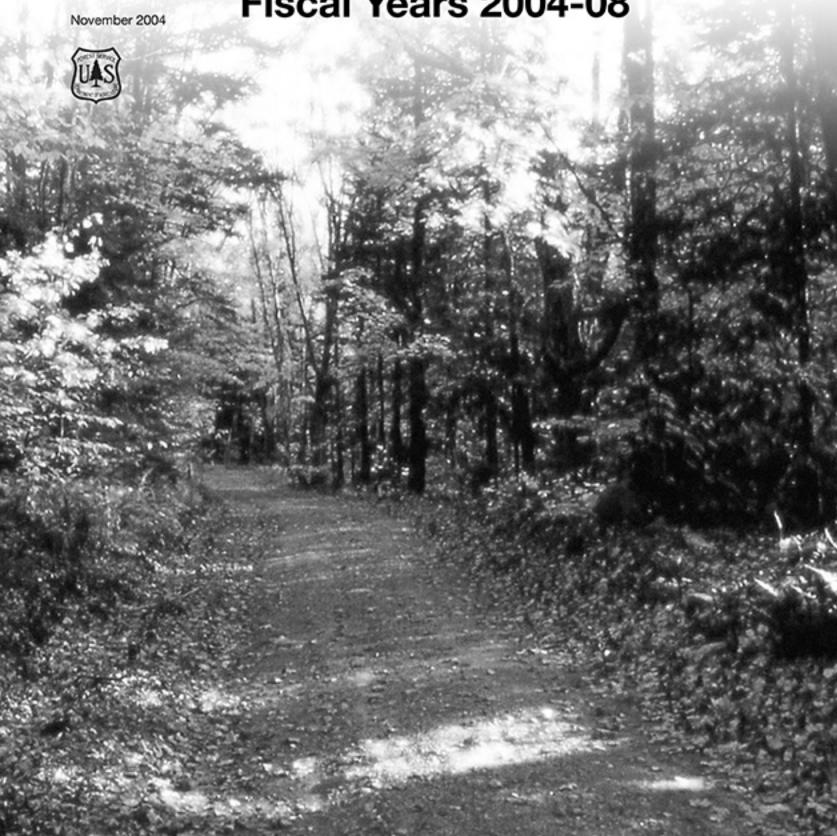


United States Department of Agriculture

Forest Service

FS-810

USDA Forest Service Strategic Plan for Fiscal Years 2004-08





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November 2004



# **USDA Forest Service Strategic Plan for Fiscal Years 2004-08**

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# Chief's Perspective: Strategic Plan of the USDA Forest Service

The U.S. Department of Agriculture (USDA) Forest Service is proud of its tradition of decentralization. Many decisions are made on the ground, at the district level, and that's the way it should be. From the very beginning, however, our outfit has also had a common strategic direction. Gifford Pinchot called it conservation, and we still call it that today.

Conservation has taken various forms to address changes in forest and grassland ecosystems, our changing understanding of those ecosystems, and the changing needs of the people we serve. We capture those changes through our Strategic Plan and its periodic updates. This Strategic Plan is for fiscal years 2004–08.

One definition of conservation is "to protect and enhance the Nation's natural resource base and environment." That's the way it's stated in the USDA Strategic Plan (Goal 5), and our Strategic Plan is tied to this conservation ideal.

Through conservation, we can improve the current and future quality of life for the American people by protecting and enhancing clean air, abundant water, and healthy habitat on our Nation's forests and grasslands. Four threats to conservation—growing fire danger due to hazardous fuel buildups; the spread of invasive species; loss of open space; and unmanaged recreation, particularly the unmanaged use of off-highway vehicles—increasingly keep us from delivering clean air, abundant water, and healthy habitat.

Our plan addresses these threats by providing six goals with performance measures to evaluate our success. The six goals don't capture every part of our mission, but they do give us a way to focus on the most important issues we will face in the next 5 years.

What ultimately counts is what happens on the ground. Based on the resources we expect to have available, we propose annual targets to reach the six goals. Success depends partly on finding new ways of doing business, including community-based solutions, and new ways to work in partnership with governmental and nongovernmental organizations, procedural reforms, and workforce training to help us function more collaboratively.

Our Strategic Plan is one of the many tools we have to guide our work. It provides a framework for our **annual performance plan**, which guides agency units in proposing project-level work, while they consider the opportunities and challenges detailed in their **local unit plans**. The proposed work is then summarized in a **performance budget** and funded through **annual budget appropriations**. Finally, we have a **performance and accountability report**, which details the ways that people benefit from our work.

Yes, the Forest Service has a rich heritage of decentralized decisionmaking, but we also have a common strategic direction. The challenges ahead are great—it will take years to reach our conservation goals—but we know what needs to be done to make measurable progress toward sustaining the Nation's forests and grasslands. We have a roadmap to follow to achieve our mission and you'll find it on the following pages.

Dale M. Bornon

Dale N. Bosworth Chief

# **Mission and Goal Summary**

#### **Forest Service Mission**

The mission of the U.S. Department of Agriculture (USDA) Forest Service is based on the relationship between the American people and their natural resource heritage. The relationship is founded on the principles of sustaining U.S. natural resources for future generations, producing personal and community well-being, and providing economic wealth for the Nation.

The Forest Service is widely recognized for managing the more than 192 million acres in the National Forest System (NFS). The agency also enhances the lives of all Americans through its Research and Development (R&D) and State and Private Forestry programs. Forest Service International Programs promotes an exchange of forest and range management experiences with partners in the global community.

The Strategic Plan embodies the Forest Service's many areas of responsibility, as captured in the agency's mission statement:

"The mission of the USDA Forest Service is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations."

Sustainable management of the Nation's forests and grasslands is complex. To assess resource conditions and trends and track the long-term results of Forest Service management, the agency uses criteria and indicators developed to evaluate national progress in sustainable resource management. Scientific indicator assessments help identify issues that are considered in agency planning efforts (appendix A).

