/
Constant dollars/acre	251.7	279.0	269.1 4/
1997			
Million dollars 2/	36.7	52.5	89.2
1,000 acres	128.1	193.4	321.5 8/
Constant dollars/acre	286.8	271.3	277.5 4/

- 1/ Data source for accomplishments is the Timber Activity Control System silviculture data base (TRACS/Silva) and the source for expenditures is the agency's financial data base at the National Finance Center.
- 2/ All previously published values have been converted to an obligations basis in 1997 constant dollars. No General Administration funds or law enforcement funds included. Does not include funds for nursery and tree improvement.
- 3/ Includes 108,314 acres of certified natural regeneration without site preparation, but does not include 21,889 acres accomplished with contributed funding.
- 4/ Weighted average.
- 5/ Includes 101,010 acres of certified natural regeneration without site preparation, but does not include 6,194 acres accomplished with contributed funding.
- 6/ Includes 103,692 acres of certified natural regeneration without site preparation, but does not include 5,270 acres accomplished with contributed funding.
- 7/ Includes 113,295 acres of certified natural regeneration without site preparation, but does not include 5,403 acres accomplished with contributed funding.
- 8/ Includes 102,992 acres of certified natural regeneration without site preparation, but does not include 6,611 acres accomplished with contributed funding.



Table 12--Reforestation program needs--fiscal years 1997-99 1/

	Current and Projected	Prior Year Projected 2/
	1,000 acres	1,000 acres
Fiscal year 1997		
10/1/96 balance	804	804
Actual needs 3/	288	300
Actual accomplishments	-328	-315
10/1/97 balance	764	789
Fiscal year 1998		
10/1/97 balance	764	
New needs 3/	250	
Projected accomplishments	-350	
10/1/98 balance	664	
Fiscal year 1999		
10/1/98 balance	664	
New needs 3/	225	
Projected accomplishments	-300	
Projected 10/1/99 balance	589	

1/ Data source is Reforestation & TSI Needs Report (2400-K). This information is required by the National Forest Management Act of 1976, Section 4d(1).

2/ Projections in FY 1996 Report of the Forest Service.

3/ Actual or new needs are the results of timber harvests, regeneration failures, and natural disasters such as fires, storms, insects, diseases, and other changes. Includes actual and projected estimates of certified natural regeneration without site preparation.



Table 13—Reforestation needs as of October 1, 1997, by State, national forest, and site productivity class 1/

State, Commonwealth, or Territory 2/ National Forest	Acres by site productivity class 3/				Total acres
	0-49	50-84	85-119	120+	
Alabama					
NFs in Alabama (subtotal)	255	1,970	177	185	2,587
Alaska					
Chugach	0	0	0	0	0
Tongass-Chatham	35	155	1,416	2,154	3,760
Tongass-Ketchikan	73	68	0	7,189	7,330
Tongass-Stikine	0	0	0	4,774	4,774
Subtotal	108	223	1,416	14,117	15,864
Arizona					
Apache-Sitgreaves	4,927	4,646	216	0	9,789
Coconino	4,175	3,540	0	0	7,715
Coronado	8	0	0	0	8
Kaibab	7,712	2,089	0	0	9,801
Prescott	109	80	0	0	189
Tonto	1,697	187	0	0	1,884
Subtotal	18,628	10,542	216	0	29,386
Arkansas					
Ouachita	3	3,408	16,744	39	20,194
Ozark-St. Francis	1,600	10,028	1,098	38	12,764
Subtotal	1,603	13,436	17,842	77	32,958
California					
Angeles	296	686	294	0	1,276
Cleveland	0	122	0	0	122
Eldorado	0	7	1,881	2,332	4,220
Inyo	0	9	0	0	9
Klamath	301	1,603	2,350	1,401	5,655
Lake Tahoe Basin	0	47	727	564	1,338
Lassen	17	6,836	2,519	3,467	12,839
Los Padres	0	21	5	0	26
Mendocino	65	1,461	1,104	912	3,542
Modoc	0	3,158	98	447	3,703
Plumas	0	1,713	8,050	2,103	11,866
Rogue River	0	96	0	0	96
San Bernardino	346	389	29	0	764
Sequoia	52	207	1,516	919	2,694
Shasta	0	329	1,059	616	2,004
Sierra	81	370	1,579	1,551	3,581
Siskiyou	0	0	0	0	0
Six Rivers	0	4	845	495	1,344
Stanislaus	2,261	16,557	29,176	20,059	68,053
Tahoe	60	370	3,410	2,448	6,288

See footnotes at end of table.



**Table 13—Reforestation needs as of October 1, 1997, by State, national forest, and site productivity class 1/--**  
Continued

State, Commonwealth, or Territory 2/ National Forest	Acres by site productivity class 3/				Total acres
	0-49	50-84	85-119	120+	
California (continued)					
Toiyabe	23	25	0	0	48
Trinity	0	82	86	20	188
Subtotal	3,502	34,092	54,728	37,334	129,656
Colorado					
Arapaho and Roosevelt	4,619	128	0	0	4,747
Grand Mesa, Uncompahgre, and Gunnison	7,074	2,589	203	12	9,878
Manti-La Sal	0	0	0	0	0
Medicine Bow and Routt	4,226	2,052	265	0	6,543
Pike and San Isabel	1,562	648	0	0	2,210
Rio Grande	3,205	2,639	190	0	6,034
San Juan	1,886	2,255	291	0	4,432
White River	695	1,096	203	0	1,994
Subtotal	23,267	11,407	1,152	12	35,838
Florida					
NFs in Florida (subtotal)	244	40	0	1,662	1,946
Georgia					
Chattahoochee and Oconee (subtotal)	0	0	3,140	1,054	4,194
Idaho					
Boise	6,220	35,481	8,924	2,341	52,966
Caribou	0	395	31	0	426
Challis	156	298	0	0	454
Clearwater	2,532	415	2,096	2,363	7,406
Idaho Panhandle	6,224	1,285	4,292	3,360	15,161
Nez Perce	655	712	2,231	1,019	4,617
Payette	569	1,196	2,328	4	4,097
Salmon	4,508	236	0	0	4,744
Sawtooth	348	377	0	0	725
Targhee	1,629	6,383	0	56	8,068
Subtotal	22,841	46,778	19,902	9,143	98,664
Illinois					
Shawnee (subtotal)	0	0	701	0	701
Indiana					
Hoosier (subtotal)	0	80	1,136	588	1,804
Kentucky					
Daniel Boone (subtotal)	0	1,136	352	638	2,126

See footnotes at end of table.



**Table 13—Reforestation needs as of October 1, 1997, by State, national forest, and site productivity class 1/--**  
**Continued**

State, Commonwealth, or Territory 2/ National Forest	Acres by site productivity class 3/				Total acres
	0-49	50-84	85-119	120+	
Louisiana					
Kisatchie (subtotal)	0	28	749	830	1,607
Maine					
White Mountain (subtotal)	126	110	68	24	328
Michigan					
Hiawatha	6,847	6,731	1,895	0	15,473
Huron-Manistee	13	2,459	93	11	2,576
Ottawa	1,048	13,438	3,237	115	17,838
Subtotal	7,908	22,628	5,225	126	35,887
Minnesota					
Chippewa	119	934	304	44	1,401
Superior	653	8,340	1,009	155	10,157
Subtotal	772	9,274	1,313	199	11,558
Mississippi					
NFs in Mississippi (subtotal)	219	565	756	4	1,544
Missouri					
Mark Twain (subtotal)	519	20,297	136	0	20,952
Montana					
Beaverhead & Deerlodge	1,119	521	272	0	1,912
Bitterroot	745	897	164	18	1,824
Custer	1,504	356	56	0	1,916
Flathead	2,261	1,194	1,697	55	5,207
Gallatin	424	1,454	0	0	1,878
Helena	961	69	0	0	1,030
Kootenai	3,349	3,877	4,725	466	12,417
Lewis and Clark	899	112	15	0	1,026
Lolo	5,232	2,137	1,092	431	8,892
Subtotal	16,494	10,617	8,021	970	36,102
Nebraska					
Nebraska (subtotal)	0	0	0	0	0
Nevada					
Humboldt	0	0	0	0	0
Inyo	0	0	0	0	0
Lake Tahoe Basin	0	0	0	1,084	1,084
Toiyabe	0	0	0	0	0
Subtotal	0	0	0	1,084	1,084
New Hampshire					
White Mountain (subtotal)	1,963	5,275	2,381	538	10,157

See footnotes at end of table.



**Table 13—Reforestation needs as of October 1, 1997, by State, national forest, and site productivity class 1/--**  
Continued

State, Commonwealth, or Territory 2/ National Forest	Acres by site productivity class 3/				Total acres
	0-49	50-84	85-119	120+	
New Mexico					
Carson	2,938	1,607	30	0	4,575
Cibola	189	35	0	0	224
Gila	2,171	502	0	0	2,673
Lincoln	67	735	40	0	842
Santa Fe	5,097	755	0	0	5,852
Subtotal	10,462	3,634	70	0	14,166
New York					
Green Mountain (subtotal)	0	0	11	8	19
North Carolina					
NFs in North Carolina (subtotal)	622	1,944	10	251	2,827
Ohio					
Wayne (subtotal)	45	0	791	1,381	2,217
Oklahoma					
Ouachita (subtotal)	0	0	0	393	393
Oregon					
Deschutes	8,685	1,186	390	29	10,290
Fremont	6,726	2,442	81	0	9,249
Klamath	10	0	49	121	180
Malheur	4,602	15,335	0	0	19,937
Mt. Hood	133	5,543	123	406	6,205
Ochoco	465	2,978	70	0	3,513
Rogue River	0	1,130	2,322	67	3,519
Siskiyou	69	32	994	368	1,463
Siuslaw	0	0	0	83	83
Umatilla	288	24,816	2,176	590	27,870
Umpqua	90	129	1,487	62	1,768
Wallowa-Whitman	622	12,966	1,668	30	15,286
Willamette	48	847	335	4,583	5,813
Winema	368	6,418	2,917	542	10,245
Subtotal	22,106	73,822	12,612	6,881	115,421
Pennsylvania					
Allegheny (subtotal)	252	2,429	4,391	517	7,589
Puerto Rico					
Caribbean (subtotal)	0	0	41	118	159
South Carolina					
Francis Marion and Sumter (subtotal)	0	0	495	5	500
South Dakota					
Black Hills (subtotal)	26,977	5,154	106	22	32,259

See footnotes at end of table.



**Table 13—Reforestation needs as of October 1, 1997, by State, national forest, and site productivity class 1/--**  
**Continued**

State, Commonwealth, or Territory 2/ National Forest	Acres by site productivity class 3/				Total acres
	0-49	50-84	85-119	120+	
Tennessee					
Cherokee (subtotal)	0	365	717	3,316	4,398
Texas					
NFs in Texas (subtotal)	0	3,762	263	400	4,425
Utah					
Ashley	3,971	0	0	0	3,971
Dixie	11,908	791	0	0	12,699
Fishlake	146	207	5	0	358
Manti-LaSal	0	463	19	0	482
Uinta	0	17	218	0	235
Wasatch-Cache	137	25	84	15	261
Subtotal	16,162	1,503	326	15	18,006
Vermont					
Green Mountain (subtotal)	191	566	0	37	794
Virginia					
George Washington	752	1,975	41	470	3,238
Jefferson	342	2,874	123	208	3,547
Subtotal	1,094	4,849	164	678	6,785
Washington					
Colville	859	1,579	862	318	3,618
Gifford Pinchot	0	648	1,083	382	2,113
Idaho Panhandle	164	0	46	0	210
Mt. Baker-Snoqualmie	0	163	384	188	735
Okanogan	7,693	706	995	0	9,394
Olympic	0	1	86	113	200
Umatilla	14	878	0	77	969
Wenatchee	10	13,923	1,587	96	15,616
Subtotal	8,740	17,898	5,043	1,174	32,855
West Virginia					
George Washington and Jefferson	42	12	10	149	213
Monongahela	59	676	1,110	668	2,513
Subtotal	101	688	1,120	817	2,726
Wisconsin					
Chequamegon	2,688	10,042	1,765	124	14,619
Nicolet	120	946	77	262	1,405
Subtotal	2,808	10,988	1,842	386	16,024

See footnotes at end of table.



**Table 13—Reforestation needs as of October 1, 1997, by State, national forest, and site productivity class 1/--**  
Continued

State, Commonwealth, or Territory 2/ National Forest	Acres by site productivity class 3/				Total acres
	0-49	50-84	85-119	120+	
Wyoming					
Bighorn	2,349	234	0	0	2,583
Black Hills	11,960	7,886	38	0	19,884
Bridger-Teton	0	0	1,316	0	1,316
Medicine Bow and Routt	2,710	231	0	0	2,941
Shoshone	275	92	4	0	371
Targhee	35	24	0	0	59
Wasatch-Cache	146	126	0	0	272
Subtotal	17,475	8,593	1,358	0	27,426
Total	205,484	324,693	148,771	84,984	763,932

1/ Data source is Reforestation & TSI Needs Report (2400-K) Table 1. This information is required by the National Forest Management Act of 1976, Sec.4d(1).

2/ Unlisted States had no reforestation needs as of October 1, 1997.

3/ Site productivity class refers to the amount of wood produced in cubic feet per acre per year in a natural unmanaged stand.



Table 14—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1997 1/

State, Commonwealth, or Territory 2/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total <i>Acres</i>	Cleaning	Release	Precommercial Thinning	Fertili- zation	Pruning	Total <i>Acres</i>
	Planted	Seeded	w/site prep. 3/	w/o site prep. 3/							
Alabama											
NFs in Alabama (subtotal)	2,727	0	817	26	3,570	0	1,583	0	0		1,583
Alaska											
Tongass-Chatham	88	0	0	3,141	3,229	0	0	1,882	9	0	1,891
Tongass-Ketchikan	209	0	0	4,232	4,441	0	0	479	0	0	479
Tongass-Stikine	166	0	0	2,907	3,073	0	0	0	0	131	131
Subtotal	463	0	0	10,280	10,743	0	0	2,361	9	131	2,501
Arizona											
Apache-Sitgreaves	124	48		846	1,018	0	0	0	0	0	0
Coconino	0	0	0	1,798	1,798	0	0	0	0	0	0
Kaibab	18	0	175	2,702	2,895	0	0	0	0	0	0
Subtotal	142	48	175	5,346	5,711	0	0	0	0	0	0
Arkansas											
Ouachita	1,471	748	7,740	57	10,016	0	2,565	1,189	0	0	3,754
Ozark-St. Francis	469	0	983	40	1,492	0	1,219	288	0	0	1,507
Subtotal	1,940	748	8,723	97	11,508	0	3,784	1,477	0	0	5,261
California											
Angeles	70	0	0	35	105	0	299	93	0	273	665
Eldorado	65	0	0	0	65	0	3,053	1,828	0	0	4,881
Inyo	0	0	0	0	0	0	18	670	0	0	688
Klamath	5,626	0	14	619	6,259	0	2,114	2,180	0	17	4,311
Lake Tahoe Basin	0	0	0	0	0	0	0	138	0	0	138
Lassen	25	0	0	0	25	0	1,067	13,141	0	0	14,208
Los Padres	0	0	0	0	0	0	25	50	0	60	135
Mendocino	21	0	0	0	21	0	848	383	400	45	1,676
Modoc	976	0	5	0	981	0	684	2,087	0	0	2,771
Plumas	1,154	0	0	122	1,276	0	2,433	1,207	0	0	3,640
Rogue River	112	0	0	0	112	0	0	0	0	0	0

See footnotes at end of table.



