



# **Dawning of a New Era**

**United States Department of Agriculture  
Forest Service**

Note : This pamphlet was written by "Hutch" Brown (Chief's speechwriter) and Gerald Williams (national historian) at Chief Domback's request in early Jan. 2001 just before the new Bush administration was coming into office. This pamphlet was not widely distributed.

Jay Winn  
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## Foreword

"Ours is a pleasant land in which to dwell," Theodore Roosevelt once remarked. "To increase its beauty and augment its fitness can not but multiply our pleasure in it and strengthen the bonds of our attachment." That, in a nutshell, is the purpose of the USDA Forest Service. Since 1905, the agency has served the American people by caring for the land.

Other cultures have their great pyramids, temples, or works of art. Americans have their public lands, the remnants of the wild frontier. It was this frontier that shaped our character as a people and a nation. England and Spain have their great sea captains; the Far East has its dynasties. Our heroes are the likes of Davy Crockett, Daniel Boone, and Lewis and Clark—and, yes, the likes of Tecumseh, Sacagawea, and Chief Joseph. We admire them for their endurance and skill, tested by the vast wild places of the American frontier.

Today, the remnants of that frontier are found on our national forests and grasslands. For almost a century, the Forest Service has conserved our American heritage through stewardship of our national forests and grasslands. An important part of that stewardship has been cutting-edge research programs to promote conservation, recycling, and new technologies that support ecologically sustainable development. Equally important has been the agency's delivery of conservation benefits to hundreds of communities and States across the Nation through our State and private forestry programs.

As the Forest Service approaches its 100-year anniversary, it's time to revitalize our public service legacy. We are inaugurating the new millennium with a look at our past—with a celebration of our history of land stewardship, culminating in our many successes of the 1990's, too many for more than a cursory glance at a few.

Our successes have laid the groundwork for reaching our overarching goal: the desired future condition of the land. In 50 years, from the perspective of the desired future condition, the lasting value of our accomplishments will become clear. That clarity will be a tribute to every Forest Service employee and partner who helped lay the groundwork in the 20th century.

Aldo Leopold once said, "The hope of the future lies not in curbing the influence of human occupancy—it is already too late for that—but in creating a better understanding of the extent of that influence and a new ethic for its governance." Please bear in mind these words of wisdom as you read what follows. Cherish your conservation heritage as the basis for what makes all of us uniquely American—a legacy of healthy lands for future generations.

**White Oak**



## The Future Through a Rearview Mirror

The year is 2050. You are working for the USDA Forest Service on assignment in the Washington Office. The building is under renovation and you are clearing out old files.

The files contain a broad range of materials from almost every period of the 20th century. It's almost as if somebody in the year 2000, perhaps the agency historian at the time, had left a Forest Service time capsule.

You pick up a sheaf of papers and see a heading that reads, "Conservation for a New Century." Idly, you scan the top line: It's a 50-year-old speech by a former Forest Service Chief, Mike Dombeck. You notice a question in the first paragraph:

**"What is it society will want from—value most about—the Forest Service in 50 years?"**

That question gives you pause. You wonder what things were like 50 years ago. Were Forest Service leaders right about what people would want from the Forest Service?

### What Will People Want?

By 2050, the Forest Service has long worked with partners to poll Americans each year on what they want from the agency and how well we deliver. What most Americans want, first and foremost, are healthy lands. They want to know that the national forests and grasslands support steady flows of clean drinking water and a rich variety of native fish, wildlife, and plants. Americans understand that healthy lands sustain other benefits as well, such as timber, forage, and rich recreation opportunities.



## Changing Times

Americans also want to know that every management decision is grounded in sound science. Most Americans understand that all creatures are linked through complex, interconnected webs of life at various scales, ranging from a single rotting log in the forest to vast watersheds such as the Columbia basin. They expect the Forest Service and other public agencies to reach across jurisdictions to manage interconnected landscapes on a watershed basis. That includes working with small woodlot and other private landowners to conserve forest land and to share technical knowledge and research expertise.

The Forest Service is satisfying public demand. By 2050, the agency has established a solid reputation for leadership in delivering what people want. Approval ratings in recent years have topped 95 percent. Program funding has never been higher.

Leafing through more papers, you find old photos of Forest Service personnel from the 1970's. Something seems different about those employees, and it isn't the uniforms.

Then it hits you: Almost all are men. In 2050, almost half of all Forest Service employees are women. So is the Chief, and so are most of the people on the National Leadership Team. Most are also members of what were once called minorities, a term that sounds oddly old-fashioned in 21st-century America. After all, most Americans in 2050 are non-Caucasian.



**Western Wildfires Show  
No Signs of Slowing**  
Washington Post, August 18, 2000

You leaf through an old catalog of Forest Service programs, wondering where the urban programs are. In 2050, a sizable portion of the Forest Service's budget is devoted to the greening of urban neighborhoods and to bringing wildland recreation, information, and education to people from the cities. There are special programs for the elderly—a fifth of all Americans—and for schoolchildren. The urban constituency for conservation is large and active.