Executive leadership determines priorities to focus Forest Service programs on the issues that are the most critical—those that need a concentrated effort. When Forest Service units establish future budgets, or execute existing budgets, employees plan their work programs to maximize their contributions to the agency's strategic goals. Together, the work plans focus each unit's effort to address the goals identified in this Strategic Plan Update.

Each goal has specific objectives to guide its implementation. Each goal also includes performance measures that will be tracked to measure the results of the annual work. Baselines, where available, provide a benchmark to evaluate performance.

The mission of the USDA Forest Service is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations.

# **Summary of Goals**

- **1. Reduce the risk from catastrophic wildland fire.** Restore the health of the Nation's forests and grasslands to increase resilience to the effects of wildland fire.
- **2. Reduce the impacts from invasive species.** Restore the health of the Nation's forests and grasslands to be resilient to the effects of invasive insects, pathogens, plants, and pests.
- **3. Provide outdoor recreational opportunities.** Provide high-quality outdoor recreational opportunities on forests and grasslands, while sustaining natural resources, to meet the Nation's recreational demands.
- **4. Help meet energy resource needs.** Contribute to meeting the Nation's need for energy.
- **5. Improve watershed condition.** Increase the number of forest and grassland watersheds that are in fully functional hydrologic condition.
- **6.** Conduct mission-related work in addition to that which supports the agency goals. Conduct research and other mission-related work to fulfill statutory stewardship and assistance requirements.

# Goals and Objectives for Fiscal Years (FYs) 2004–08

Goal 1: Reduce the risk from catastrophic wildland fire

[USDA Objectives 5.1 and 5.2]

Outcome: Reduced risk to communities and the environment from catastrophic wildland fire by improving the health of the Nation's forests and grasslands.

"A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Wildland Fire Strategy" (Department of the Interior and Department of Agriculture 2001) describes the need to reduce the risk of wildland fire to communities and the environment for the following reasons:

- Increased population growth in the wildland-urban interface places more citizens and property at risk.
- Many of the traditional approaches to land management and suppression of wildland fire have resulted in dense, diseased, or dying forests, which have contributed to severe fires and increased threats to communities and ecosystems.
- Post-fire ecosystem health problems from insects, pathogens, and invasive species are increasing.

Miles of rural landscape once buffered urban areas from the effects of wildland fire. Now forests are increasingly part of the wildland-urban interface, creating a greater challenge for fire protection. Recent research has identified 73 million acres of NFS lands and 59 million acres of privately owned forest land at high risk of ecologically destructive wildland fire (Condition Classes 2 and 3, Fire Regime I and II) (Schmidt and others 2002). Achieving the outcome of this goal requires prioritizing the accomplishment of a variety of sound forest management objectives, including the following:

- 1. **Objective.** Improve the health of NFS lands that have the greatest potential for catastrophic wildland fire.
  - **a. Performance Measure.** Number of acres of hazardous fuels treated in the wild-land-urban interface and percent identified as high priority through collaboration consistent with the 10-Year Comprehensive Strategy Implementation Plan (hereafter referred to as the 10-Year Plan).

FY 2002 Baseline: 764,367 (100 percent) FY 2008 Target: 2,000,000 (100 percent) Outcome:
Reduced risk to
communities and
the environment from
catastrophic wildland
fire by improving
the health of the
Nation's forests and
grasslands.

**b. Performance Measure.** Number of acres in the wildland-urban interface treated per \$1 million gross investment.

FY 2002 Baseline: 10,399 FY 2008 Target: 10,918

**c. Performance Measure.** Number of acres of hazardous fuels treated in Condition Classes 2 or 3 in Fire Regimes 1, 2, or 3 outside the wildland-urban interface, and percent identified as high priority through collaboration consistent with the 10-Year Plan.

FY 2002 Baseline: 293,127 (40 percent) FY 2008 Target: 2,000,000 (100 percent)

**d. Performance Measure.** Number of acres treated outside the wildland-urban interface per \$1 million gross investment.

FY 2002 Baseline: 8,069 FY 2008 Target: 8,472

e. **Performance Measure.** Number of acres in Condition Classes 2 or 3 in Fire Regimes 1, 2, or 3 treated by all land management activities that improve condition class, and percent that were identified as high priority through collaboration consistent with the 10-Year Plan.

FY 2002 Baseline: 605,000 (100 percent)
FY 2008 Target: 885,780 (100 percent)

f. Performance Measure. Percent of mechanically treated acres to reduce hazardous fuels with byproducts used.

FY 2002 Baseline: 31 percent FY 2008 Target: 40 percent

**g.** Performance Measure. Number of acres brought into stewardship contracts.

FY 2002 Baseline: 5,000 FY 2008 Target: 380,000

- **2. Objective.** Consistent with resource objectives, wildland fires are suppressed at a minimum cost, considering firefighter and public safety, benefits, and values to be protected.
  - **a. Performance Measure.** Percent of unplanned and unwanted wildland fires controlled during initial attack.

FY 2002 Baseline: 98 percent FY 2008 Target: 99 percent

<sup>&</sup>lt;sup>1</sup> Because the data were not collected in prior years, this baseline is projected for 2004 based on planned accomplishment levels.

**b. Performance Measure.** Number of acres burned by unplanned and unwanted wildland fires.

FY 2002 Baseline: 841,677 FY 2008 Target: 799,593

**c. Performance Measure.** Percent of large fires in which the value of resources protected exceeds the cost of suppression.

FY 2002 Baseline: 38 percent FY 2008 Target: 55 percent

- **3. Objective.** Assist 2,500 communities and those non-NFS lands most at risk with developing and implementing hazardous fuels reduction and fire prevention plans and programs.
  - **a. Performance Measure.** Percent of communities at risk with completed and current fire management plans or risk assessments.

FY 2002 Baseline: 3 percent FY 2008 Target: 30 percent

b. Performance Measure. Number of acres covered by partnership agreements.