**Table 14—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1997 1/--  
Continued**

State, Commonwealth, or Territory 2/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total  Acres	Cleaning	Release	Precommercial Thinning	Fertili- zation	Pruning	Total  Acres
	Planted	Seeded	w/site prep. 3/	w/o site prep. 3/							
California (continued)											
San Bernardino	0	0	0	0	0	0	50	92	15	32	189
Sequoia	82	0	0	0	82	0	1,168	656	0	0	1,824
Shasta	1,516	0	0	4	1,520	0	2,150	787	0	22	2,959
Sierra	301	0	0	0	301	0	3,369	597	0	0	3,966
Six Rivers	602	0	31	66	699	0	1,272	606	0	0	1,878
Stanislaus	0	0	0	0	0	0	6,045	0	0	0	6,045
Tahoe	2,151	0	684	67	2,902	0	6,313	2,453	0	115	8,881
Trinity	720	0	0	2	722	0	2,324	632	0	0	2,956
Toiyabe	0	0	0	1,366	1,366	0	0	0	0	0	0
Subtotal	13,421	0	734	2,281	16,436	0	33,232	27,600	415	564	61,811
Colorado											
Arapaho and Roosevelt	0	0	395	1,019	1,414	0	0	0	0	0	0
Grand Mesa, Uncompahgre, and Gunnison	183	0	295	847	1,325	0	0	0	0	0	0
Manti-La Sal	0	0	0	0	0	0	0	294	0	0	294
Medicine Bow and Routt	57	206	455	1,004	1,722	0	0	0	0	0	0
Pike and San Isabel	11	0	407	435	853	0	0	0	0	0	0
Rio Grande and San Juan	0	0	0	3,130	3,130	0	0	147	0	0	147
White River	87	0	118	230	435	0	251	0	0	0	251
Subtotal	338	206	1,670	6,665	8,879	0	251	441	0	0	692
Florida											
NFs in Florida (subtotal)	2,998	3,399	100	1,916	8,413	0	78	0	0	0	78
Georgia											
Chattahoochee- Oconee (subtotal)	2,675	0	1,781	33	4,489	0	1,947	832	0	0	2,779
Idaho											
Boise	3,304	0	0	2,146	5,450	0	642	3,474	0	0	4,116
Caribou	304	0	411	0	715	0	0	426	0	0	426
Clearwater	5,525	0	213	459	6,197	0	552	128	0	368	1,048

See footnotes at end of table.



Table 14—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1997 1/--  
Continued

State, Commonwealth, or Territory 2/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total Acres	Cleaning	Release	Precommercial Thinning	Fertili- zation	Pruning	Total Acres
	Planted	Seeded	w/site prep. 3/	w/o site prep. 3/							
Idaho (continued)											
Idaho Panhandle	5,178	30	157	129	5,494	0	775	2,087	647	2,378	5,887
Kootenai	33	0	0	0	33	0	0	0	0	0	0
Nez Perce	2,239	0	78	351	2,668	0	136	820	0	0	956
Payette	2,655	0	45	0	2,700	0	0	1,374	0	0	1,374
Salmon and Challis	178	0	58	1,120	1,356	0	120	769	0	0	889
Sawtooth	93	0	57	56	206	0	0	0	0	0	0
Targhee	3,815	0	7,257	0	11,072	0	0	278	0	0	278
Subtotal	23,324	30	8,276	4,261	35,891	0	2,225	9,356	647	2,746	14,974
Illinois											
Shawnee (subtotal)	44	0	0	0	44	0	210	0	0	0	210
Kentucky											
Daniel Boone (subtotal)	487	0	831	0	1,318	0	166	0	0	0	166
Louisiana											
Kisatchie (subtotal)	2,404	0	529	0	2,933	0	2,115	37	0	0	2,152
Michigan											
Hiawatha	568	246	2,226	3,197	6,237	0	335	146	0	225	706
Huron-Manistee	947	0	1,570	1,259	3,776	0	204	165	0	0	369
Ottawa	311	16	2,182	3,588	6,097	0	313	0	0	0	313
Subtotal	1,826	262	5,978	8,044	16,110	0	852	311	0	225	1,388
Minnesota											
Chippewa	506	6	5,256	104	5,872	0	422	0	0	64	486
Superior	410	275	108	7,036	7,829	0	779	0	0	0	779
Subtotal	916	281	5,364	7,140	13,701	0	1,201	0	0	64	1,265

See footnotes at end of table.



**Table 14—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1997 1/--**  
Continued

State, Commonwealth, or Territory 1/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total Acres	Cleaning	Release	Precommercial Thinning	Fertili- zation	Pruning	Total Acres
	Planted	Seeded	w/site prep. 2/	w/o site prep. 2/							
Mississippi NFs in Mississippi (subtotal)	8,393	185	70	0	8,648	0	1,351	412	152	0	1,915
Missouri Mark Twain (subtotal)	412	0	9,712	484	10,608	0	1,429	5,992	0	0	7,421
Montana											
Beaverhead and Deerlodge	923	0	1,484	332	2,739	0	0	886	0	0	886
Bitterroot	2,253	0	0	44	2,297	0	101	380	0	0	481
Custer	0	0	8	121	129	0	0	45	0	0	45
Flathead	2,358	0	660	164	3,182	0	15	2,501	0	140	2,656
Gallatin	1,101	19	296	121	1,537	0	124	453	0	0	577
Helena	1,118	0	239	92	1,449	0	0	357	0	0	357
Kootenai	10,145	0	2,651	355	13,151	0	8	2,807	0	0	2,815
Lewis and Clark	120	26	952	121	1,219	0	0	85	0	0	85
Lolo	3,132	0	681	61	3,874	0	145	1,016	0	0	1,161
Subtotal	21,150	45	6,971	1,411	29,577	0	393	8,530	0	140	9,063
New Hampshire White Mountain (subtotal)	0	0	457	1,294	1,751	0	0	0	0	0	0
New Mexico											
Carson	135	0	0	3,096	3,231	0	101	989	0	0	1,090
Cibola	0	0	0	151	151	0	0	0	0	0	0
Gila	0	0	0	889	889	0	0	0	0	0	0
Lincoln	0	0	0	137	137	0	0	0	0	0	0
Santa Fe	28	0	0	71	99	0	0	0	0	0	0
Subtotal	163	0	0	4,344	4,507	0	101	989	0	0	1,090
North Carolina NFs in North Carolina (subtotal)	1,259	0	1,438	0	2,697	0	2,782	235	0	0	3,017

See footnotes at end of table.



Table 14--Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1997 1/--  
Continued

State, Commonwealth, or Territory 2/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total Acres	Cleaning	Release	Precommercial Thinning	Fertili- zation	Pruning	Total Acres
	Planted	Seeded	w/site prep. 3/	w/o site prep. 3/							
Ohio											
Wayne (subtotal)	112	0	236	0	348	0	111	0	0	0	111
Oklahoma											
Ouachita (subtotal)	39	0	451	28	518	0	0	42	0	0	42
Oregon											
Deschutes	3,289	0	1,500	2,391	7,180	0	0	0	0	0	0
Fremont	2,898	0	0	39	2,937	0	0	753	0	0	753
Klamath	118	0	0	19	137	0	17	0	0	0	17
Malheur	5,925	0	0	10	5,935	0	0	539	0	0	539
Mt. Hood	1,258	0	423	300	1,981	0	95	2,281	1,313	0	3,689
Ochoco	2,698	0	161	99	2,958	0	0	0	0	0	0
Rogue River	2,992	0	0	456	3,448	0	0	0	0	0	0
Siskiyou	1,718	0	0	234	1,952	0	1,514	1,280	0	95	2,889
Siuslaw	453	0	0	0	453	0	1,688	1,752	0	0	3,440
Umatilla	2,451	0	115	4,235	6,801	0	0	0	0	0	0
Umpqua	871	0	0	0	871	0	0	660	0	42	702
Wallowa-Whitman	7,099	0	935	3,134	11,168	330	135	3,339	0	0	3,804
Willamette	9,117	0	0	563	9,680	0	631	2,581	1,548	1,279	6,039
Winema	2,649	0	4,258	0	6,907	0	0	1,728	0	97	1,825
Subtotal	43,536	0	7,392	11,480	62,408	330	4,080	14,913	2,861	1,513	23,697
Pennsylvania											
Allegheny (subtotal)	0	0	1,040	305	1,345	0	430	0	0	0	430
South Carolina											
Francis Marion (subtotal)	3,431	0	256	0	3,687	0	1,877	654	0	0	2,531
South Dakota											
Black Hills (subtotal)	0	0	537	13,934	14,471	0	0	3,967	0	0	3,967
Tennessee											
Cherokee (subtotal)	937	0	484	0	1,421	0	752	0	0	0	752

See footnotes at end of table.



**Table 14—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest--fiscal year 1997 1/--**  
Continued

State, Commonwealth, or Territory 2/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total Acres	Cleaning	Release	Precommercial Thinning	Fertili- zation	Pruning	Total Acres
	Planted	Seeded	w/site prep. 3/	w/o site prep. 3/							
<b>Texas</b>											
NFs in Texas (subtotal)	609	0	119	133	861	0	0	944	0	0	944
<b>Utah</b>											
Ashley	0	0	88	3,926	4,014	0	0	257	0	0	257
Dixie	399	0	0	96	495	0	0	235	0	0	235
Fishlake	13	0	0	0	13	0	288	10	0	0	298
Manti-La Sal	0	0	0	129	129	0	0	379	0	0	379
Uinta	0	0	168	0	168	0	0	0	0	0	0
Wasatch	0	0	118	0	118	0	0	322	0	0	322
Subtotal	412	0	374	4,151	4,937	0	288	1,203	0	0	1,491
<b>Vermont</b>											
Green Mountain (subtotal)	0	0	253	56	309	0	26	0	0	0	26
<b>Virginia</b>											
George Washington and Jefferson (subtotal)	123	0	1,102	158	1,383	0	662	809	0	0	1,471
<b>Washington</b>											
Colville	4,757	0	154	903	5,814	0	0	1,187	0	237	1,424
Gifford Pinchot	3,737	0	0	151	3,888	0	0	581	0	0	581
Idaho Panhandle	340	0	22	0	362	0	9	172	0	245	426
Mt. Baker-Snoqualmie	1,399	0	0	0	1,399	0	0	0	0	0	0
Okanogan	3,820	0	324	2,699	6,843	33	2,859	8,220	0	1,825	12,937
Olympic	248	0	0	38	286	0	0	822	0	0	822
Umatilla	895	0	0	64	959	0	0	187	0	162	349
Wenatchee	1,108	0	63	5,946	7,117	0	0	558	46	0	604
Subtotal	16,304	0	563	9,801	26,668	33	2,868	11,727	46	2,469	17,143

See footnotes at end of table.



**Table 14—Reforestation and timber stand improvement acreages certified as satisfactorily stocked by State and national forest—fiscal year 1997 1/--**  
Continued

State, Commonwealth, or Territory 2/ National Forest	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total Acres	Cleaning	Release	Precommercial Thinning	Fertili- zation	Pruning	Total Acres
	Planted	Seeded	w/site prep. 3/	w/o site prep. 3/							
<b>West Virginia</b>											
George Washington and Jefferson	0	0	160	0	160	0	0	0	0	0	0
Monongahela	102	0	1,136	115	1,353	0	1,338	0	0	0	1,338
Subtotal	102	0	1,296	115	1,513	0	1,338	0	0	0	1,338
<b>Wisconsin</b>											
Chequamegon	509	0	2,881	1,874	5,264	0	91	0	0	0	91
Nicolet	522	0	992	1,412	2,926	0	148	0	0	0	148
Subtotal	1,031	0	3,873	3,286	8,190	0	239	0	0	0	239
<b>Wyoming</b>											
Bighorn	0	0	634	75	709	0	0	0	0	0	0
Black Hills	0	0	0	482	482	0	0	0	0	0	0
Bridger-Teton	2,414	0	0	0	2,414	0	0	0	0	0	0
Medicine Bow and Routt	0	54	1,811	1,366	3,231	0	217	715	0	0	932
Shoshone	1,159	0	0	4,000	5,159	0	0	0	0	0	0
Targhee	39	0	180	0	219	0	0	49	0	0	49
Subtotal	3,612	54	2,625	5,923	12,214	0	217	764	0	0	981
<b>Total</b>	<b>155,330</b>	<b>5,258</b>	<b>74,227</b>	<b>102,992</b>	<b>337,807</b>	<b>363</b>	<b>66,588</b>	<b>93,596</b>	<b>4,130</b>	<b>7,852</b>	<b>172,529</b>

1/ Data source is Reforestation & TSI Needs Report (2400-K) Table 21. This information is required by the National Forest Management Act of 1976, Section 4d(1).

2/ Unlisted States and Forests had no certification in fiscal year 1997.

3/ w/ site prep. = with site preparation; w/o site prep. = without site preparation.



Table 15—Certification of reforestation and timber stand improvement acreages by region—fiscal year 1997 1/

Region	Reforestation					Timber stand improvement					
	Artificial regeneration		Natural regeneration		Total	Cleaning	Release	Precom- mercial thinning	Fertili- zation	Pruning	Total
	Planted	Seeded	With site preparation	Without site preparation							
Acres											
Northern (R-1)	34,465	75	7,441	2,350	44,331	0	1,865	11,737	647	3,131	17,380
Rocky Mountain (R-2)	1,497	260	4,652	26,522	32,931	0	468	4,829	0	0	5,297
Southwest (R-3)	305	48	175	9,690	10,218	0	101	989	0	0	1,090
Intermountain (R-4)	13,214	0	8,382	8,839	30,435	0	1,050	7,867	0	0	8,917
Pacific Southwest (R-5)	13,427	0	734	934	15,095	0	33,249	27,600	415	564	61,828
Pacific Northwest (R-6)	59,494	0	7,933	21,262	88,689	363	6,922	26,468	2,907	3,737	40,397
Southern (R-8)	28,022	4,332	16,861	2,391	51,606	0	17,097	5,442	152	0	22,691
Eastern (R-9)	4,443	543	28,049	20,724	53,759	0	5,836	6,303	0	289	12,428
Alaska (R-10)	463	0	0	10,280	10,743	0	0	2,361	9	131	2,501
Total	155,330	5,258	74,227	102,992	337,807	363	66,588	93,596	4,130	7,852	172,529

1/ Data source is Reforestation & TSI Needs Report (2400-K) Table 21. This information is required by the National Forest Management Act of 1976, Section 4d(1).



**Table 16—Timber stand improvement expenditures and accomplishments by funding source--  
fiscal years 1993-97 1/**

	Appropriated	Knutson-Vandenberg	Total
1993			
Million dollars 2/	27.3	26.4	53.7
1,000 acres	175.6	165.8	341.4 3/
Constant dollars/acre	155.5	159.2	157.3 4/
1994			
Million dollars 2/	18.5	22.1	40.6
1,000 acres	131.6	131.4	263.0 5/
Constant dollars/acre	140.6	168.2	154.4 4/
1995			
Million dollars 2/	25.3	27.5	52.8
1,000 acres	140.7	132.6	273.3 6/
Constant dollars/acre	179.8	207.4	193.2 4/
1996			
Million dollars 2/	20.1	25.5	45.6
1,000 acres	130.4	128.4	258.8 7/
Constant dollars/acre	154.1	198.6	176.2 4/
1997			
Million dollars 2/	20.7	24.8	45.6
1,000 acres	118.9	139.0	257.9 8/
Constant dollars/acre	174.1	178.6	176.7 4/

1/ Data source for accomplishments is the Timber Activity Control System silviculture data base (TRACS/Silva) and the source for expenditures is the agency's financial data base at the National Finance Center.

2/ All previously published values have been converted to an obligations basis in 1997 constant dollars. No General Administration or law enforcement funds included. Does not include funds for nursery and tree improvement.