FY 2002 Baseline: 154,341 FY 2008 Target: 925,450

# Means and Strategies

To accomplish the above objectives, the Forest Service proposes to take these steps:

- Complete Federal fire management plans and cooperate in developing State plans in compliance with Federal Wildland Fire Policy.
- Develop nationally comparable definitions for identifying at-risk wildland-urban interface communities and a process for prioritizing communities within State or tribal jurisdiction.
- Improve procedures for developing and implementing fuels treatment and forest restoration projects in collaboration with Federal, State, tribal, and local governments and the private sector.
- Provide technical and financial assistance to rural communities, tribes, organizations, and enterprises to increase their commercial use of hazardous fuels to reduce the risk of catastrophic wildland fire.
- Improve fire suppression decisionmaking training for line officers, fire suppression officers, and other responsible officials.
- Provide supplemental assistance for the training, equipment, safety awareness, and services provided by rural, volunteer, and other firefighters who work in the wildland-urban interface, and report that assistance to Congress.

- Use streamlined and consistent processes, such as combined analyses and clearances, for compliance of fuels treatment and restoration activities with the National Environmental Policy Act, the Endangered Species Act, and the Clean Air Act.
- Use one Internet-based information management system for all five Federal wildland firefighting agencies and participating States or tribal entities to provide the status of wildland fires, fire regimes and condition classes, hazardous fuels treatment, and thinning projects.
- Communicate with non-Federal landowners about methods and funding sources to achieve and maintain low-risk fuels conditions on their properties.
- Develop guidance to weigh the short-term risks against the long-term benefits of fuels treatment and restoration projects.
- Provide modeling, inventory, and monitoring tools to assess potential and actual compliance with smoke management plans.

#### **External Factors**

Factors outside the control of the Forest Service that might affect progress toward this long-term objective include the following items:

- Increasing demands on the agency's human and financial resources from large fire operations.
- Accelerated tree mortality from drought, insects, and disease.
- Continuing expansion of the wildland-urban interface.
- Legal and regulatory constraints limiting the full range of fuels management options.

# Goal 2: Reduce the impacts from invasive species

[USDA Objectives 5.1 and 5.2]

Outcome: Improve the health of the Nation's forests and grasslands by reducing the impacts from invasive species.

Invasive species—particularly insects, pathogens, plants, and aquatic pests—pose a long-term risk to the health of the Nation's forests and grasslands by interfering with natural and managed ecosystems, degrading wildlife habitat, reducing the sustainable production of natural-resource-based goods and services, and increasing the susceptibility of ecosystems to other disturbances such as fire and flood. Often when new organisms are introduced into ecosystems and their natural enemies do not follow, the organisms multiply rapidly and serious consequences occur. Habitat fragmentation (the division of forest and grassland habitat into smaller, more isolated patches) limits containment and eradication of invasive species.

Economic impacts to forests and grasslands from invasive species currently exceed \$4 billion per year, without considering the "cost" of environmental consequences, such as loss of native fauna and flora in large areas. The best defense against invasive species is either preventing their introduction or aggressively eradicating newly detected pest species. The Forest Service is accomplishing both courses of action by implementing the National Invasive Species Management Plan in cooperation with other USDA agencies, other Federal departments, States, tribes, and private sector partners.

Achieving the outcome of this goal requires focusing on the following objective:

- **1. Objective.** Improve the effectiveness of treating selected invasive species on the Nation's forests and grasslands.
  - **a. Performance Measure.** Availability and reliability of the annual National Risk Assessment survey.

FY 2002 Baseline: 61 percent reliable FY 2008 Target: 92 percent reliable

**b. Performance Measure.** Acres treated for selected invasive species.

FY 2002 Baseline: 1,537,368 FY 2008 Target: 2,068,000

**c. Performance Measure.** Percent change in the rate of spread of selected invasive species.

FY 2002 Baseline: 50-percent reduction for gypsy moth FY 2008 Target: 50-percent reduction for gypsy moth

#### **Outcome:**

Improve the health of the Nation's forests and grasslands by reducing the impacts from invasive species.

# Means and Strategies

To accomplish the objective, the Forest Service proposes to take these steps:

- Implement and support actions to prevent and detect the introduction of invasive species into newly disturbed ecosystems.
- Manage populations of established invasive species using prevention, suppression, and restoration tactics to reduce impacts and restore ecosystems.
- Involve partners in developing a nationally consistent risk-modeling approach that enhances the use of risk maps at national, State, regional, and local levels.
- Implement risk-based detection surveys to identify forest vulnerability to invasive species based on availability of susceptible hosts, suitable environmental conditions for invasion, and the likely movement pathways of invasive species.
- Cooperate with other Federal, State, tribal, and nongovernmental partners in conservation education efforts that increase public awareness of invasive species and encourage support and participation in management actions.

#### External Factors

Factors outside the control of the Forest Service that might affect progress toward this long-term objective include the following items:

- Increasing demands on the agency's human and financial resources and the resulting reduced ability to work with and through other jurisdictions and stakeholder groups.
- Accelerated susceptibility and mortality of forest trees from drought, insects, and pathogens.
- Introduction of new species of insects, pathogens, and invasive plants into the United States.
- Legal and regulatory constraints limiting the full range of insect and disease management treatments.

# Goal 3: Provide outdoor recreational opportunities

[USDA Objective 5.1]

Outcome: Provide high-quality outdoor recreational opportunities on forests and grasslands, while sustaining natural resources, to help meet the Nation's recreational demands.

By mid-century, the Nation's population is projected to increase by nearly 50 percent. Simultaneously, public access to privately owned forest land is expected to continue to decline. This situation will increase the pressure on public lands to provide additional recreational opportunities. If public lands are to continue to provide additional recreational benefits without experiencing unacceptable impacts to resources, emphasis must be placed on effective management solutions. In particular, it is critical that the agency improve management of off-highway-vehicle access and use on NFS lands to preserve high-quality experiences for all recreational users.