3/ Does not include 2,565 acres accomplished with contributed funding.

4/ Weighted average.

5/ Does not include 1,572 acres accomplished with contributed funding.

6/ Does not include 270 acres accomplished with contributed funding.

7/ Does not include 889 acres accomplished with contributed funding.

8/ Does not include 2,758 acres accomplished with contributed funding.



Table 17--Timber stand improvement needs as of October 1, 1997, by State, national forest, cubic foot productivity class, and type of treatment 1/

State, Commonwealth, or Territory 2/ National Forest	Cubic foot productivity classes 3/				Total	Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+					
	Acres								
Alabama									
NFs in Alabama (subtotal)	682	3,513	1,565	705	6,465	6,225	240	0	0
Alaska									
Chugach	0	40	374	0	414	40	374	0	0
Tongass-Chatham	0	154	207	8,087	8,448	150	8,298	0	0
Tongass-Ketchikan	14	138	78	22,068	22,298	54	22,244	0	0
Tongass-Stikine	0	0	0	695	695	0	695	0	0
Subtotal	14	332	659	30,850	31,855	244	31,611	0	0
Arizona									
Apache-Sitgreaves	1,597	376	48	0	2,021	15	2,006	0	0
Coconino	4,628	549	0	0	5,177	169	5,008	0	0
Coronado	6	64	0	0	70	0	70	0	0
Kaibab	2,541	256	0	0	2,797	0	2,797	0	0
Prescott	96	0	0	0	96	96	0	0	0
Tonto	977	225	0	0	1,202	657	545	0	0
Subtotal	9,845	1,470	48	0	11,363	937	10,426	0	0
Arkansas									
Ouachita	53	232	1,990	556	2,831	1,721	1,110	0	0
Ozark-St. Francis	235	9,875	0	70	10,180	5,158	5,022	0	0
Subtotal	288	10,107	1,990	626	13,011	6,879	6,132	0	0
California									
Angeles	524	1,658	390	0	2,572	1,393	589	0	590
Cleveland	0	689	0	0	689	511	177	0	1
Eldorado	70	555	8,457	18,412	27,494	21,438	5,998	58	0
Inyo	0	98	0	0	98	19	79	0	0
Klamath	562	20,741	30,911	18,523	70,737	35,254	35,440	34	9
Lake Tahoe Basin	800	2,329	2,962	459	6,550	3,635	2,915	0	0
Lassen	1,542	23,489	11,318	3,730	40,079	7,577	32,489	13	0
Los Padres	0	138	0	0	138	72	41	0	25
Mendocino	55	17,933	17,680	38,945	74,613	43,613	27,025	3,972	3

See footnotes at end of table.



Table 17--Timber stand improvement needs as of October 1, 1997, by State, national forest, cubic foot productivity class, and type of treatment 1/--  
Continued

State, Commonwealth, or Territory 2/ National Forest	Cubic foot productivity classes 3/				Total	Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+					
	Acres								
California (continued)									
Modoc	152	11,740	4,111	1,232	17,235	7,583	8,910	727	15
Plumas	59	3,839	16,077	8,210	28,185	7,377	20,808	0	0
Rogue River	0	505	0	0	505	421	84	0	0
San Bernardino	272	2,577	107	66	3,022	1,246	1,741	0	35
Sequoia	156	1,451	3,782	7,308	12,697	7,752	3,978	672	295
Shasta	0	825	1,370	4,955	7,150	5,777	1,373	0	0
Sierra	250	1,935	7,280	9,478	18,943	11,368	7,288	0	287
Siskiyou	0	0	1,766	0	1,766	809	758	199	0
Six Rivers	0	166	8,115	21,443	29,724	19,118	10,606	0	0
Stanislaus	205	5,738	13,978	48,924	68,845	47,822	21,023	0	0
Tahoe	1,124	4,118	23,480	29,007	57,729	25,638	31,711	376	4
Toiyabe	512	820	30	0	1,362	0	1,362	0	0
Trinity	327	13,525	12,882	7,743	34,477	8,193	26,284	0	0
Subtotal	6,610	114,869	164,696	218,435	504,610	256,616	240,679	6,051	1,264
Colorado									
Arapaho-Roosevelt	2,917	0	0	0	2,917	276	2,641	0	0
Grand Mesa, Uncompahgre, and Gunnison	3,019	344	0	0	3,363	520	2,843	0	0
Manti-La Sal	0	90	95	0	185	0	185	0	0
Medicine Bow and Routt	8,656	2,829	50	0	11,535	3,069	8,466	0	0
Pike and San Isabel	1,161	285	0	0	1,446	1,035	411	0	0
Rio Grande and San Juan	1,897	1,250	0	0	3,147	2,857	290	0	0
White River	214	1,104	324	0	1,642	1,488	154	0	0
Subtotal	17,864	5,902	469	0	24,235	9,245	14,990	0	0
Florida									
NFs in Florida (subtotal)	1,483	392	516	41	2,432	980	392	1,060	0
Georgia									
Chattahoochee and Oconee (subtotal)	0	261	5,148	3,056	8,465	1,502	5,863	1,100	0

See footnotes at end of table.



**Table 17—Timber stand improvement needs as of October 1, 1997, by State, national forest, cubic foot productivity class, and type of treatment 1/--**  
**Continued**

State, Commonwealth, or Territory 2/ National Forest	Cubic foot productivity classes 3/					Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+	Total				
	Acres								
<b>Idaho</b>									
Boise	996	1,872	7,514	1,098	11,480	1,506	9,974	0	0
Caribou	0	597	47	0	644	9	635	0	0
Clearwater	1,028	73	732	2,548	4,381	1,364	2,207	54	756
Idaho Panhandle	24,652	10,494	41,458	44,520	121,124	9,515	97,705	5,166	8,738
Kootenai	36	0	9	35	80	0	80	0	0
Nez Perce	3,404	5,017	21,501	12,072	41,994	260	41,719	15	0
Payette	411	1,446	2,688	22	4,567	1,142	3,425	0	0
Salmon and Challis	6,794	1,665	0	0	8,459	6,608	1,851	0	0
Sawtooth	389	24	0	0	413	152	261	0	0
Targhee	11	14,332	0	0	14,343	0	14,343	0	0
<b>Subtotal</b>	<b>37,721</b>	<b>35,520</b>	<b>73,949</b>	<b>60,295</b>	<b>207,485</b>	<b>20,556</b>	<b>172,200</b>	<b>5,235</b>	<b>9,494</b>
<b>Illinois</b>									
Shawnee (subtotal)	0	50	453	0	503	450	0	0	53
<b>Indiana</b>									
Hoosier (subtotal)	0	0	513	2,427	2,940	1,555	1,385	0	0
<b>Kentucky</b>									
Daniel Boone (subtotal)	19	871	2,797	239	3,926	547	3,347	0	32
<b>Louisiana</b>									
Kisatchie (subtotal)	2	1,098	3,336	2,828	7,264	3,385	3,879	0	0
<b>Maine</b>									
White Mountain (subtotal)	6	36	15	13	70	11	59	0	0
<b>Michigan</b>									
Hiawatha	920	5,752	720	42	7,434	2,007	708	0	4,719
Huron-Manistee	1,260	1,948	379	0	3,587	727	2,801	0	59
Ottawa	86	1,078	164	0	1,328	1,328	0	0	0
<b>Subtotal</b>	<b>2,266</b>	<b>8,778</b>	<b>1,263</b>	<b>42</b>	<b>12,349</b>	<b>4,062</b>	<b>3,509</b>	<b>0</b>	<b>4,778</b>

See footnotes at end of table.



Table 17--Timber stand improvement needs as of October 1, 1997, by State, national forest, cubic foot productivity class, and type of treatment 1/--  
Continued

State, Commonwealth, or Territory 2/ National Forest	Cubic foot productivity classes 3/				Total	Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+					
	Acres								
Minnesota									
Chippewa	100	2,480	411	29	3,020	2,713	0	0	307
Superior	2,638	0	101	27	2,766	2,766	0	0	0
Subtotal	2,738	2,480	512	56	5,786	5,479	0	0	307
Mississippi									
NFs in Mississippi (subtotal)	474	333	2,544	3,059	6,410	4,397	1,627	386	0
Missouri									
Mark Twain (subtotal)	0	17,068	174	0	17,242	1,877	15,290	0	75
Montana									
Beaverhead & Deerlodge	25,486	15,275	1,142	127	42,030	284	41,746	0	0
Bitterroot	6,077	10,855	5,413	223	22,568	2,805	19,763	0	0
Custer	1,335	5	54	0	1,394	125	1,269	0	0
Flathead	10,692	5,620	20,571	6,204	43,087	558	42,191	0	338
Gallatin	475	5,931	0	0	6,406	222	6,184	0	0
Helena	748	387	454	70	1,659	1	1,648	10	0
Idaho Panhandle	10	0	213	347	570	0	501	0	69
Kootenai	7,122	33,331	40,076	4,244	84,773	1,125	83,560	0	88
Lewis and Clark	2,550	1,785	558	6	4,899	51	4,848	0	0
Lolo	3,922	9,031	8,691	1,514	23,158	1,132	22,019	0	7
Subtotal	58,417	82,220	77,172	12,735	230,544	6,303	223,729	10	502
Nevada									
Lake Tahoe Basin (subtotal)	0	0	0	120	120	0	120	0	0
New Hampshire									
White Mountain (subtotal)	111	121	67	24	323	16	307	0	0
New Mexico									
Carson	1,817	1,436	260	0	3,513	833	2,680	0	0
Cibola	2,549	12	0	0	2,561	0	2,561	0	0
Gila	3,521	349	0	0	3,870	0	3,870	0	0

See footnotes at end of table.



Table 17--Timber stand improvement needs as of October 1, 1997, by State, national forest, cubic foot productivity class, and type of treatment 1/--  
Continued

State, Commonwealth, or Territory 2/ National Forest	Cubic foot productivity classes 3/				Total	Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+					
	Acres								
New Mexico (continued)									
Lincoln	157	1,078	36	0	1,271	0	1,271	0	0
Santa Fe	6,804	220	0	0	7,024	481	6,543	0	0
Subtotal	6,961	1,298	36	0	8,295	481	7,814	0	0
New York									
Green Mountain (subtotal)	0	80	653	0	733	58	675	0	0
North Carolina									
NFs in North Carolina (subtotal)	650	1,945	513	2,711	5,819	3,048	1,895	876	0
Ohio									
Wayne (subtotal)	26	185	618	2,508	3,337	738	1,261	0	1,338
Oklahoma									
Ouachita (subtotal)	0	35	227	205	467	300	167	0	0
Oregon									
Deschutes	18,047	8,407	1,087	458	27,999	2,466	20,175	71	5,287
Fremont	12,488	3,672	879	0	17,039	2,121	14,918	0	0
Klamath	12	208	682	936	1,838	996	842	0	0
Malheur	3,696	4,026	0	0	7,722	633	6,961	0	128
Mt. Hood	131	17,965	11,704	2,496	32,296	618	15,206	14,057	2,415
Ochoco	7,554	6,671	12	0	14,237	370	12,531	0	1,336
Rogue River	0	3,982	24,238	1,402	29,622	6,149	13,445	3,450	6,578
Siskiyou	71	1,993	19,355	4,497	25,916	6,472	8,338	5,135	5,971
Siuslaw	0	0	0	9,306	9,306	7,032	2,274	0	0
Umatilla	1,563	4,038	1,744	379	7,724	148	7,547	0	29
Umpqua	0	6,444	29,070	9,890	45,404	883	25,950	16,018	2,553
Wallowa-Whitman	14,122	44,010	4,084	0	62,216	7,097	54,198	0	921
Willamette	81	5,037	61,827	89,387	156,332	16,051	35,039	72,317	32,925
Winema	3,607	12,941	3,743	0	20,291	1,000	19,058	0	233
Subtotal	61,372	119,394	158,425	118,751	457,942	52,036	236,482	111,048	58,376

See footnotes at end of table.



Table 17--Timber stand improvement needs as of October 1, 1997, by State, national forest, cubic foot productivity class, and type of treatment 1/--  
Continued

State, Commonwealth, or Territory 2/ National Forest	Cubic foot productivity classes 3/				Total	Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+ Acres					
Pennsylvania									
Allegheny (subtotal)	102	763	832	374	2,071	2,071	0	0	0
Puerto Rico									
Caribbean (subtotal)	0	300	798	0	1,098	498	600	0	0
South Carolina									
Francis Marion (subtotal)	0	75	3,600	2,600	6,275	1,475	200	4,600	0
South Dakota									
Black Hills (subtotal)	4,765	533	0	0	5,298	0	5,298	0	0
Tennessee									
Cherokee (subtotal)	5	1,597	10	2,138	3,750	2,956	794	0	0
Texas									
NFs in Texas (subtotal)	0	635	1,779	1,378	3,792	3,421	371	0	0
Utah									
Ashley	8,681	0	0	0	8,681	0	8,681	0	0
Dixie	4,483	1,325	0	0	5,808	1,397	4,411	0	0
Fishlake	525	205	0	0	730	730	0	0	0
Manti-LaSal	0	11	1,331	200	1,542	0	1,542	0	0
Uinta	0	33	45	0	78	78	0	0	0
Wasatch-Cache	171	573	0	0	744	146	598	0	0
Subtotal	13,860	2,147	1,376	200	17,583	2,351	15,232	0	0
Vermont									
Green Mountain (subtotal)	744	1,200	109	0	2,053	795	1,258	0	0
Virginia									
George Washington & Jefferson (subtotal)	722	4,995	1,043	1,656	8,416	2,432	5,921	0	63
Washington									
Colville	443	5,495	7,461	817	14,216	1,144	12,704	0	368
Gifford Pinchot	0	24,800	32,844	8,073	65,717	312	40,392	14,114	10,899
Idaho Panhandle	1,319	392	4,698	2,739	9,148	126	9,006	0	16

See footnotes at end of table.



**Table 17—Timber stand improvement needs as of October 1, 1997, by State, national forest, cubic foot productivity class, and type of treatment 1/--  
Continued**

State, Commonwealth, or Territory 2/ National Forest	Cubic foot productivity classes 3/					Release subtotal	Thinning subtotal	Fertili- zation subtotal	Pruning subtotal
	0-49	50-84	85-119	120+	Total				
Acres									
Washington (continued)									
Mt. Baker-Snoqualmie	0	40	3,056	1,892	4,988	110	3,096	1,488	294
Okanogan	7,184	4,358	769	0	12,311	2,639	8,733	0	939
Olympic	0	669	14,853	1,904	17,426	89	14,023	2,589	725
Umatilla	105	7,357	111	24	7,597	100	7,143	0	354
Wenatchee	1,136	19,076	3,526	2,404	26,142	3,395	14,651	6,353	1,743
Subtotal	10,187	62,187	67,318	17,853	157,545	7,915	109,748	24,544	15,338
West Virginia									
George Washington and Jefferson	202	233	0	256	691	668	23	0	0
Monongahela	91	743	790	422	2,046	1,420	626	0	0
Subtotal	293	976	790	678	2,737	2,088	649	0	0
Wisconsin									
Chequamegon	121	465	177	88	851	751	0	0	100
Nicolet	47	557	301	0	905	344	120	0	441
Subtotal	168	1,022	478	88	1,756	1,095	120	0	541
Wyoming									
Bighorn	14,004	362	0	0	14,366	2,722	11,644	0	0
Black Hills	690	320	0	0	1,010	0	1,010	0	0
Bridger-Teton	0	282	860	0	1,142	0	1,142	0	0
Medicine Bow and Routt	7,864	162	13	0	8,039	364	7,675	0	0
Shoshone	75	204	0	0	279	116	163	0	0
Targhee	43	87	0	0	130	0	130	0	0
Wasatch-Cache	232	27	0	0	259	0	259	0	0
Subtotal	22,908	1,444	873	0	25,225	3,202	22,023	0	0
Total	261,303	486,232	577,364	486,691	1,811,590	418,226	1,146,293	154,910	92,161

1/ Data source is Reforestation & TSI Report (2400-K) Table 2. This information is required by the National Forest Management Act of 1976, Section 4d(1).