Achieving the outcome of this goal requires focusing on the following objectives:

- **1. Objective.** Improve public access to NFS land and water and provide opportunities for outdoor health-enhancing activities.
  - a. Performance Measure. Miles and percent of trail network maintained to standard.<sup>2</sup>

 FY 2002 Baseline:
 71,400 (60 percent)

 FY 2008 Target:
 71,400 (60 percent)

**b. Performance Measure.** The 3-year average number of fatalities on the passenger car road network.

FY 2003 Baseline: 28.7 FY 2008 Target: 0

**c. Performance Measure.** Number and percent of facilities maintained to standard.

 FY 2002 Baseline:
 22,400 (56 percent)

 FY 2008 Target:
 24,000 (60 percent)

**d. Performance Measure.** Number and percent of facilities and sites that meet accessibility standards.<sup>3</sup>

 FY 2003 Baseline:
 10,000 (25 percent)

 FY 2008 Target:
 20,000 (50 percent)

Outcome:

Provide high-quality outdoor recreational opportunities on forests and grasslands, while sustaining natural resources, to help meet the Nation's recreational demands.

<sup>&</sup>lt;sup>2</sup> The 2008 target is based on an expected annual increase of 1 percent in trail maintenance funding and increased collaboration by partners in trail maintenance. Without this increase in funding and trail maintenance by partners, 64,974 miles of trail would meet maintenance standards in 2008, a 9-percent decline from the baseline.

<sup>&</sup>lt;sup>3</sup> The 2003 baseline is based on estimates from the national forests against the totals of 25,000 administrative facilities and 18,000 developed recreation facilities/sites. The infrastructure database has been revised to address accessibility. When the inventory is completed in 2005, the baseline and 2008 target will be adjusted if necessary.

e. Performance Measure. Number of rights-of-way acquired to provide public access.

 FY 2002 Baseline:
 148

 FY 2008 Target:
 300

- 2. Objective. Improve the management of off-highway-vehicle use to protect natural resources, promote safety of all users, and minimize conflicts among various uses through the collaborative development and implementation of locally based travel management plans.
  - **a. Performance Measure.** Percent of NFS lands covered by travel management implementation plans.

FY 2002 Baseline: 66 percent FY 2008 Target: 75 percent

## Means and Strategies

To accomplish the above objectives, the Forest Service proposes to take these steps:

- Research national demand for and capacity trends of the Nation's supply of outdoor recreational and tourism opportunities by public and private providers.
- Continue facility master planning to determine the environmentally and financially sustainable mix of facilities that best meets customer demand.
- Maintain public access to NFS land and water and ensure that access and travel management direction identifies all areas available for off-highway-vehicle use and that the direction is consistent with applicable forest plans.
- Provide tourism and marketing technical assistance to the tourism industry and other partners through Recreation One-Stop and the National Recreation Reservation Service Interagency Office.
- Increase the number of rural communities, organizations, and enterprises actively
  participating with the Forest Service and other natural resource agencies to provide
  outdoor recreational opportunities.
- Deliver substantial recreational opportunities by administering recreation special-use permits in a timely manner.
- Encourage healthy outdoor lifestyles through conservation education and collaboration with State and local recreation and tourism planners.

## **External Factors**

Factors outside the control of the Forest Service that might affect progress toward this long-term goal include the following items:

- Increasing demands on recreational resources due to population growth.
- Legal and regulatory constraints limiting the full range of recreational resource management options.
- Accelerated land parcelization adjacent to national forests and grasslands.
- Development of recreational facilities on public and private lands, which is a function of market demand and is correlated to national and regional economic activities.

# Outcome: Consider opportunities for energy development and the supporting infrastructure on forests and grasslands to help meet the Nation's energy needs.

# Goal 4: Help meet energy resource needs

[USDA Objective 5.1]

Outcome: Consider opportunities for energy development and the supporting infrastructure on forests and grasslands to help meet the Nation's energy needs.

The Nation's forests and grasslands play a significant role in meeting America's need for energy production and transmission. Unless otherwise restricted, NFS lands are available for energy exploration, development, and infrastructure occupancy (for example, well sites, pipelines, and transmission lines).

Achieving the outcome of this goal requires focusing on the following objectives:

- Objective. Work with other agencies to identify and designate corridors for energy
  facilities, improve the efficiency of processing permit applications, and establish
  appropriate land tenure (including transferability clauses) in easements and other
  authorizations to provide for long-term project viability.
  - **a. Performance Measure.** Percent of energy facility and corridor applications approved within prescribed timeframes.

FY 2002 Baseline: 35 percent FY 2008 Target: 50 percent

- **2. Objective.** Stimulate commercial use of small-diameter trees from NFS lands for biomass energy.
  - **a. Performance Measure.** Total biomass from small-diameter and low-value trees used for energy production.

FY 2002 Baseline: 1,753,615 tons FY 2008 Target: 2,256,000 tons

# Means and Strategies

To accomplish the above objectives, the Forest Service proposes to take these steps:

- Improve energy conservation by developing and transferring new technologies and increasing the use of alternative energy sources.
- Develop the potential of short-rotation woody crops as a renewable source of biomass energy; stimulate the local industrial infrastructure development required for harvesting, processing, and marketing biomass for energy; and develop marketing options to improve domestic wood use, especially the use of small-diameter, lowvalue trees and residues.
- Eliminate unnecessary, redundant, or conflicting requirements for processing energy and energy-related proposals to increase efficiency, reduce overall cost, and meet established timeframes for processing energy and energy-related proposals.
- Provide technical and financial assistance to rural communities, tribes, organizations, and enterprises to increase their use of biomass for energy and other products and markets to improve forest and grassland health.

#### External Factors

Factors outside the control of the Forest Service that might affect progress toward this long-term objective include the following items:

- Increasing demands on the agency's human and financial resources.
- Expansion of human developments into forest and grassland ecosystems, which promotes parcelization and results in de-emphasizing the commodity production of forest and grassland products.
- Legal and regulatory constraints limiting the full range of energy resource management options.

# **Goal 5: Improve watershed condition**

[USDA Objectives 5.1 and 5.2]

#### Outcome:

Increase the area of forest and grassland watersheds in fully functional and productive condition.

Outcome: Increase the area of forest and grassland watersheds in fully functional and productive condition.

An estimated 3,400 towns and cities currently depend on National Forest System watersheds for their public water supplies. National forests and grasslands contain more than 3,000 public water supplies for campgrounds, administrative centers, and similar facilities. Communities that draw source water from national forests and grasslands provide water to 60 million people, or one-fifth of the Nation's people. Although most forested watersheds are in fully functioning or satisfactory condition, many streams on NFS lands do not meet State water quality standards. Some municipal watersheds, especially in the West, are at risk from catastrophic wildland fire and damage resulting from excessive use. Land parcelization compounds these problems. The loss of valuable corridors connecting NFS land with other undisturbed tracts of land increases the difficulty of effectively managing watershed conditions. Sustaining functional watershed conditions over time maintains the productive capacity of the Nation's land and water.

Achieving the outcome of this goal requires focusing on the following objectives:

- 1. **Objective.** Assess and restore high-priority watersheds and maintain riparian habitat in these watersheds.
  - **a. Performance Measure.** Number of inventoried forest and grassland watersheds in fully functioning condition as a percent of all watersheds.

FY 2002 Baseline: 27 percent FY 2008 Target: 41 percent

**b. Performance Measure.** Acres of nonindustrial private forest land under approved stewardship management plans.

FY 2002 Baseline: 1,640,000 FY 2008 Target: 3,200,000

- **2. Objective.** Monitor water quality impacts of activities on NFS lands.
  - **a. Performance Measure.** Percent of projects on NFS lands fully implementing best management practices (BMPs).

FY 2002 Baseline: 88 percent FY 2008 Target: 95 percent **b. Performance Measure.** Allotment acres and percent administered to 100 percent of standard.

FY 2002 Baseline: 21,016,978 (23 percent) FY 2008 Target: 25,775,000 (29 percent)

- **3. Objective.** Restore and maintain native and desired nonnative plant and animal species diversity in terrestrial and aquatic ecosystems and reduce the rate of species endangerment by contributing to species recovery.
  - a. Performance Measure. Terrestrial and aquatic habitat enhanced to achieve desired ecological conditions.

FY 2002 Baseline: 2,001 miles of stream habitat

18,217 acres of lake habitat

209,472 acres of terrestrial habitat

FY 2008 Target: 2,400 miles of stream habitat

18,000 acres of lake habitat

225,000 acres of terrestrial habitat

**b. Performance Measure.** Value of partnership contributions that support habitat enhancement.

FY 2002 Baseline: \$26,800,000 FY 2008 Target: \$32,000,000

## Means and Strategies

To accomplish the above objectives, the Forest Service proposes to take these steps:

- Clean up hazardous substances, pollutants, or contaminants on priority watersheds based on threats to human health or the environment.
- Use collaborative stewardship and partnerships with community stakeholders to
  identify watersheds at risk of diminished water quality due to fire and other threats
  and to plan and implement mitigation or prevention measures.
- Provide information and options to mitigate adverse impacts to watersheds from air pollution and acid rain.
- Conduct watershed condition monitoring, inventories, and assessments.
- Provide scientific information to support BMPs for forests and grasslands to protect watershed values and monitor and evaluate their effectiveness.
- Develop and implement methods to evaluate, improve, and restore riparian wildlife and aquatic habitats on forests and grassland watersheds.
- Ensure that road management activities fully implement BMPs.
- Administer grazing allotments to forest plan standards and guides.

- Provide technical planning assistance to private forest landowners to help them
  achieve their stewardship management objectives, while ensuring that their forests
  continue to provide needed public goods and services.
- Reconnect stream segments by correcting fish passage blockages caused by inadequate road-crossing culverts.
- Assess the causes of decline of rare and at-risk species and provide recommendations for reversing the declines.
- Complete, update, and implement Land and Resource Management Plans and Wild and Scenic River Plans.
- Maintain and restore critical terrestrial and aquatic habitats and complete conservation recovery actions for plant and animal species.
- Establish a baseline and identify long-term trends in acidic deposition, ozone, visibility, regional haze, particulates, and air-quality-related values for protected and sensitive areas.

#### **External Factors**

Factors outside the control of the Forest Service that might affect progress toward this long-term objective include the following:

- Need to collaborate with other jurisdictions and groups of people.
- Inability of the Forest Service to list or remove impaired stream segments from the list.
- Insufficient information about the fifth-level watershed delineation that is needed to complete Forest Service assessments.
- Activities occurring on non-NFS lands and watersheds that offset the effects of improved Forest Service land management activities.

# Goal 6: Conduct mission-related work in addition to that which supports the agency goals

[USDA Objectives 5.1 and 5.2]

Outcome: Improve the productivity and efficiency of other mission-related work and support programs.

The Forest Service provides direction for natural resource stewardship through direct land management practices, indirect management under partnership agreements, and research and development programs. The agency also provides many goods and services—such as recreational opportunities, clean water, and wood products—to the American people. The agency consistently strives to maintain the organizational structure and capacity to deliver the necessary mission-related work.

- **1. Objective.** Provide current resource data, monitoring, and research information in a timely manner.
  - **a. Performance Measure.** Percent of the Nation for which forest inventory and analysis information is accessible to external customers.

FY 2002 Baseline: 77 percent FY 2008 Target: 100 percent

**b. Performance Measure.** The percent of research and development products or services that meet customer expectations as assessed through targeted, standardized evaluations.

FY 2002 Baseline: 70 percent FY 2008 Target: 95 percent

- **2. Objective.** Meet Federal financial management standards and integrate budget with performance.
  - **a. Performance Measure.** Review of financial statement audits and implementation of corrective actions based on audit findings.