2/ Unlisted States had no timber stand improvement needs as of October 1, 1997.

3/ Cubic foot productivity class refers to the cubic feet of wood produced per acre per year in a natural unmanaged stand.



Table 18—Timber stand improvement program needs--fiscal years 1997-99 1/

	Current and Projected	Prior Year Projected 2/
	1,000 acres	1,000 acres
Fiscal year 1997		
10/1/96 balance	1,680	1,680
Actual needs	402	350
Actual accomplishments	-261	-274
10/1/97 balance	1,821	1,756
Fiscal year 1998		
10/1/97 balance	1,821	
New needs	400	
Projected accomplishments	-260	
10/1/98 balance	1,961	
Fiscal year 1999:		
10/1/98 balance	1,961	
New needs	350	
Projected accomplishments	-300	
Projected 10/1/99 balance 3/	2,011	

1/ Data source is Reforestation & TSI Needs Report (2400-K). This information is required by the National Forest Management Act of 1976, Section 4d(1).

2/ Projections in FY 1996 Report of the Forest Service

3/ This represents over 6 years of future projected accomplishments.



Table 19—Timber offered, sold, and harvested--fiscal years 1993-97 1/

	1997	1996	1995	1994	1993
<b>Offered</b>					
Volume (billion board feet)	4.0	4.0	4.0	3.4	4.6
Volume (billion cubic feet) 2/	(0.76)	(0.75)	(0.77)	(0.65)	(0.87)
<b>Sold</b>					
Number of sales	232,110	190,123	216,272	215,004	255,825
Volume (billion board feet)	3.7	3.4	2.9	3.1	4.5
Volume (billion cubic feet) 3/	(0.74)	(0.68)	(0.58)	(0.61)	(0.90)
Value (million dollars) 4/	494.0	450.5	369.7	508.9	774.9
<b>Harvested</b>					
Volume (billion board feet)	3.3	3.7	3.9	4.8	5.9
Volume (billion cubic feet) 3/	(0.66)	(0.74)	(0.77)	(0.96)	(1.18)
Value (million dollars) 4/	498.0	544.3	616.1	783.0	914.6

1/ Offer data comes from the Periodic Timber Sale Accomplishment Report. Sold and Harvest data comes from cut and sold report.

2/ Conversion from the 1990 RPA Program, which vary by region, except for FY 1996 and FY 1997, which come from the Sales Tracking and Accomplishment Reporting System (STARS).

3/ Until cubic information is available from cut and sold report, conversion from BBF to BCF is calculated at 5 BF per CF, then rounded. Data for FY 1993-96 has been changed to reflect this.

4/ Includes reforestation, stand improvement, and timber salvage deposits. Does not include value of roads or brush disposal.



Table 20—Timber offered, sold, and harvested by region--fiscal years 1996-97

	1997						1996					
	Offered 1/		Sold 2/ 3/		Harvested 4/		Offered 1/		Sold 2/ 3/		Harvested 4/	
	MMBF	MMCF	MMBF	MMCF	MMBF	MMCF	MMBF	MMCF	MMBF	MMCF	MMBF	MMCF 5/
Northern (R-1)	417.0	88.4	429.3	85.9	316.7	63.3	395.6	79.8	369.9	74.0	342.7	68.5
Rocky Mountain (R-2)	223.0	45.4	169.3	33.9	123.6	24.7	155.4	32.2	82.5	16.5	154.5	30.9
Southwestern (R-3)	123.9	21.6	88.9	17.8	83.3	16.7	34.3	5.5	33.4	6.7	46.3	9.3
Intermountain (R-4)	191.3	35.7	195.1	39.0	221.2	44.2	323.8	63.1	270.1	54.0	265.0	53.0
Pacific Southwest (R-5)	667.3	126.0	597.9	119.6	505.2	101.0	610.2	97.9	409.3	81.9	548.2	109.6
Pacific Northwest (R-6)	951.2	186.7	870.5	174.1	767.9	153.6	907.8	175.6	939.4	187.9	775.7	155.1
Southern (R-8)	682.4	124.1	606.6	121.3	571.6	114.3	743.2	135.1	678.2	135.6	847.4	169.5
Eastern (R-9)	568.1	91.5	568.3	113.7	587.0	117.4	577.0	93.3	529.6	105.9	621.3	124.3
Alaska (R-10)	177.0	43.5	161.7	32.3	108.8	21.8	268.2	66.9	72.0	14.4	123.5	24.7
Total 6/	4,001.1	762.8	3,687.7	737.5	3,285.3	657.1	4,015.5	749.3	3,384.4	676.9	3,724.6	744.9

1/ Sales offered for the fiscal year being displayed. Offer data comes from the Periodic Timber Sale Accomplishment Report.

2/ Includes sales offered in prior fiscal years and sold in the fiscal year being displayed, and miscellaneous small sales that were previously offered and/or sold and were reoffered and sold in the fiscal year being displayed. Does not include the volume of long-term sales released for harvesting.

3/ Sold and offered will not be equal since some sales were not sold (awarded) in the same fiscal year in which they were offered. Some sales did not receive any bids, or were withdrawn. Sold data comes from the cut and sold report. Conversion is 5 BF per CF until cubic data can be generated from cut and sold report.

4/ Includes the volume harvested on long-term sales. Harvest data comes from the cut and sold report. Conversion is 5 BF per CF until cubic data can be generated from cut and sold report.

5/ MMBF = million board feet; MMCF = million cubic feet

6/ Totals are actual; Regional figures are rounded and may not add to totals.



Table 21—Timber sold and harvested by State--fiscal year 1997 1/

State or Commonwealth 2/	Sales	Timber sold			Timber harvested		
		Volume		Bid value 3/ 1,000 dollars	Volume		Receipts 3/ 1,000 dollars
		MMBF 4/	MMCF 5/		MMBF 4/	MMCF 5/	
Alabama	434	26.46	5.29	3,045.96	31.36	6.27	3,843.13
Alaska	111	161.73	32.35	10,589.07	108.85	21.77	2,122.41
Arizona	10,468	62.24	12.45	6,011.81	60.80	12.16	5,808.44
Arkansas	1,960	141.74	28.35	26,771.54	141.99	28.40	23,371.42
California	36,392	604.13	120.83	68,414.51	503.76	100.75	65,708.38
Colorado	8,169	56.74	11.35	6,345.88	41.46	8.29	4,514.44
Florida	128	35.73	7.15	3,291.64	32.29	6.46	3,146.32
Georgia	777	11.24	2.25	469.71	27.09	5.42	2,366.50
Idaho	18,547	277.46	55.49	38,385.51	279.01	55.80	54,447.74
Illinois	63	0.13	0.03	7.42	0.21	0.04	3.73
Indiana	75	9.28	1.86	629.47	1.89	0.38	96.78
Kentucky	558	11.60	2.32	894.32	16.73	3.35	1,462.57
Louisiana	349	57.13	11.43	10,269.43	56.61	11.32	10,642.78
Maine	0	0.00	0.00	0.00	2.78	0.56	139.20
Michigan	506	186.56	37.31	13,155.87	190.11	38.02	10,865.57
Minnesota	34,168	138.42	27.68	8,126.41	110.99	22.20	6,214.76
Mississippi	551	145.84	29.17	26,394.42	101.19	20.24	18,307.62
Missouri	921	49.06	9.81	5,074.57	49.44	9.89	4,564.75
Montana	13,224	251.81	50.36	36,730.67	198.35	39.67	27,762.15
Nebraska	9	0.02	0.00	0.20	0.01	0.00	0.08
Nevada	1,690	2.41	0.48	40.36	6.78	1.36	163.81
New Hampshire	142	20.71	4.14	1,499.90	19.68	3.94	1,156.35
New Mexico	14,658	26.64	5.33	1,026.41	22.53	4.51	769.51
New York	11	0.02	0.00	0.34	0.19	0.04	19.86
North Carolina	919	22.45	4.49	1,354.87	24.46	4.90	1,979.97
North Dakota	41	0.04	0.01	0.45	0.04	0.01	0.45
Ohio	163	0.19	0.04	4.15	0.42	0.08	30.43
Oklahoma	52	12.01	2.40	2,617.11	19.06	3.81	3,437.84
Oregon	27,534	700.98	140.20	120,371.86	601.67	120.33	138,948.91
Pennsylvania	135	38.05	7.61	15,948.48	57.61	11.52	23,949.75
South Carolina	329	38.98	7.80	5,094.99	38.93	7.79	5,310.66
South Dakota	2,104	78.86	15.77	9,817.42	50.82	10.16	12,248.31
Tennessee	267	16.55	3.31	1,434.18	14.17	2.83	1,249.26
Texas	266	58.47	11.69	11,697.60	39.17	7.83	7,794.23
Utah	23,252	71.42	14.28	4,309.05	45.94	9.19	3,226.85
Vermont	80	5.74	1.15	1,074.56	3.22	0.64	394.26
Virginia	3,020	28.28	5.66	2,841.38	28.07	5.61	2,777.46
Washington	7,351	177.70	35.54	35,180.91	166.32	33.26	31,232.18
West Virginia	560	12.86	2.57	3,460.36	25.66	5.13	5,854.06
Wisconsin	901	107.42	21.48	6,391.93	125.30	25.06	7,211.15
Wyoming	21,225	40.60	8.12	5,250.42	40.33	8.07	4,812.54
Total 6/	232,110	3,687.68	737.54	494,025.14	3,285.29	657.06	497,956.60

1/ Data source is the cut and sold report. Excludes nonconvertible products such as Christmas trees, cones, burls, etc.

2/ States not listed had no timber sold or harvested in fiscal year 1997.

3/ Includes reforestation and stand improvement costs and timber salvage. Does not include value of roads or brush disposal.

4/ MMBF = million board feet.

5/ MMCF = million cubic feet. Conversion is 5 BF per CF until cubic data can be generated.

6/ Columns may not add due to rounding.



Table 22--Uncut timber volume under contract by region (all products)--fiscal years 1993-97

Region	1997 1/		1996 1/		1995 1/		1994 2/		1993	
	MMBF 3/	MMCF 4/	MMBF 3/	MMCF 4/	MMBF 3/	MMCF 5/	MMBF 3/	MMCF 5/	MMBF 3/	MMCF 5/
Northern (R-1)	650	163	568	142	555	136	706	173	1,086	266
Rocky Mountain (R-2) 6/	389	74	350	78	461	105	507	116	526	120
Southwestern (R-3)	88	18	84	17	116	19	135	23	148	25
Intermountain (R-4) 7/	405	71	417	73	512	105	417	85	483	99
Pacific Southwest (R-5) 8/	516	103	775	149	793	123	871	135	907	141
Pacific Northwest (R-6)	1,353	268	1,289	248	1,148	225	1,594	313	2,218	435
Southern (R-8)	907	165	871	158	1,159	216	1,140	213	1,253	234
Eastern (R-9)	1,363	220	1,388	225	1,475	239	1,607	260	1,665	269
Alaska (R-10) 9/	264	66	149	37	103	26	63	16	77	20
Total	5,935	1,148	5,891	1,127	6,322	1,194	7,040	1,334	8,363	1,609

1/ Data source is the Automated Timber Sale Accounting System (ATSA), rather than regional calculations.

2/ Some numbers have changed from 1994 Report due to replacement of regional information with more auditable data obtained from the ATSA.

3/ Volume (million board feet) in local scale.

4/ Conversions from million board feet to million cubic feet (MMCF) based upon actual regional conversion factors, which vary by region.

5/ Million cubic feet (MMCF) conversions based on 1990 RPA Program, which vary by region.

6/ FY 1996 data changed to reflect all products. FY 1995 data shows sawlog volume only, for which all products data is not available.

7/ FY 1994-1996 data shows sawlog volume only, for which all products data is not available.

8/ FY 1996 data shows sawlog volume only, for which all products data is not available.

9/ Long term sale not included.



Table 23--Timber sale funding--fiscal years 1995-97 1/

	1997	1996	1995
	<i>1,000 dollars</i>		
Timber sales management	196,000	188,641	180,555
Road construction (timber-related)			
Forest Service construction.....	59,000	57,000	51,807
Purchaser construction.....	(36,854)	(41,291)	(50,000)
Purchaser construction by the Forest Service.....	7,486	6,209	1,058
Subtotal, Road construction	66,486	63,209	52,865
Total, appropriated accounts	262,486	251,850	233,420
Special accounts 4/ Timber salvage sales.....	174,024	204,649	155,101
Total	436,510	456,499	388,521

1/ Data source is each fiscal year's final program budget advice, as reflected in the Budget Explanatory Notes.

2/ Includes General Administration expenses.



Table 24--Authorized grazing use in HM's by State--fiscal year 1997 1/

State, Commonwealth, or Territory 2/	Cattle	Domestic horses	Sheep	Wild horses	Wild burros	Total
Alabama	303	0	0	0	0	303
Arizona	786,151	8,209	88,730	0	552	883,642
Arkansas	11,467	0	0	0	0	11,467
California	316,881	3,207	146,392	9,537	480	476,497
Colorado	640,434	2,619	445,716	0	0	1,088,769
Florida	1,044	0	0	0	0	1,044
Georgia	5,212	0	0	328	0	5,540
Idaho	442,828	5,310	546,942	0	0	995,080
Illinois	101	0	0	0	0	101
Indiana	34	0	0	0	0	34
Kansas	36,580	0	0	0	0	36,580
Louisiana	8,018	0	0	0	0	8,018
Michigan	1,752	0	0	0	0	1,752
Minnesota	41	0	0	0	0	41
Mississippi	2,213	0	0	0	0	2,213
Missouri	26,850	0	0	0	0	26,850
Montana	420,609	10,000	49,374	350	0	480,333
Nebraska	90,953	8	0	0	0	90,961
Nevada	155,020	347	166,744	16,377	2,603	341,091
New Mexico	632,896	4,425	59,079	2,556	0	698,956
New York	7,751	0	0	0	0	7,751
North Dakota	386,250	3,421	0	0	0	389,671
Ohio	709	0	0	0	0	709
Oklahoma	19,874	60	0	0	0	19,934
Oregon	335,277	868	99,126	1,860	0	437,131
South Dakota	341,486	99	19,503	0	0	361,088
Texas	32,554	0	0	0	0	32,554
Utah	335,358	1,519	513,261	0	0	850,138
Vermont	108	0	0	0	0	108
Virginia	6,691	1,469	0	0	0	8,160
Washington	66,775	50	37,004	0	0	103,829
West Virginia	5,688	40	321	0	0	6,049
Wyoming	419,712	7,293	360,103	0	0	787,108
Total	5,537,620	48,944	2,532,295	31,008	3,635	8,153,502

1/ A head month (HM) is the billing unit for permitted grazing and is equal to 1 month's occupancy.

2/ Unlisted States had no Forest Service grazing program in 1997.



Table 25--Annual grazing statistics--fiscal year 1997

	Permittees 1/	Cattle		Horses and burros		Sheep and goats		Total	
		Number	HM's 2/ AUM's 3/	Number	HM's AUM's	Number	HM's AUM's	Number	HM's AUM's
Permitted to graze		1,264,909	6,281,578 7,915,553	21,091	46,937 55,621	988,002	2,966,760 859,178	2,274,002	9,295,275 8,830,352
Authorized to graze:									
Paid permits 4/	8,468	1,197,944	5,531,573 6,948,830	20,413	43,452 51,407	914,831	2,508,241 723,682	2,133,188	8,083,266 7,723,919
Free use	62	2,444	5,859 7,593	529	5,476 6,564	11,020	19,227 5,016	13,993	30,562 19,173
Private land permits	0	44,854	221,279 278,554	483	4,182 4,994	6,943	32,452 9,466	52,280	257,913 293,014
Crossing	6	556	188 246	211	16 20	5,863	4,827 1,196	6,630	5,031 1,462
<b>Total Authorized 5/</b>	<b>8,536</b>	<b>1,200,944</b>	<b>5,537,620 6,956,669</b>	<b>21,153</b>	<b>48,944 57,991</b>	<b>931,714</b>	<b>2,532,295 729,894</b>	<b>2,153,811</b>	<b>8,118,859 7,744,554</b>
Wild horses				2,744	31,008 31,008			2,744	31,008 31,008
Wild burros				300	3,635 3,635			300	3,635 3,635

1/ Permittees holding paid permits are not counted in other categories

2/ A head month is the billing unit for permitted grazing and is equal to 1 month's occupancy.

3/ An animal unit month (AUM) is the amount of forage required by a 1,000 lb. cow, or equivalent for 1 month

4/ Includes term and temporary grazing permits and all other paid permits (e.g., transportation, research, working animals, special uses, etc.).

5/ Private land and wild horse and burro data not included in totals



Table 26--Status of NFS acres within grazing allotments with range vegetation management objectives--fiscal year 1997

Region	Total number of allotments	Acres with range vegetation management objectives	Acres meeting or moving toward FP objectives	Acres not meeting or moving toward FP objectives	Acres of undetermined status	Acres monitored in FY 1997
Northern (R-1)	1,572	4,663,941	3,891,845	722,096	0	1,299,592
Rocky Mountain (R-2)	2,229	11,519,712	8,692,036	554,622	2,273,054	2,830,134
Southwest (R-3)	1,393	18,024,376	11,880,855	4,288,999	1,854,522	6,363,692
Intermountain (R-4)	1,706	19,476,758	15,323,356	1,353,981	2,799,421	5,224,334
Pacific Southwest (R-5)	731	7,121,389	3,470,826	167,404	3,483,159	1,625,628
Pacific Northwest (R-6)	724	10,243,094	6,715,367	290,736	3,236,991	2,821,981
Southern (R-8)	436	1,168,370	926,424	177,304	64,642	249,884
Eastern (R-9)	17	65,372	61,067	22	4,283	47,903
Total	8,808	72,283,012	50,961,776	7,555,164	13,716,072	20,463,148



**Table 26--Status of NFS acres within grazing allotments with range vegetation management objectives--fiscal year 1997--  
Continued**

Region	Total riparian acres	Riparian acres meeting or moving toward FP objectives 1/	Riparian acres not meeting or moving toward FP objectives 1/	Riparian acres of undetermined status	Riparian acres monitored in FY 1997
Northern (R-1)	192,339	142,958	49,381	0	56,724
Rocky Mountain (R-2)	518,113	355,152	37,224	125,737	116,103
Southwest (R-3)	244,785	152,618	61,577	30,590	81,640
Intermountain (R-4)	620,770	489,984	63,065	67,721	185,600
Pacific Southwest (R-5)	312,253	162,265	17,536	132,452	80,929
Pacific Northwest (R-6)	473,119	304,736	29,289	139,094	113,084
Southern (R-8)	59,711	30,917	2,294	26,500	2,816
Eastern (R-9)	110	110	0	0	110
Total	2,421,200	1,638,740	260,366	522,094	637,006



Table 27--Energy mineral workload and production--fiscal years 1993-97

Fiscal year	Acres under lease <i>Millions</i>	Oil production <i>Barrels</i>	1/	Gas production <i>1,000 cu.ft.</i>	1/	Coal production <i>Short tons</i>	1/
1993	9.6	10,500,000		210,000,000		90,000,000	
1994	6.5	12,400,000		325,400,000		114,500,000	
1995	6.0	12,000,000		325,000,000		115,000,000	
1996	5.9	10,000,000		300,000,000		115,000,000	
1997	5.4	10,000,000		250,000,000		115,000,000	

1/ Estimates.



Table 28--Road maintenance accomplishments--fiscal year 1997

Region	Cost	Miles fully maintained 1/	Total Miles 2/
	1000 dollars	Miles	Miles
Northern (R-1)	8,024	24,848	49,425
Rocky Mountain (R-2)	6,852	7,739	31,162
Southwestern (R-3)	7,479	14,847	52,420
Intermountain (R-4)	7,276	11,512	37,576
Pacific Southwest (R-5)	13,909	13,234	44,196
Pacific Northwest (R-6)	18,541	37,326	93,916
Southern (R-8)	8,338	17,206	35,347
Eastern (R-9)	6,337	13,769	30,386
Alaska (R-10)	1,504	1,559	3,548
Total 3/	78,260	142,040	377,976

1/ Includes miles of road maintained at a level consistent with current use.

2/ Road mile changes include roads acquired through land and right-of-way purchases, inventory revisions and new construction.

3/ Does not include \$1,988,000 of Washington Office funds and other funds.



Table 29--Road and bridge construction and reconstruction--fiscal year 1997

Region	Cost 1,000 dollars	From Appropriated Funds			
		Construction		Reconstruction	
		Roads Miles	Bridges No.	Roads Miles	Bridges No.
Northern (R-1)	7,828	1.3	0	93.6	4
Rocky Mountain (R-2)	5,886	0.3	0	18.6	3
Southwestern (R-3)	6,436	1.1	0	47.0	0
Intermountain (R-4)	6,568	0.1	0	16.3	0
Pacific Southwest (R-5)	8,178	0.4	1	20.7	1
Pacific Northwest (R-6)	20,176	2.5	1	102.9	13
Southern (R-8)	10,693	1.6	0	32.0	8
Eastern (R-9)	7,743	0.5	1	47.4	1
Alaska (R-10)	9,050	0.4	4	5.8	3
Total 1/	82,560	8.2	7	384.3	33

See footnotes at end of table.



Table 29--Road and bridge construction and reconstruction--fiscal year 1997

By Timber Purchasers 2/					
Cost <i>1,000 dollars</i>	Construction		Reconstruction		Region
	Roads	Bridges	Roads	Bridges	
	Miles	No.	Miles	No.	
4,676	59.5	1	811.8	1	Northern (R-1)
3,057	25.3	1	207.3	1	Rocky Mountain (R-2)
141	0.0	0	6.7	0	Southwestern (R-3)
2,066	44.5	0	164.8	1	Intermountain (R-4)
5,127	35.9	0	463.8	0	Pacific Southwest (R-5)
10,772	75.3	0	586.2	0	Pacific Northwest (R-6)
7,686	40.2	0	576.9	0	Southern (R-8)
2,583	21.8	1	179.1	0	Eastern (R-9)
746	56.1	13	85.8	7	Alaska (R-10)
36,854	358.6	16	3,082.4	10	

1/ Includes funds for engineering and program support for appropriated roads and timber purchaser roads. Does not include \$6,223,000 of Washington Office and other funds. Numbers may not add due to rounding.

2/ Does not include 33 miles of construction, 127.2 miles of reconstruction, construction of 8 bridges and reconstruction of 1 bridge turned back to the Forest Service (Purchaser Election Program).



Table 30—Purchaser election roads constructed by the Forest Service--fiscal year 1997

Region	Cost 1,000 dollars	Construction		Reconstruction	
		Roads	Bridges	Roads	Bridges
		Miles	No.	Miles	No.
Northern (R-1)	36	0.0	0	2.2	0
Rocky Mountain (R-2)	3	0.0	0	0.0	0
Southwestern (R-3)	0	0.0	0	0.0	0
Intermountain (R-4)	277	3.0	0	18.3	0
Pacific Southwest (R-5)	512	4.5	0	27.1	0
Pacific Northwest (R-6)	1,002	2.0	0	55.7	0
Southern (R-8)	504	1.0	0	20.1	0
Eastern (R-9)	7	0.0	0	0.0	0
Alaska (R-10)	5,034	22.5	8	3.8	1
Total 1/	7,375	33.0	8	127.2	1

1/ Does not include General Administrative expenses.

Table 31—Roads decommissioned, reconstructed, and constructed by the Forest Service-fiscal year 1997 1/

Region	Decommissioned Miles	Reconstruction Miles	Construction Miles
Northern (R-1)	257.6	907.6	60.8
Rocky Mountain (R-2)	162.7	225.9	25.6
Southwestern (R-3)	470.7	53.7	1.1
Intermountain (R-4)	104.0	199.4	47.6
Pacific Southwest (R-5)	31.9	511.6	40.8
Pacific Northwest (R-6)	593.2	744.8	79.8
Southern (R-8)	125.5	629.0	42.8
Eastern (R-9)	38.3	226.5	22.3
Alaska (R-10)	3.0	95.4	79.0
Total	1,786.9	3,593.9	399.8

1/ Reconstruction and construction miles accomplished are from Road Reconstruction and Construction Appropriation, and from Purchaser Credits and Purchaser Election inventory revisions, and new construction.





USDA, Forest Service, 00-CS-2780

*Horseback rider with pack horse.*

Ed Fox, 00-CS-0094

*Tubing on the National Forests.*



Table 32—Payment to States from national forest receipts--fiscal years 1995-97 1/

State, Commonwealth, or Territory	FY 1997	FY 1996	FY 1995
<i>Dollars actual</i>			
Alabama	964,419.35	2,049,877.80	1,468,155.91
Alaska	1,186,861.51	5,905,519.94	7,600,541.26
Arizona	2,214,865.38	1,631,749.08	3,182,123.93
Arkansas	5,954,070.48	6,648,382.02	4,938,171.81
California	33,962,946.42	36,157,525.82	43,045,670.58
Colorado	4,387,767.22	5,955,613.62	5,584,256.33
Florida	999,545.83	1,066,315.90	1,334,477.12
Georgia	698,906.48	907,778.79	758,829.26
Idaho	14,267,098.19	17,457,711.74	15,031,321.37
Illinois	17,395.99	27,727.21	32,531.32
Indiana	25,818.99	7,410.94	13,755.32
Kentucky	433,327.54	494,031.96	311,288.83
Louisiana	2,948,815.75	2,735,547.25	2,174,763.33
Maine	29,962.76	34,773.87	33,068.56
Michigan	2,759,083.22	2,384,195.64	2,504,904.39
Minnesota	2,921,889.97	3,179,462.34	2,977,331.33
Mississippi	4,919,049.16	8,276,153.99	7,224,011.21
Missouri	1,149,262.82	1,231,668.46	1,170,273.33
Montana	8,558,089.72	9,383,236.30	10,555,715.38
Nebraska	31,738.20	30,563.25	36,887.86
Nevada	387,649.20	298,540.38	322,014.89
New Hampshire	440,059.80	510,233.26	485,115.81
New Mexico	923,233.20	652,646.23	1,102,857.41
New York	6,389.69	6,375.28	5,776.98
North Carolina	653,563.62	692,308.54	941,657.23
North Dakota	63.44	82.02	122.88
Ohio	16,379.83	11,399.70	15,554.61
Oklahoma	1,016,643.21	883,416.06	643,567.28
Oregon	92,242,534.29	95,238,952.66	109,647,413.38
Pennsylvania	5,998,106.69	6,207,364.12	5,362,116.42
Puerto Rico	22,527.37	20,837.85	14,555.48
South Carolina	1,292,387.27	960,281.44	1,359,265.06
South Dakota	3,814,006.24	2,349,598.42	2,839,734.94
Tennessee	440,144.51	319,484.79	441,952.31
Texas	2,264,469.21	4,337,308.72	2,893,393.24
Utah	1,598,864.83	1,831,244.84	1,553,366.88
Vermont	225,878.43	256,960.60	177,634.44
Virginia	789,579.79	822,089.27	996,568.42
Washington	28,425,142.05	29,429,025.66	30,089,073.00
West Virginia	1,623,548.54	1,860,935.47	1,403,962.13
Wisconsin	1,861,110.53	1,621,386.26	1,327,757.01
Wyoming	1,849,057.36	1,844,048.53	1,881,106.70
Total	234,322,254.08	255,719,766.02	273,482,644.93

1/ Data Source: All Service Receipts - ASR-09-3.



Table 33--State and Private Forestry funding--fiscal years 1993-97

	1997	1996	1995	1994	1993
	<i>1,000 dollars actual</i>				
Appropriated accounts					
Forest pest management	48,165	32,971	34,902	38,541	40,605
Fire protection	18,001	17,001	13,689	17,148	16,885
Forest management and utilization	89,295	86,861	105,587	93,218	77,583
Special projects	0	0	0	19,200	21,155
Hurricane Andrew/Iniki	0	0	0	0	4,140
Subtotal	155,461	136,833	154,178	168,107	160,368
Transfer accounts					
Rural community fire protection	1,285	2,000	3,400	3,500	3,500
Watershed and flood prevention	267	139	500	2,020	2,020
Watershed planning	270	107 1/	230	303	303
Watershed operations	218	173 1/	151	410	410
Emergency watershed protection	1,989	0 1/	0	0	0
Resource conservation and development	542	494	594	555	512
River basin surveys and investigations	0	345 1/	570	830	850
Forestry Incentives Program 2/	631	633	662	1,169	1,245
Agricultural Conservation Program 2/	0	750	1,000	1,824	1,944
Pesticide assessment	355	361 1/	360	190	361
Subtotal	5,557	5,002	7,467	10,801 3/	11,145 3/
Total	161,018	141,835	161,645	178,908 3/	171,513 3/

1/ The numbers originally published in 1996 were estimates. They have been changed to reflect actual amounts.

2/ Includes only technical assistance allocated for the Forestry Incentives and Agricultural Conservation Programs (administered jointly by ASCS and FS).

3/ Totals appear different than those published in the FY 1996 Report of the Forest Service due to a formula error.



Table 34--Summary of State and Private Forestry accomplishments--fiscal years 1996-97

	Unit of measure 1/	1997 Actual	1997 Funded	Percent of 1997 Actual to 1997 Funded	1996 Actual	Percent of 1996 Actual to 1997 Actual
Appropriated accounts						
Forest pest management 2/						
Insect and disease management surveys	MM acres	772.0	661.0	116.8	657.0	85.1
Insect and disease suppression	MM acres	1.5			3.3	220.0
Insect and disease special projects	Projects	32.0			38.0	118.8
Forest management and utilization						
Forest resource management						
Forest land management plans	MM acres	2.1			3.2	152.4
Timber harvested	MM cubic feet	514.0			318.0	61.9
Reforestation 3/	M acres	867.0			761.0	87.8
Timber stand improvement 4/	M acres	220.0			419.0	190.5
Woodland owners assisted	M owners	187.0			215.0	115.0
Wood utilization	MM cubic feet				NA	NA
Seedling, nursery, and tree improvement	MM seedlings	50.0			482.0	964.0
Urban forestry assistance 5/	No. of assists	NA			41,705.0	NA
Transfer accounts						
	M approved					
Rural community fire protection, FmHA	Applications	NA			NA	
Watershed and flood prevention, NRCS	Projects	21.0			23.0	109.5
Watershed surveys and planning, NRCS 6/	Plans	16.0			57.0	356.3
Resource conservation and development, NRCS	Projects	258.0			214.0	82.9
Forestry Incentives Program, ASCS						
Reforestation	M acres	106.0			107.0	100.9
Timber stand improvement	M acres	22.0			19.0	86.4
Environmental Quality Incentives Program (EQIP) 7/						
Reforestation	M acres	145.0			77.0	53.1
Timber stand improvement	M acres	9.0			23.0	255.6

1/ M = thousand, MM = million.