FY 2002 Baseline: Unqualified audit opinion FY 2008 Target: Unqualified audit opinion

**b. Performance Measure.** Average number of days between fiscal obligation and transaction data entry into the Foundation Financial Information System.

FY 2002 Baseline: 30 days FY 2008 Target: 3 days

#### Outcome:

Improve the productivity and efficiency of other mission-related work and support programs.

c. Performance Measure. Extent to which performance data are current and complete.

FY 2002 Baseline: 50 percent FY 2008 Target: 100 percent

**d. Performance Measure.** Number of accounting adjustments required to reconcile agency quarterly reports with Federal Treasury reports.

FY 2002 Baseline: TBD FY 2008 Target: TBD

**e. Performance Measure.** Number of "business operations internal control weaknesses" identified in annual financial statement audits.

FY 2002 Baseline: 42 FY 2008 Target: 0

- **3. Objective.** Maintain the environmental, social, and economic benefits of forests and grasslands by reducing their conversion to other uses.
  - **a. Performance Measure.** Acres of land adjustments to conserve the integrity of undeveloped lands and habitat quality.

FY 2002 Baseline: 140,519 FY 2008 Target: 948,000

- 4. Objective. Maintain Office of Safety and Health Administration standards.4
  - a. Performance Measure. Number of firefighters injured in fire-related incidents.

FY 2002 Baseline: 745 FY 2008 Target: 671

**b. Performance Measure.** Number of new Office of Workers' Compensation Program cases.

FY 2003 Baseline: 2,431 FY 2008 Target: 2,087

- **5. Objective.** Develop and maintain the processes and systems to provide and analyze scientific and technical information to address agency priorities.
  - **a. Performance Measure.** Number and percent of Land and Resource Management Plans developed and revised.

FY 2002 Baseline: 6 (5 percent) FY 2008 Target: 15 (12 percent)

<sup>&</sup>lt;sup>4</sup> Baseline is for July 1, 2001, through June 30, 2002, the fiscal year of the Office of Workers' Compensation Programs.

**b. Performance Measure.** Percent of data in information systems that is current to standard.

FY 2002 Baseline: 20 percent FY 2008 Target: 40 percent

**c. Performance Measure.** Number and percent of forest plan monitoring reports completed.

 FY 2002 Baseline:
 92 (77 percent)

 FY 2008 Target:
 119 (100 percent)

# Means and Strategies

To accomplish the objectives, the Forest Service proposes to take these steps:

- From 2004 to 2008, collaborate with forestry colleges and universities and other stakeholders to substantially strengthen the Forest Service's R&D workforce and address current and potential future shortfalls.
- Continue improving the integrity of financial data and the performance of financial systems.
- Pursue the goals of the Forest Inventory and Analysis Strategic Plan by implementing an annualized inventory in all States.
- Improve technologies to validate field data for remote sensing to enhance statistical reliability of spatial reporting.
- Develop scientific information and methods to strengthen forest-product markets and improve the use of wood products.
- Inventory and monitor terrestrial and aquatic habitats and acquire critical habitats.
- Implement the Forest Legacy Program and conduct land adjustments to protect the public benefits provided by private forests and conserve contiguous forest areas.

# **External Factors**

Factors outside the control of the Forest Service that might affect progress toward this long-term objective include the following items:

- Increasing demands on the agency's financial resources from competing government programs.
- Complication of management activities on NFS lands due to intermingling of non-NFS lands.

# Management Initiatives

The ability of the Forest Service to streamline and improve the accomplishment of its mission in the 21st century depends on improving organizational and cost effectiveness by adopting new ways of doing business, as identified in the President's Management Agenda. The agenda focuses on the following five initiatives:

- 1. Effective management of human capital.
- 2. Increasing opportunities for competitively sourcing tasks that are not inherently governmental.
- 3. Improving financial accountability.
- 4. Increasing the use of electronic government applications.
- 5. Improving budget and performance integration.

The "Forest Service Strategy for Improving Organizational Efficiency, 2003–07" (USDA Forest Service 2002) addresses needed management and performance improvements. In FY 2003, the Forest Service established the 21 subordinate plans in this strategy and initiated a quarterly review process to ensure progress and make adjustments.

The initiative to strategically manage human capital focuses on workforce planning, a recruitment strategy for filling mission-critical skill gaps, orientation and training of new employees, developing the competencies of potential leaders, and strategies to ensure the retention of knowledge as employees retire.

A Forest Service Competitive Sourcing Program Office has been established and is conducting studies to provide for private sector competition. The agency is examining functions to assess whether they might be competitively sourced.

By reconciling accounts and improving processes and policy, the Forest Service received an unqualified financial audit opinion for FY 2002. The agency will continue to simplify its accounting structure and increase the timeliness and accurate use of financial systems. In addition, the agency will continue to reduce indirect costs and improve fixed-to-variable cost ratios for increased operational capacity.

The Forest Service continues expanding electronic government services to its customers. Recreation One-Stop, indexing environmental planning records, and providing permits electronically are enhancing citizen's online transactions and are required by the Government Paperwork Elimination Act. The agency is achieving budget and performance integration by developing a Performance Accountability System. The system, to be implemented in FY 2005, will help the agency accomplish strategic plan goals by integrating annual budget plans and programs of work in an automated system.

In addition, the Forest Service is making every effort to reduce the estimated 40 percent of its total appropriations devoted to planning, analysis, and resolution of legal and administrative challenges by eliminating unnecessary steps and duplication of effort.

Aggressive action on these management initiatives reflects a commitment to achieve immediate, concrete, and measurable results in the near term. Additional reforms to improve program efficiencies and effectiveness will be undertaken as tangible results are achieved on the President's Management Agenda initiatives.