2/ Includes accomplishments on National Forest System and other Federal lands, as well as State and private lands.

3/ Includes Conservation Reserve Program, Forestry Incentives Program and Agricultural Conservation Program accomplishments.

4/ Includes Forestry Incentives Program and Agricultural Conservation Program accomplishments.

5/ Areas represent more than one assistance per community; e.g., New York, Philadelphia, etc.

6/ Formerly known separately as watershed planning and river basin surveys and investigations

7/ Formerly Agricultural Conservation Program, ASCS



Table 35—Acres of State and private lands burned--calendar year 1996

State, Commonwealth, or Territory	Lightening fires Number	Person-caused fires Number	Total fires Number	Acres burned Number
Alabama	26	4,536	4,562	56,764
Alaska	54	511	565	81,669
Arizona	83	563	646	6,428
Arkansas	58	2,269	2,327	41,036
California	333	6,897	7,230	232,621
Colorado	264	2,235	2,499	48,498
Connecticut	0	34	34	94
Delaware	0	4	4	72
Florida	450	4,383	4,833	105,668
Georgia	217	9,786	10,003	38,306
Guam	0	284	284	848
Hawaii	2	128	130	466
Idaho	179	215	394	38,289
Illinois	3	259	262	5,478
Indiana	13	1,768	1,781	12,320
Iowa	5	838	843	2,907
Kansas	184	5,183	5,367	435,004
Kentucky	2	971	973	18,066
Louisiana	25	4,357	4,382	76,966
Maine	20	322	342	419
Maryland	5	323	328	1,182
Massachusetts	4	2,247	2,251	2,223
Michigan	6	334	340	2,100
Minnesota	18	1,317	1,335	17,966
Mississippi	3	5,523	5,526	81,415
Missouri	51	5,748	5,799	123,889
Montana	766	533	1,299	128,148
Nebraska	115	1,315	1,430	60,623
Nevada	51	109	160	101,806
New Hampshire	2	270	272	89
New Jersey	2	875	877	991
New Mexico	291	640	931	84,397
New York	1	81	82	213
North Carolina	49	4,215	4,264	15,952
North Dakota	49	397	446	11,681
Ohio	0	524	524	2,486
Oklahoma	18	3,639	3,657	633,239
Oregon	313	732	1,045	24,532
Pennsylvania	1	396	397	1,712
Rhode Island	0	85	85	136
South Carolina	62	4,413	4,475	27,940
South Dakota	56	70	126	4,752
Tennessee	2	2,342	2,344	24,407
Texas	96	2,526	2,622	76,581
Utah	410	322	732	178,507
Vermont	2	122	124	153
Virginia	10	846	856	2,771
Washington	93	718	811	10,885
West Virginia	4	648	652	6,725
Wisconsin	22	1,595	1,617	3,014
Wyoming	478	1,028	1,506	417,310
Total	4,898	89,476	94,374	3,249,744



Table 36—Summary of forest stewardship plans and acres accomplished by State--fiscal years 1996-97

State or territory 1/	1997		1996		(1991-97)	
	Plans	Acres	Plans	Acres	Cumulative plans 2/	Cumulative acres
Alabama	237	104,013	195	49,094	1,757	379,424
Alaska	48	334,093	57	256,963	227	2,428,495
American Samoa	62	401	63	55	183	1,229
Arizona	17	1,782	24	4,869	117	232,813
Arkansas	398	20,310	336	53,574	1,491	260,102
California	7	2,272	1	25,150	438	247,354
Colorado	71	18,696	167	18,225	1,662	380,622
Connecticut	45	3,814	9	1,109	209	25,215
Delaware	104	5,016	56	2,974	421	28,197
Florida	171	42,102	122	36,699	889	364,151
Georgia	286	60,886	367	92,139	2,103	673,484
Guam	20	18	22	198	119	375
Hawaii	0	0	0	0	28	5,166
Idaho	100	25,475	84	4,589	1,171	86,711
Illinois	776	27,949	751	25,144	6,738	291,998
Indiana	1,043	49,512	1,388	58,562	11,149	434,691
Iowa	484	17,981	730	26,236	6,116	196,944
Kansas	93	5,954	137	6,303	1,030	55,676
Kentucky	1,307	170,706	1,327	172,176	7,754	870,125
Louisiana	49	7,097	90	10,811	719	78,231
Maine	183	16,731	244	20,481	2,487	219,867
Maryland	365	17,344	378	24,237	3,162	176,598
Massachusetts	264	21,689	219	18,951	2,153	196,062
Michigan	271	37,487	313	43,022	2,136	290,882
Minnesota	708	38,990	724	76,356	7,089	660,230
Mississippi	0	0	31	9,634	690	154,101
Missouri	272	52,628	206	29,032	1,973	271,430
Montana	81	89,502	94	38,490	633	431,668
Nebraska	51	8,040	58	6,833	1,070	50,312
Nevada	10	4,707	6	552	163	70,061
New Hampshire	157	46,902	112	26,993	1,770	347,360
New Jersey	14	6,683	47	4,445	296	47,279
New Mexico	31	6,181	46	36,482	263	251,495
New York	989	116,066	1,221	133,493	11,907	1,053,176
North Carolina	154	17,939	226	35,356	1,239	203,796
North Dakota	158	6,942	132	5,151	1,027	51,913
Ohio	1,126	53,151	1,506	68,481	10,867	520,020
Oklahoma	101	22,720	101	20,128	601	174,829
Oregon	71	34,226	97	28,669	988	245,748
Pennsylvania	171	22,661	214	26,185	1,210	183,917
Puerto Rico	8	551	1	932	9	1,483
Rhode Island	16	784	0	0	264	10,960
South Carolina	210	42,608	300	77,240	1,833	504,643
South Dakota	84	3,360	99	5,164	820	33,812
Tennessee	218	30,607	221	41,685	1,253	236,001
Texas	308	171,346	108	19,111	1,469	404,145
Utah	1	3,000	2	117,080	84	195,769
Vermont	172	24,594	242	30,705	1,541	227,311
Virginia	617	86,148	726	106,247	4,104	647,065
Washington	581	30,627	457	20,780	2,269	166,474
West Virginia	292	71,347	205	51,499	2,434	374,675
Wisconsin	2,285	148,544	968	104,697	20,284	1,017,619
Wyoming	88	11,788	73	11,224	1,105	91,506
Total	15,357	2,143,970	15,303	2,084,205	329,576	16,553,210

1/ Unlisted States had no data.

2/ Landowner forest stewardship plans.



**Table 37—Summary of selected cooperative forest management and processing program activities--  
selected fiscal years — 1945-97**

Fiscal year	Woodland owners assisted <i>Number</i>	Timber sale assistance— volume marked <i>MBF 1/</i>	Loggers and processors assisted <i>Number</i>
1945	8,093	411,330	0
1950	22,828	518,566	0
1955	34,828	549,373	8,182
1960	82,188	569,178	8,099
1965	99,074	716,950	9,248
1970	115,197	1,225,520	13,620
1971	127,828	860,950	14,627
1972	274,001	955,627	5,290
1973	106,422	1,578,664	4,855
1974	117,990	907,311	5,353
1975	140,940	677,532	5,405
1976	105,184	596,599	15,318
1976 -77 (T.Q.) 2/	25,253	220,649	5,849
1977	133,619	921,171	29,101
1978	165,329	1,120,743	12,749
1979	183,585	755,103	11,393
1980	176,385	870,964	11,582
1981	164,279	683,181	18,609
1982	141,472	841,475	15,470
1983	136,265	872,125	8,717
1984	151,539	1,033,440	10,082 3/
1985	134,338	913,411	- 4/
1986	137,753	855,813	-
1987	158,353	1,225,896	-
1988	167,432	890,581	-
1989	153,855	1,242,564	-
1990	148,673	1,597,931	-
1991	153,090	1,697,861	-
1992	190,211	791,462	-
1993	190,256	950,178	-
1994	152,189	1,313,946	-
1995	192,618	1,274,902	-
1996	214,517	1,372,380	-
1997	186,824	1,864,805	-

1/ MBF = thousand board feet.

2/ Transition quarter.

3/ Not all States reported.

4/ - = inadequate data due to lack of State grants in wood utilization program.



**Table 38--Summary of selected cooperative forest management and processing activities by region--  
fiscal year 1997**

Assistance activity	Unit of measure	Regions					
		R-1 Northern	R-2 Rocky Mountain	R-3 South- western	R-4 Inter- mountain	R-5 Pacific Southwest	IF Puerto Rico
Woodland owners assisted	Number	2,130	9,403	378	492	1,711	915
Forest management plans 1/ prepared	Number	362	393	46	16	15	134
	Acres	24,536	29,697	16,308	6,173	8,153	1,329
Reforestation:							
Planting	Acres	4,207	16,148	376	677	10,116	349
Seeding	Acres	0	30	0	0	0	0
Management for natural 2/ regeneration	Acres	0	0	0	0	0	0
Timber stand improvement 3/	Acres	1,722	1,028	3	1,222	8,212	0
Outdoor recreation development	Acres	475	125	1,895	786	36	75
Wildlife habitat development	Acres	4,321	4,802	25,497	628	252	55
Forested range improvement	Acres	162	44	21,317	51	220	34
Timber sale assistance volume harvested	Thousand	15,639	8,520	0	970	215	0
	cubic feet	3,127	5,613	1,484	288	36	0
Urban forestry assistance activities	Urban areas assisted	302	1,159	226	101	258	86
Referrals to consulting foresters	Number	252	406	43	0	152	3

See footnote at end of table.



**Table 38—Summary of selected cooperative forest management and processing activities by region--  
fiscal year 1997--Continued**

Assistance activity	Unit of measure	Regions				Total
		R-6 Pacific Northwest	R-8 Southern	R-10 Alaska	NA Northeastern Area	
Woodland owners assisted	Number	4,853	87,977	423	78,542	186,824
Forest management plans1/ prepared	Number	137	19,134	3	4,148	24,388
	Acres	4,701	1,743,381	240	286,121	2,120,639
Reforestation:						
Planting	Acres	77,878	700,206	550	56,512	867,019
Seeding	Acres	0	3,478	1,000	56	4,564
Management for natural regeneration	Acres	0	0	0	0	0
Timber stand improvement	Acres	43,561	126,881	4,494	33,049	220,172
Outdoor recreation development	Acres	112	139,800	40	67,424	210,768
Wildlife habitat development	Acres	4,262	418,546	4,478	119,520	582,361
Forested range improvement	Acres	196	1,007	0	31,697	54,728
Timber sale assistance volume harvested	MBF	1,297,659	204,254	34,000	303,548	1,864,805
	MCF	356	277,441	5,666	219,696	513,707
Urban forestry assistance activities	Urban areas assisted	219	3,431	14	5,879	11,675
Referrals to consulting foresters	Number	831	9,919	14	11,302	22,922

1/ Forest stewardship program plans and acres separately recorded in table 36.

2/ No Data were collected for this activity. Data will be collected for FY 1998.

3/ TSI acres were for nonindustrial private landowners only.



**Table 39--Summary of selected cooperative forest management and processing activities by State--  
fiscal year 1997**

State, Commonwealth, or Territory	Woodland owners assisted <i>Number</i>	Reforestation assistance <i>Acres</i>	Timber stand improvement assistance <i>Acres</i>	Timber sale assistance-- harvest volume <i>1,000 cubic feet</i>	State nursery production <i>1,000 trees</i>
Alabama	14,783	140,435	75,044	0	194
Alaska	423	550	4,494	5,666	0
American Samoa	288	3	1	0	1
Arizona	147	367	3	1,484	0
Arkansas	4,797	45,000	0	583	0
California	506	10,000	2,000	0	40
Colorado	6,262	5,865	624	3,587	7
Comm. of N. Marianas	52	4	15	0	1
Connecticut	563	250	318	11,667	0
Delaware	409	579	0	1,318	64
Florida	2,533	70,069	1,153	539	3,261
Federated States of Micronesia	165	29	196	0	0
Georgia	7,970	0	0	9,226	1,086
Guam	31	21	0	0	37
Hawaii	216	9	0	36	200
Idaho	1,028	1,014	0	1,600	610
Illinois	15,655	6,831	0	1,196	587
Indiana	2,325	1,666	6,647	420	4,000
Iowa	5,322	6,017	0	994	346
Kansas	271	1,781	247	171	10
Kentucky	1,932	1,802	2,788	2,493	2,694
Louisiana	3,331	48,123	0	0	12,214
Maine	6,944	0	0	0	0
Maryland	3,420	0	0	5,033	15
Massachusetts	3,607	6	500	9,765	0
Michigan	1,350	3,000	500	166,667	0
Minnesota	4,468	5,629	2,937	214	2,593
Mississippi	27,781	138,138	31,540	0	0
Missouri	0	1,108	0	0	0
Montana	631	497	1,270	1,525	122
Nebraska	1,097	3,680	157	517	87
Nevada	290	475	62	151	3
New Hampshire	2,719	0	0	2,756	18
New Jersey	1,102	626	4,794	1,159	55
New Mexico	231	0	0	0	3
New York	4,678	1,650	0	293	0
North Carolina	9,021	75,976	5,292	0	2,600
North Dakota	471	2,696	452	2	8
Ohio	5,804	1,710	5,834	1,388	363
Oklahoma	890	3,715	3,633	32	99
Oregon	2,374	31,078	27,161	356	3,131
Palau	82	40	0	0	0
Pennsylvania	2,801	0	0	4,725	3,690
Republic of the Marshall Islands	371	10	6,000	0	0
Puerto Rico	913	349	0	0	5
Rhode Island	214	18	8	524	0
South Carolina	3,708	56,493	6,341	110	2,616
South Dakota	1,545	3,761	0	17	0
Tennessee	2,968	6,147	1,090	659	58
Texas	1,473	50,022	0	4,694	1,180



**Table 39--Summary of selected cooperative forest management and processing activities by State--  
fiscal year 1997--Continued**

State, Commonwealth, or Territory	Woodland owners assisted <i>Number</i>	Reforestation assistance <i>Acres</i>	Timber stand improvement assistance <i>Acres</i>	assistance-- harvest volume <i>1,000 cubic feet</i>	State nursery production <i>1,000 trees</i>
Utah	202	202	1,160	137	224
Vermont	3,481	45	4,745	4,516	0
Virgin Islands	2	0	0	0	0
Virginia	6,790	68,001	0	259,105	50
Washington	2,479	46,800	16,400	0	6,571
West Virginia	3,942	1,171	2,828	1,372	8
Wisconsin	9,738	22,500	3,938	5,689	900
Wyoming	228	1,061	0	1,321	0
<b>Total</b>	<b>186,824</b>	<b>867,019</b>	<b>220,172</b>	<b>513,707</b>	<b>49,751</b>



**Table 40--Small watershed protection accomplishments--fiscal years 1993-97 (Watershed Protection and Flood Prevention Act of 1954) 1/**

	Unit of measure	1997	1996	1995	1994	1993
Land treatment 2/						
Forest land	Acres	8402	2,193	1,905	16,806	38,322
Cropland	Acres	741	1,160	0	626	501
Pastureland	Acres	88	45	7,284	28	170
Total land treatment	Acres	9,233	3,398	9,189	17,460	38,993
Landowners assisted	Number	1186	1,348	1,465	1,483	3,534

1/ Accomplishments are limited to activities accomplished solely by small watershed protection program funds.

2/ Reported in land use categories consistent with those reported by the Natural Resources Conservation Service.