# Appendix A—Resources Planning Act Assessment Findings

# Introduction

Throughout its history, the U.S. Department of Agriculture (USDA) Forest Service has conducted long-range planning and policy development based on studies of the Nation's forest and grassland resources and an evolving understanding of what is necessary for sustainable resource management. During the past three decades, a global consensus has formed that sustainable development of our natural resources requires simultaneous consideration of the environment, the economy, and the desires of society for present and future generations. Sustainable development has been described as "the reconciliation of society's developmental goals with its environmental limits over the long term" (National Research Council 1999).

In considering the Nation's and the Forest Service's future courses of action, the agency cannot say with certainty that any particular set of conditions for the Nation's forests and grasslands would have long-term sustainability. Sustainability is a dynamic target because environmental, economic, and social conditions (and the Forest Service's understanding of these three elements and their interrelationships) are always changing. Thus, sustainability is a journey that may have a range of acceptable outcomes, as well as a range of potential courses to achieve those outcomes. Information derived from monitoring trends in sustainability indicators contributes to better public understanding of and management decisions about the Nation's forests and grasslands.

The principal source of information about national indicators of sustainable resource management, which form the scientific foundation for Forest Service strategic planning, is the national renewable resources assessment required under the Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974.5 The RPA Assessment documents the status, trends, and management of all natural resources on all forests and grasslands in the United States. The assessment is produced on a 10-year cycle, with 5-year interim updates. The 2000 RPA Assessment (USDA Forest Service 2001) is based on a framework of national criteria and indicators for sustainable resource management.6 Future assessments will monitor indicator trends and provide a scientific basis for evaluating progress in achieving our mission.

One of the most often cited indicators of forest sustainability is the trend in total area of forest land. Between 1630 and 1900, the Nation converted approximately 300 million

<sup>&</sup>lt;sup>5</sup> For more information on the RPA Assessment, visit http://www.fs.fed.us/pl/rpa/.

<sup>&</sup>lt;sup>6</sup> The framework is from the Montreal Process Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests, which has been endorsed by the United States and 11 other countries that together represent 90 percent of the world's temperate and boreal forests.

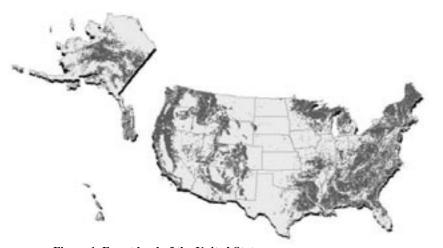


Figure 1. Forest land of the United States

Total forest land area in the East and West is similar, but differences exist in forest composition and ownership:

#### Area of Forest Land

East 384 million acres West 365 million acres

#### **Forest Composition**

East 75 percent hardwood West 85 percent softwood

## Ownership of Forest Land

East 83 percent privately owned
West 74 percent publicly owned

acres of forest land to other uses, notably agriculture. By 1900, about 760 million acres of forest land remained. Currently, the United States still has nearly 750 million acres of forest land (shown on the map in figure 1).

Sustaining the Nation's forest land area during the last century, while the United States' population grew by nearly 300 percent, is a remarkable conservation success story. It is clear, however, that the natural resource

management challenges facing our Nation today go beyond merely conserving acres of forest land. The Forest Service and its partners in land stewardship must also address complex issues involving ecosystem health, biological diversity, invasive species, climate change, habitat fragmentation, and loss of open space, as well as increasing demands for goods and services.

One trend affecting all natural resource issues is the expansion of human populations. World growth in population and income has resulted in social, economic, and technological changes that profoundly affect global management and natural resource use. The world population will continue to grow, possibly from 5.9 billion in 1998 to 8.9 billion by 2050. The United States' population also continues to grow, particularly in the South and West, with a projected increase of nearly 50 percent by 2050. Increases in population and discretionary income will, in turn, increase demands for renewable resources. Demographic shifts, such as an aging population and increasing ethnic and racial diversity, will also affect demand for natural resources. Restoring and maintaining healthy ecosystems while meeting the demands of this changing population will present difficult challenges for natural resource managers.

The Strategic Plan's goals and objectives are responsive to the current and future resource conditions and societal demands presented in the RPA Assessment, as well as to other sources cited in the plan. A few of the assessment findings that are critical to the delivery of the agency's mission are described below.

# Forest and Grassland Resource Base

#### Area and Structure

- While the net area of forest land in the United States was relatively stable throughout
  the 20th century, grassland area has declined substantially. Human population
  growth will slowly accelerate conversion of forests and grasslands to developed uses
  in the future.
- The subdivision of forests and grasslands into smaller parcels is expected to result in further declines in the average size of private holdings, which is a precursor to physical fragmentation of ecosystems.
- Publicly owned western forests are aging, while privately owned forests in the East are generally managed for harvest at younger ages.
- More than 55 percent of the Nation's forest lands are privately owned and managed by more than 10 million forest landowners.

# Health and Vitality

- Wildland fire will continue to be a threat in areas where fuel buildup has resulted from previous suppression efforts. The areas considered at greatest cumulative risk to loss of key ecosystem components from wildland fire are those that have been moderately or significantly altered from the historical range (Condition Classes 2 or 3) and have experienced fire-return intervals of 0 to 35 years (Historical Fire Regimes I and II). About 73 million acres of NFS lands are in this category (Schmidt and others 2002).
- Approximately 70 million acres of forest land in the United States are at high risk of mortality from 26 different insects and diseases.
- Invasive weeds now grow on more than 133 million acres nationwide. Invasive plant species account for about 25 percent of all plant cover in California. Of the 70 major insect pests found in the United States, 19 are invasive species.

#### **Urban Forests**

- Forest land in metropolitan counties represents more than 20 percent of the Nation's forest cover.
- Rapid urban expansion and increased levels of use by urban populations have a significant effect on U.S. forests.
- As urbanization continues to spread into less developed rural areas, a greater proportion of natural resources will become part of urban ecosystems.