**Table 41--Flood prevention accomplishments--fiscal years 1993-97 (Watershed Protection and Flood Prevention Act of 1954) 1/**

	Unit of measure	1997	1996	1995	1994	1993
Land treatment 2/						
Forest land	Acres	6541	8,682	63,028	6,335	2,196
Cropland	Acres	20	1,668	575	0	- 3/
Pastureland	Acres	78	92	83	40	-
Total land treatment	Acres	6,639	10,442	63,686	6,375	2,196
Landowners assisted	Number	1183	2,265	2,461	1,528	1,452

1/ Accomplishments are limited to activities accomplished solely by small watershed protection program funds.

2/ Reported in land use categories consistent with those reported by the Natural Resources Conservation Service.

3/ - = no accomplishments reported for FY 1993 on cropland and pastureland.



**Table 42—Research accomplishments--fiscal years 1994-97**

Research Subject Area 2/	Research Accomplishments 1/			
	1997	1996	1995	1994
<b>Vegetation Management &amp; Protection Research</b>				
Fundamental Plant Science	270			
Silvicultural Applications	206			
Quantitative Analysis	73			
Forest & Rangeland Management	115			
Forest Operations Engineering	59			
Insects/Diseases/Exotic Weeds	279			
Fire Science	112			
Subtotal 3/	1,114	1,289	1,408	1,619
<b>Wildlife, Fish, Water &amp; Atmospheric Sciences Research</b>				
Terrestrial Wildlife Habitat	281			
Aquatic Habitat	109			
Watershed	253			
Atmospheric Sciences	83			
Subtotal 3/	726	741	768	657
<b>Resource Valuation and Use Research</b>				
Economics	113			
Urban Forestry	37			
Wilderness	16			
Social/Cultural	144			
Forest Product Utilization & Processing	240			
Forest Product Safety/Human Health	108			
Subtotal 3/	658	705	651	692
<b>Inventory &amp; Monitoring</b>				
Forest Inventory & Analysis	78			
Forest Health Monitoring	22			
Monitoring Methods/Applications	18			
Subtotal 3/	118	212	138	169
General	NA	58	56	71
Grand total	2,616	3,005	3,021	3,208

1/ Research accomplishments include: books, papers in series, journal articles, proceedings, general technical reports, special reports, patents, videos, computer programs, dissertations and theses, and other similar accomplishments.

2/ Research subject area categories reflect the Research Budget and Attainment Information System, established in FY 1997.

3/ Subtotals for 1994-96 have been adjusted, as needed, to correspond with Research Budget and Attainment Information System work activities.



Table 43—Forest Research funding--fiscal years 1993-97

	1997	1996	1995	1994	1993 1/
<i>1,000 actual dollars</i>					
Appropriated funds					
Forest protection research				41,089	40,833
Resource analysis research				35,932	34,998
Forest management research				40,887	39,594
Forest environment research				41,978	41,755
Forest products and harvesting research				25,697	25,535
Ecosystem research				7,500	0
Research foundation program 2/			111,376		
Forest resources and management research 2/			74,178		
Ecosystem research 2/			7,955		
Forest and Rangeland Research 3/	179,781	177,854			
Subtotal	179,781	177,854	193,509	193,083	182,715
Transfer from timber salvage sales 4/	0	0	0	1,963	0
Research construction (subtotal)	2,000	2,000	4,316	4,910	3,572
Total appropriated accounts	181,781	179,854	197,825	199,956	186,287
Reimbursable accounts (subtotal)	10,993	14,898		19,578	13,713
Grand total	192,774	194,752	197,825	219,534	200,000

1/ Numbers in FY 1993 column have been corrected from those published in 1993 Annual Report.

2/ In FY 1995, the budget structure was revised from six major budget line items to three. The three BLI's for FY 1995 overlap those used the previous years.

3/ In FY 1996, the budget structure was revised from three BLI's to one.

4/ FY-1994 transfer from timber salvage sale funds to cover cost of Voluntary Separation Incentive (Buyout).



Table 44—Extramural research funded through Forest Service Research appropriations--fiscal years 1996-97

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Type of recipient	1997		1996	
	1,000 dollars	Number of grants	1,000 dollars	Number of grants
Domestic grantees				
Universities and colleges:				
Land Grant research institutions	15,360	512	6,711	238
1890 Land Grant and predominately black institutions	558	10	388	16
Other non-Land Grant institutions	1,375	71	5,620	209
Subtotal, universities and colleges	17,293	593	12,719	463
Other domestic				
Profit organizations	10	2	12	2
Nonprofit institutions and organizations	1,591	55	759	27
Federal, State, and local governments	825	34	997	18
Private individuals	72	10	96	10
Small business innovation research	0	0	0	0
Industrial firms	0	0	0	0
Subtotal, other domestic	2,498	101	1,864	57
Total, domestic	19,791	694	14,583	520
Foreign grantees				
Universities and colleges	0	0	0	0
Profit & nonprofit institutions and organizations	79	7	15	5
Private individuals	6	2	20	7
Total, foreign grantees	85	9	35	12
Grand total	19,876	703	14,618	532



Table 45--Summary of Forest Service human resource programs--fiscal year 1997

	Program funding	Value of work accomplished	Persons served	Women	Minority	Work accomplished	Placement	Return per dollar invested
	Million dollars	Million dollars	Number	Percent	Percent	Person years	Percent	Dollars
Youth Conservation Corps 1/	Unfunded	1.9	632	45	20	93	N/A	1.05
Job Corps 2/	95.0	20.0	8,903	17	46	3,808	83	N/A
Senior Community Service Employment Program 2/	24.2	39.9	5,055	43	23	2,393	18	1.65
Volunteers in the National Forests 3/	Unfunded	38.6	112,384	37	10	2,193	N/A	N/A
Hosted programs	Unfunded	15.9	7,793	25	38	839	N/A	N/A
Youth forest camps 4/	Unfunded	0.1	25	44	24	3	N/A	N/A
Total	119.2	116.4	134,792	N/A	N/A	9,329	N/A	N/A

1/ Funds were not directly appropriated for Youth Conservation Corps; the Congress earmarked not less than \$1 million to be expended from funds available to the Forest Service. The Forest Service operated a \$1.8 million YCC program.

2/ Statistics for 1996 program year (July 1, 1996, through June 30, 1997).

3/ Statistics include 180 Touch America Project (TAP) enrollees and 129 international volunteers.

4/ Operated as a summer program through partnership with the National Forest Foundation.



**Table 46—Number and percent of all permanent and excepted-conditional employees by race/national origin and gender as of September 28, 1997 1/**

Race/National Origin	Women	Men	Total	Percent
American Indian/Alaskan Native	555	864	1,419	4.8
Asian/Pacific Islander	225	234	459	1.5
African American	619	589	1,208	4.1
Hispanic	598	1,069	1,667	5.6
Caucasian	9,659	15,287	24,946	84.0
<b>Total</b>	<b>11,656</b>	<b>18,043</b>	<b>29,699</b>	<b>100.0</b>
Targeted Disabilities	--	--	378	1.3
<b>Percent by Gender</b>	<b>39.2</b>	<b>60.8</b>		

1/ Excepted-conditional include cooperative education students and excepted appointments of people with disabilities.



Table 47-Workforce EEO profile by pay levels, as of September 28, 1997 1/

GS Pay Level	Race/National Origin											
	American Indian/ Alaskan Native		Asian/ Pacific Islander		African American		Hispanic		Caucasian		Total	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
GS-1					1		1		2		3	1
GS-2					1				3	3	3	4
GS-3					7	5	7	1	64	24	78	30
GS-4	54	32	20	10	38	26	65	49	562	165	739	282
GS-5	120	113	27	9	77	70	106	148	1,340	857	1,670	1,197
GS-6	72	81	13	10	79	34	62	75	889	673	1,115	873
GS-7	90	135	35	16	108	104	125	154	1,567	1,719	1,925	2,128
GS-8	16	29	5	3	26	10	10	27	329	367	386	436
GS-9	117	190	43	51	97	118	93	207	2,609	3,304	2,959	3,870
GS-10		10	1	1		3	1	6	15	186	17	206
GS-11	53	119	36	47	67	64	64	147	1,516	3,194	1,736	3,571
GS-12	15	52	24	40	63	49	36	98	128	1,859	266	2,098
GS-13	10	33	18	25	36	50	22	58	415	1,372	501	1,538
GS-14		12	3	12	8	8	1	28	125	473	137	533
GS-15					4	5	2	7	30	236	36	248
GS-18 & SES					3	5	1		9	29	13	34
WG, WL & WS	8	58		10	6	36	2	64	56	826	72	994
Total	555	864	225	234	619	589	598	1,069	9,659	15,287	11,656	18,043

1/ Grand total is 29,699 (includes permanent full-time and permanent part-time employees only, including WG, WL, WS)



Table 48—Number of paid employees by occupational category for selected fiscal years 1/

Occupation	1997	1996	1995	1994	1993
Professional	11,038	11,327	11,441	11,830	12,987
Administrative	4,512	4,519	4,627	4,330	4,684
Technical	19,134	20,172	21,970	23,094	25,165
Clerical	2,821	3,050	3,234	3,312	3,962
Other	195	312	353	558	673
Wage System	2,073	2,042	2,060	2,446	2,480
Total	39,773	41,422	43,685	45,570	49,951
Full-time equivalents (FTE's) 2/	36,311	37,205	38,330	40,612	42,798

1/ The above data include permanent, summer, seasonal, cooperative education students, stay-in-school, and many other types of employees. These data do not include employees excluded from agency ceilings, such as volunteers (who are not paid salary), the Senior Community Service Employment Program (who are paid by the Department of Labor), and employees in special employment categories.

2/ One Full-Time Equivalent (FTE) equals 2,080 paid hours of employment. These data include emergency FTE's.

Table 49—Number of paid employees by type of appointment for selected fiscal years

Type of Appointment	1997	1996	1995	1994	1993
Permanent 1/	29,558	30,347	30,676	30,978	34,588
Nonpermanent 2/	10,215	11,075	13,009	14,592	15,363
Total	39,773	41,422	43,685	45,570	49,951

1/ Permanent are those employees who have career or career-conditional appointments.

2/ Nonpermanent employees who count in agency ceilings, such as summer, temporary, excepted, term, seasonal and similar types of employees. These data do not include volunteers (who are not paid salary) and the Senior Community Service Employment Program (who are paid by the Department of Labor), and employers in special employment categories.



Table 50--Summary statement of receipts and obligations--fiscal years 1996-97 1/

	1997		1996		Percent change 1996 to 1997	
	Receipts	Obligations	Receipts	Obligations	Receipts	Obligations
National Forest programs	<i>1,000 constant 1997 dollars</i>					
Cash receipts:						
Sale of timber and use of other forest resources	197,194		263,606		(34)	0
Use of National Grasslands & land utilization areas	24,370		16,740		31	0
Timber sale area betterment (K-V) 2/	140,329		161,829		(15)	0
Cooperative work for others	39,580		43,869		(11)	0
Brush disposal	19,381		18,265		6	0
Miscellaneous (sales, rentals, damages, etc.) 3/	9,603		6,972		27	0
Restoration of forest lands and improvements	579		5,043		(771)	0
Golden Eagle passports	608		236		61	0
Timber salvage sales	177,221		185,756		(5)	0
Operation and maintenance of quarters	6,904		6,629		4	0
Gifts, donations, and bequests	791		1,335		(69)	0
Subtotal	616,560		710,280		(15)	0
Cash receipts from NFS lands collected in conjunction with, and deposited to, accounts of other agencies	157,582		175,433		(11)	0
Noncash income (roads built by timber purchasers)	36,854		42,319		(15)	0
Total cash receipts	810,996	0	928,032		(14)	0
Obligations						
Operating costs		2,717,882		3,265,765	0	(20)
Capital outlay		3,455		9,438	0	(173)
Total obligations	0	2,721,337		3,275,203	0	(20)
Other Forest Service programs						
Forest Research programs:						
Forest research		189,610	0	193,182	0	(2)
Research construction		8	0	(12)	0	250
Cooperative research work		(4)	0	(2)	0	50
Gifts, donations, and bequests for forest rangeland research		720	5	1,290	0	(79)
Tongass Timber Supply Fund		0	0	0	0	0
Subtotal	0	190,333	5	194,458	0	(2)

See footnotes at end of table.



Table 50--Summary statement of receipts and obligations--fiscal years 1996-97--Continued

	1997		1996		Percent change 1996 to 1997	
	Receipts	Obligations	Receipts	Obligations	Receipts	Obligations
	<i>1,000 constant 1997 dollars</i>					
State and Private Forestry programs						
State and Private Forestry cooperation		151,654	0	161,401	0	(6)
Rural community fire protection		1,275	0	2,049	0	0
Flood prevention and watershed protection		2,051	0	1,906	0	7
Licensee programs (Woodsy Owl and Smokey Bear)	159	62	47	63	70	(2)
Forestry Incentives and other programs 4/		1,447	0	1,424	0	2
Subtotal	159	156,488	47	166,843	70	(7)
International Forestry Programs						
International Forestry	0	0	0	548	0	0
Subtotal	0	0	0	548	0	0
Human Resource programs						
Job Corps		93,904	0	89,428	0	5
Senior Community Service Employment		26,848	0	19,558	0	27
Subtotal	0	120,752	0	108,986	0	10
Grand total, all programs	811,155	3,188,910	928,084	3,746,038	(14)	(17)
Cash receipts distributed to States, counties and Puerto Rico						
Payments to States and Puerto Rico		233,056	0	260,779	0	(100)
Payment to Minnesota		1,267	0	1,308	0	(3)
Payments to counties (National Grasslands and Land Utilization Areas)		4,645	0	5,241	0	(11)
Total	0	238,968	0	267,328	0	0
Internal equipment and supply service (Working Capital)	137,615	169,562	121,598	136,977	13	24
Reimbursements for work performed for government and others included above	0	185,037	0	382,899	0	(52)

1/ Obligations were incurred on a "charged-as-worked" basis.

2/ K-V = Knutson-Vandenberg.

3/ Includes sale of personal property and acquisitions of lands to complete land exchanges.

4/ Includes Resource Conservation and Development, and Pesticide Impact assessment funds transferred from Agricultural Research Service.



Table 51--Statement of receipts--fiscal years 1993-97

	1997	1996	1995	1994	1993
<i>1,000 dollars actual</i>					
Receipts from sale and use of forest resources					
Timber and forest products	197,194	195,000	303,046	431,615	425,105
Grazing	6,972	7,352	8,756	11,056	10,518
Land uses	8,149	4,664	6,246	5,960	5,455
Recreation	45,275	47,618	46,427	47,762	49,396
Power	1,756	1,894	1,607	1,657	1,435
Minerals	25,408	17,007	20,663	16,817	11,669
Subtotal	284,754	273,535	386,745	514,867	503,578
Receipts from deposits for expenditures on national forests					
Timber sale area betterment	140,329	157,897	177,951	225,381	269,056
Timber salvage sales	177,221	181,243	135,640	163,281	193,747
Brush disposal	19,381	17,821	16,135	22,498	23,849
Restoration of Forest Service lands and improvements	579	4,920	972	358	940
Cooperative work	39,580	42,803	37,246	43,023	41,134
Operation and maintenance of quarters	6,904	6,468	6,504	6,452	6,879
Gifts, donations, and bequests	791	1,303	496	965	1,222
Subtotal	384,785	412,455	374,944	461,958	536,827
Other receipts					
Miscellaneous (sales, rents, etc.)	8,664	6,390	6,644	6,552	12,360
Golden Eagle passports	608	230	200	133	9
Sale of personal property	0	0	0	0	8
Royalties from sale of Smokey Bear and Woodsy Owl products	159	46	122	82	34
Acquisition of lands to complete land exchanges	939	413	1,398	212	151
Gifts, donations, and bequests for forest rangeland research	55	5	5	18	6
Subtotal	10,425	7,084	8,369	6,997	12,568

See footnotes at end of table.



Table 51--Statement of receipts--fiscal years 1993-97--Continued

	1997	1996	1995	1994	1993
<i>1,000 dollars actual</i>					
Other income					
Estimated collections by Department of Energy for power licenses on proclaimed national forest land	2,174	1,931	1,778	2,159	4,317
Estimated collections by Department of the Interior for mineral leases on proclaimed national forest land	155,408	169,240	253,600	213,812	207,861
Value of roads built by timber purchasers applied in lieu of cash payment for timber	36,854	41,291	47,896	68,275	64,747
Subtotal	194,436	212,462	303,274	284,246	276,925
Total	874,400	905,536	1,073,332	1,268,068	1,329,898
Other net deposits					
Monies advanced on active timber sales 1/					
Balance from previous year	151,141	193,563	190,554	217,585	173,835
Deposited current year	560,235	568,106	644,347	873,321	954,989
Transferred to other accounts	(548,438)	(610,528)	(641,338)	(900,352)	(911,239)
Balance on deposit	162,938	151,141	193,563	190,554	217,585
Amounts deposited pending disposition 2/					
Balance from previous year	19,292	29,868	18,680	25,079	43,530
Deposited current year	(6,810)	(8,065)	13,195	(5,411)	(17,208)
Transferred to other accounts	(1,343)	(2,511)	(2,008)	(988)	(1,243)
Balance on deposit	11,139	19,292	29,867	18,680	25,079
Subtotal	174,077	170,433	223,430	209,234	242,664
Total	1,048,477	1,075,969	1,296,762	1,477,302	1,572,562

1/ Timber sale deposits made by timber purchasers.

2/ Budget clearing account.



Table 52--Statement of receipts--fiscal year 1997

	National forests	Oregon and California grant lands	National grasslands & L.U. Areas 1/ 1,000 dollars	Other	Total
Receipts from sale and use of forest resources					
Timber and forest products	190,673	6,521	0		197,194
Grazing	6,372	2	598		6,972
Land uses	7,921	5	223		8,149
Recreation	45,152	95	28		45,275
Power	1,743	0	13		1,756
Minerals	1,900	0	23,508		25,408
Subtotal	253,761	6,623	24,370	0	284,754
Receipts from deposits for expenditures on national forests					
Timber sale area betterment	140,329				140,329
Timber salvage sales	177,221				177,221
Brush disposal	19,381				19,381
Restoration of Forest Service lands and improvements	579				579
Cooperative work	39,580				39,580
Operation and maintenance of quarters	6,904				6,904
Gifts, donations, and bequests	791				791
Subtotal	384,785	0	0	0	384,785
Other receipts					
Miscellaneous (sales, rents, etc.)				8,664	8,664
Golden Eagle passports				608	608
Royalties from sale of Smokey Bear and Woodsy Owl products				159	159
Acquisition of lands to complete land exchanges				939	939
Gifts, donations, and bequests for forest rangeland research				55	55
Subtotal	0	0	0	10,425	10,425

See footnote at end of table.



Table 52--Statement of receipts--fiscal year 1997--Continued

	National forests	Oregon and California grant lands	National grasslands & L.U. Areas 1/ 1,000 dollars	Other	Total
Other income					
Estimated collections by Department of Energy for power licenses on proclaimed national forest land	2,174				2,174
Estimated collections by Department of the Interior for mineral leases on proclaimed national forest land	155,408				155,408
Value of roads built by timber purchasers in lieu of cash	36,854				36,854
Subtotal	194,436	0	0	0	194,436
Total	832,982	6,623	24,370	10,425	874,400
Other net deposits					
Monies advanced on active timber sales					
Balance from previous year	151,141				151,141
Deposited current year	560,235				560,235
Transferred to other accounts	(548,438)				(548,438)
Balance on deposit (subtotal)	162,938	0	0	0	162,938
Amounts deposited pending disposition					
Balance from previous year	19,292				19,292
Deposited current year	(6,810)				(6,810)
Transferred to other accounts	(1,343)				(1,343)
Balance on deposit (subtotal)	11,139				11,139
Total	174,077	0	0	0	174,077
Grand total	1,007,059	6,623	24,370	10,425	1,048,477

1/ Land utilization projects.



Table 53--Statement of obligations--fiscal year 1997 1/

	Total 2/	Work for other public agencies (reimbursables) 1,000 dollars
<b>National Forest System</b>		
Protection and management	1,039,425	49,363
Wildland Fire Management	706,412	90,766
Cooperative work for others	42,874	
Cooperative law enforcement	61,661	
Flood prevention and watershed protection	124	
Restoration of forest lands and improvements	34,377	
Reforestation and timber stand improvement	30,345	(2)
Timber sale betterment (K-V) 3/	11,936	
Brush disposal	20,877	
Timber salvage sales	174,029	
Range betterment	3,454	
Acquisition of lands, Forest Service	1,412	
Acquisition of lands, Land and Water Conservation Fund	35,115	
Construction of forest roads and trails	189,645	4,867
Timber purchaser roads constructed by the Forest Service	7,486	
Restoration of roads, Federal Highway funds	50,431	
Road construction, Mount St. Helens, highway trust	0	
Trail maintenance	389	
Tongass Timber Supply Fund	952	
General Administration	267,137	
Operation and maintenance of quarters	6,945	
Hazardous waste management	7,405	1,046
Resource management timber receipts	61	
Strawberry Valley land transfer	0	
Emergency Pest Suppression	4,117	
L&WCF Recreation fees	1,068	
Southwest Alaska Economic Development	20,000	
Recreation Fee Demo	3,662	
<b>Subtotal 2/</b>	<b>2,721,337</b>	<b>146,042</b>
<b>Research</b>		
Tongass Timber Supply Fund	0	
Forest research	189,610	10,993
Construction of research facilities	8	
Cooperative research	(4)	
Gifts, donations, and bequests for forest and rangeland research	720	
<b>Subtotal 2/</b>	<b>190,333</b>	<b>10,993</b>

See footnotes at end of table.



Table 53--Statement of obligations--fiscal year 1997--Continued

	Total 2/	Work for other public agencies (reimbursables) 1,000 dollars
State and Private Forestry		
Cooperation and general forestry assistance	151,654	1,017
Resource conservation and development	466	
Rural community fire protection grants	1,275	
Flood prevention and watershed planning	2,051	
Licensee programs - Smokey Bear and Woodsy Owl	62	
Pesticide Impact Assessment	351	
Forestry incentives	630	
Subtotal 2/	156,488	1,017
International Forestry Programs		
International Forestry		
Subtotal 2/	0	0
Human Resource Programs	93,904	136
Job Corps	26,848	26,848
Senior Community Service Employment Program		
Subtotal 2/	120,752	26,984
Total 2/	3,188,910	185,037
Internal equipment and supplies service		
Working Capital Fund (subtotal)	169,562	169,562
Grand total 2/	3,358,473	354,599

1/ Obligations were incurred on a "charged-as-worked" basis.

2/ May not add due to rounding.

3/ K-V = Knutson-Vandenberg Act.



Table 54—Statement of obligations--fiscal years 1993-97

	1997	1996	1995	1994	1993
<i>Million dollars actual</i>					
National Forest System	2,721.3	3,195.6	2,871.8	3,436.1	2,553.2
Forest Research	190.3	189.7	209.9	218.6	300.1
State and Private Forestry	156.5	162.8	157.8	179.0	182.0
International Forestry	0	0.6	5.5	7.6	
Human Resource Programs	120.8	106.3	113.3	102.3	90.1
Working Capital Fund	169.6	133.7	167.6	140.4	119.8
<b>Total</b>	<b>3,358.5</b>	<b>3,788.7</b>	<b>3,525.9</b>	<b>4,084.0</b>	<b>3,245.2</b>



Table 55--Summary statement of values and obligations--fiscal year 1997

Item	Units	1/	Quantity	Average value per unit	Total value
			Number		Million dollars
Value					
Minerals 2/					
Common variety	-	3/	-	-	300.0
Locatable	-	3/	-	-	1,000.0
Leasable					
Oil	BBL		10,000,000	19.83	198.3
Gas	MCF		250,000,000	2.21	552.5
Coal	Tons		115,000,000	9.81	1,128.2
Others	-	3/	-	-	
Timber Harvested	MBF		3,285,290	151.58 4/	498.0
Recreation	RVD	5/			
Wilderness and primitive areas	RVD	5/			
Wildlife and fish					
Recreation	AD	5/			
	Pounds		200,000,000	1.30	260.0
Range	HM	6/	8,083,266	1.01	8.2
Total value					3,945.2
Expenditures					
National Forest System					2,721.3
Forest Research					190.3
State and Private Forestry					156.5
International Forestry					0.0
Human Resource Programs					120.8
Working Capital Fund					169.6
Total expenditures					3,358.5
Net value, total					586.7
Net value, National Forest System only					1,223.9

1/ BBL=barrels; MCF=thousand cubic feet; MBF=thousand board feet; RVD=recreation visitor day; AD=activity day; HM=head month

2/ Minerals data estimated.

3/ Units for common variety and locatable minerals are not standard.

4/ Actual value at time of sale.

5/ Data not available for FY 1997.

6/ A head month is one month's occupancy by an adult animal. The fee for an adult sheep is 1/5 the fee for cattle.





USDA, Forest Service

*Sign marking entrance to wilderness.*

Curt Given 89-CS-1667

*Hikers in Douglas Wilderness.*



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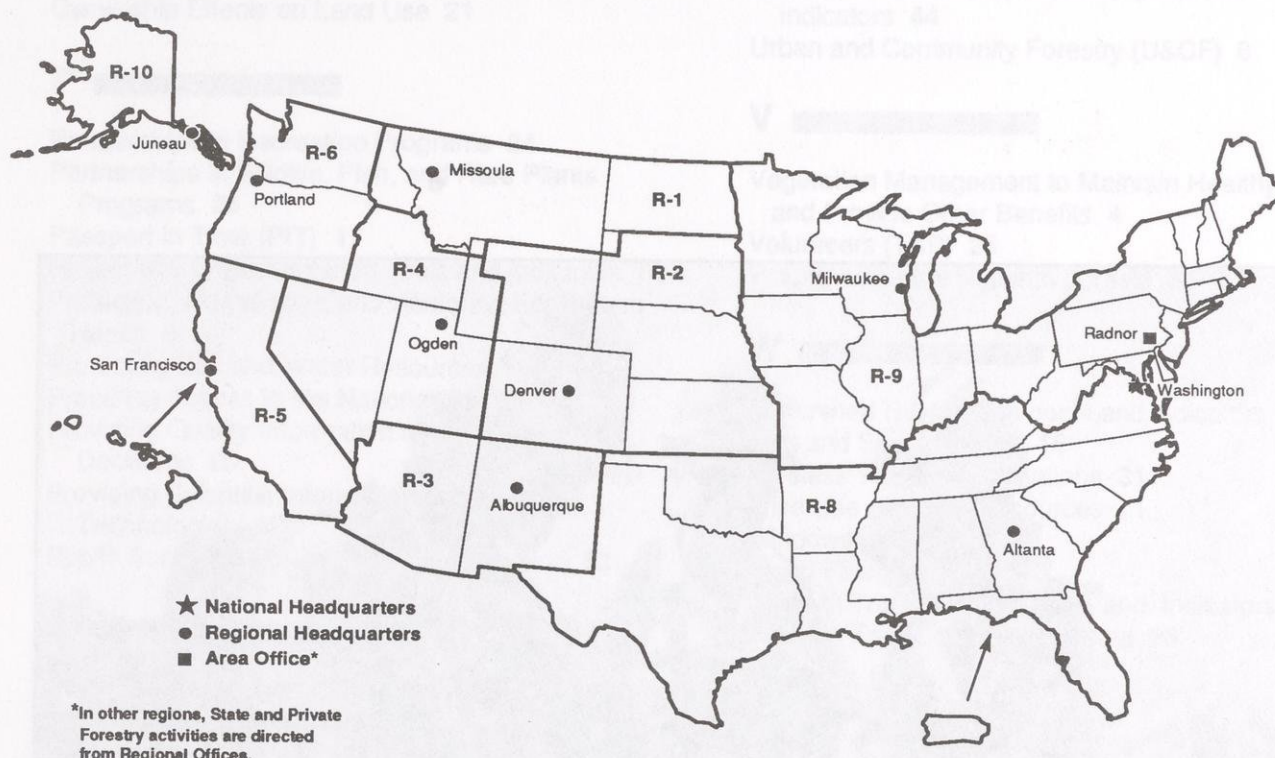


USDA, Forest Service

Firefighters, Idaho Star Gulch Fire



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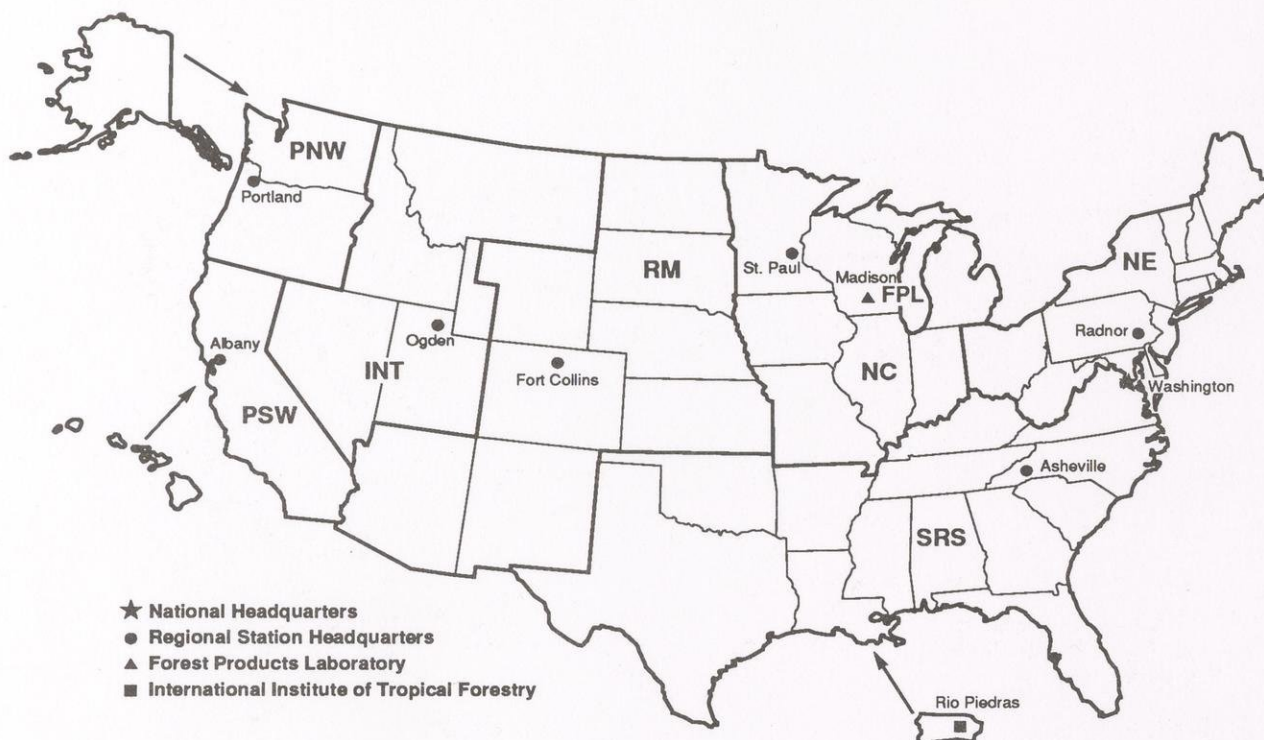
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# Research International Institute of Tropical Forestry

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