# **Diversity of Plant and Animal Species**

# Forest-dependent Species

The United States has a great diversity of wildlife and fish species, but trend data are available for only a small portion of the total species.

- Nationally, most big game species have increased substantially since 1975.
- Small game species associated with grassland or agricultural habitats are generally declining.
- Grassland-nesting birds, as a group, show a high proportion (44 percent) of species with declining population trends. Among native birds, only those that nest in or around urban areas have a higher proportion (54 percent) of declining species.
- Wetland and open-water-nesting species were among the groups of breeding bird species with the greatest proportion of increasing population trends.

# Threatened and Endangered Species

The number of federally protected endangered or threatened species continues to increase. Additions to the list are occurring faster than de-listing of species due to recovery.

- Endangered species are concentrated in 12 geographic areas of the country, including the southern Appalachians, coastal areas, and the Southwest.
- Species that need large undeveloped landscapes or specialized habitats that are vulnerable to development pressures are most likely at future risk.

#### Watershed Function

Conservation of the soil and water resources of forest and grassland ecosystems is vital to all aspects of sustainable resource management. These resources, the building blocks of all ecosystems, are also the most complex elements in the landscape to consistently and comprehensively assess.

- Forested watersheds in the United States are generally functioning effectively. Most watershed impairment conditions occur downstream of forested areas.
- Water use in the United States is expected to increase by 7 percent between 1995 and 2040, while population is projected to increase 49 percent. Several regions of the country, however, particularly in the West, might experience water shortages. An increase in conflicts between off-stream and in-stream uses is also likely, especially in regions already experiencing water shortages.
- Efforts to improve consistent, comprehensive monitoring of forest and grassland watersheds are a high priority among several natural resource agencies.

The number of federally protected endangered or threatened species continues to increase. Additions to the list are occurring faster than de-listing of species due to recovery.

# **Productive Capacity of Forests and Grasslands**

The rate at which forests and grasslands replenish biomass removed by harvest or grazing provides a coarse-filter indication of the overall capacity of the ecosystem.

• The ratio of growth replacement to timber harvest has increased in the West and decreased in the East. For the Nation as a whole, the growth-to-removals ratio in 1997 was 1.3:1 for softwoods and 1.7:1 for hardwoods, indicating continuing accumulation of biomass. Projections suggest these ratios will decline to about 1.2:1 by 2050 for softwoods and hardwoods. In each region of the country, the pattern of change in the growth-to-removals ratio differs widely by ownership and species (USDA Forest Service 2003).

#### Social and Economic Benefits From the Resource Base

The people of the United States derive a wide range of goods and services from private and public forests and grasslands.

- Demand for these goods and services is expected to continue to increase in the future, although the types of goods and services might change.
- To meet the projected demands of a growing population, increased output will need to be produced from a slowly declining land base.

## Recreation and Tourism

The recreational use of forests and grasslands has been increasing for decades; it is expected to continue to increase.

- The most popular outdoor recreational activities are walking, nonconsumptive
  wildlife activities, biking, sightseeing, nonpool swimming, fishing, family gatherings, and picnicking.
- The fastest growing projected outdoor recreational activities are visiting historic places, downhill skiing, snowmobiling, sightseeing, and nonconsumptive wildlife activities.
- The resource base and facilities for recreation appear to be keeping pace with population growth in most regions of the country. The availability of private land for public recreation has declined during the past 20 years; it is expected to continue to slowly decline. This trend has the potential to reduce some recreational opportunities, especially in the Eastern United States, while increasing pressure on publicly owned forests and grasslands.

#### Forest and Grassland Products

The demand for most forest and range products will grow in the future. Per capita use is increasing for some products, such as paper and paperboard, while remaining stable or declining for other products. Compared with rising per capita consumption, per capita timber harvest has been relatively stable or has declined in the last few decades due to increases in recycling and efficiency in production.

- Overall, forest product demand will increase as a result of increasing population, and there will be a relative shift toward paper and composite products manufacturing.
- The United States will continue to meet most of its wood fiber needs from domestic sources, although imports will supply an increasing share of these needs. The portion of total U.S. consumption of wood and wood products met from U.S. harvest decreased from 89 to 80 percent between 1952 and 1997, and is projected to decrease to 73 percent by 2050 (USDA Forest Service 2003). The share of consumption supplied by imports is much larger for softwood products (26 percent in 1997) than for hardwood products (10 percent in 1997).
- Private lands in the Eastern United States will be the main source of domestic timber; harvest from the public lands is expected to remain stable at recent levels.
   Plantations in the South will be the most important source of increased softwood harvest in the foreseeable future.
- Grassland forage demand is likely to decline in the future, particularly in the western and northern regions.
- Wildlife use of grazing lands is expected to increase in all regions and forage supplies appear to be sufficient to meet those needs.
- The per capita consumption of many minerals is expected to decline or remain stable.
- International prices will remain a major determinant of the level of mineral exploration and development on public and private lands. Rising oil and natural gas prices could lead to renewed domestic exploration.

#### **Forest Contributions to Global Carbon Cycles**

Many scientists believe that increasing concentrations of atmospheric carbon are leading to long-term climate change. Forests remove carbon from the atmosphere through the growth of vegetation and the associated storage of carbon in living and dead wood fiber and in wood-fiber products.

- U.S. forests offset approximately one-fourth of all domestic carbon emissions.
- Climate change can influence species distributions, and the duration, frequency, and intensity of forest disturbances such as fire, insects, disease, drought, and storms.

## **Conclusions**

Demands for and supplies of renewable resources from the Nation's forests and grass-lands will continue to change in response to varying preferences, new technology, and the latest information. The increasing human population will expand urban areas and cause increased fragmentation of private forests and grasslands. As a result, most extensive tracts of intact ecosystems will be on public lands. The public lands will be under increasing pressure to meet varying, and sometimes conflicting, demands. Working in partnership with other public and private land managers will be essential to developing management strategies to ensure a sustainable flow of goods and services from the forest and grassland resources of the United States.

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