You run across an old headline from the year 2000: "Worst fire season in 50 years!" You smile, knowing that fire seasons in the early 21st century far surpassed the 2000 fire season in severity. The great 2010 fires sent enormous smoke plumes billowing across the Great Plains, affecting air quality in Minneapolis and St. Louis. After that, most Americans demanded controlled burns to reduce the fire risk. Even smoke pollution, most now believe, is better managed using carefully planned burns than waiting for enormous and unpredictable wildfires.

**Fire Blow Up Overnight:  
1,000 Firefighters  
Headed for Helena**  
Billings Gazette, July 27, 2000

**Fire Officials Fear Worst Is on the Way**  
Missoulian, July 27, 2000

**Beaver Creek Fire Explodes**  
Bozeman Chronicle, August 15, 2000

**Sierra Nevada Blaze  
Now Spreads Across  
60,000 Acres**  
Associated Press, July 31, 2000

**Firefighters Struggle With Forest, Range Fires**  
Missoulian, July 28, 2000

**Firefighters Battle Blaze in Canyon Near San Clemente**  
Los Angeles Times, September 12, 2000

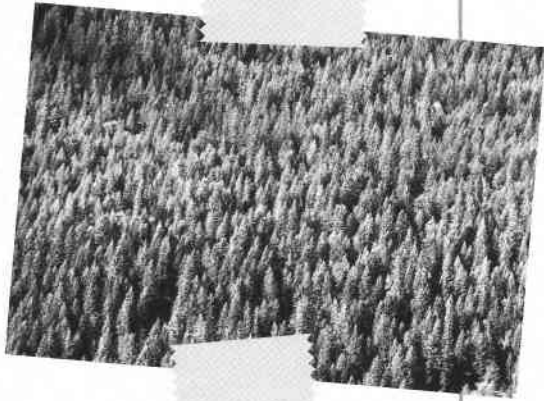
**Wildfires Raging**  
ABC News, August 9, 2000

**Fires Burning Throughout State  
Consume Almost 14,000 Acres**  
Salt Lake Tribune, August 16, 2000

Relief arrived by 2025, after decades of large-scale interagency programs to reduce fuels and restore forest health. By 2050, controlled fire is an accepted part of America's landscape. Millions of acres are burned each year to maintain our fire-adapted forests in a healthy condition. An annual interagency firesafe campaign helps millions of Americans protect their homes from fire in the wildland/urban interface.

You find an old forest health update, a colorful brochure with a list of ills at the turn of the century. Invasive species, you note, are on the list. By the 2010's, invasive species were considered our worst forest health problem, on a par with fire. It took decades of concerted interagency efforts involving international partners to find solutions. The 2030's finally brought a series of breakthroughs, including ways to restore elm, hemlock, and even chestnut to our eastern forests. Fortunately, roadless area conservation helped keep many boreal ecosystems free from some of the worst invasive species, giving us a baseline for restoring our damaged forests in the West.

The old forest health update mentions riparian degradation as another problem. Now that's something you've read a lot about. By 2050, water scarcity has become the foremost political issue worldwide, precipitating two regional wars so far. Fortunately, Americans tackled the problem early in the century, with the Forest Service leading the way in reaching agreements through watershed partnerships that include Canada and Mexico.



A related bone of contention was recreational use, the worst remaining threat to the integrity of our riparian ecosystems. You remember reading about the fierce debates among competing recreational users, especially the insistence by some groups on their right to use motorized vehicles wherever they pleased, even off road in fragile ecosystems. It took congressional action to settle the dispute through a compromise that limited recreational uses on our public lands to levels consistent with healthy ecosystems.

In an old brochure on forest roads, you are stunned to see that the maintenance backlog once reached into the billions of dollars. You think it must be a misprint, but a graphic confirms it. By 2020, the forest road system had shrunk to a stable size that all parties agreed was necessary for sustainable forest uses. By 2050, unneeded roads have long been obliterated, often restoring the wild characteristics of roadless areas. Program funding is now sufficient to maintain our remaining forest roads to standard, keeping them safe for use and eliminating environmental damage from road degradation.



You open a tract from the 1960's to a photo series on timber harvests. The text congratulates the Forest Service for improving rural schools and roads through soaring timber harvest levels. You don't understand: What does timber harvest have to do with educating our rural schoolchildren? You know that the Forest Service still makes payments to States for rural schools and roads, but fortunately the payments no longer depend on fluctuating levels of timber harvest.

In fact, all Forest Service timber sales are now designed primarily to improve forest health. At the turn of the century, the Forest Products Laboratory in Madison, WI, made a series of discoveries leading to lucrative new markets for small-diameter forest materials, including brush. Most timber receipts are now from small-diameter materials removed to reduce fuels and improve habitat.

At the same time, the Forest Service's imaginative "Reuse It or Lose It" campaign has raised public awareness of wood waste as a threat to our forests, both nationally and internationally. Since the 2010's, per capita wood and paper consumption has gradually declined, reducing market incentives for loggers in parts of the world with few environmental protections. Through international agreements, the Forest Service is working with counterparts worldwide to practice forestry based on the same standards of long-term sustainability.



## **Unfolding of a National Purpose**

**"A Federal policy of forestry has been evolving for almost 60 years...It is not a specific and limited program but rather is a gradual unfolding of a national purpose."**

**-Chief Robert Y. Stuart (1930)**

You pause to reflect. So much has changed since the 20th century. You marvel at how much conditions have improved, and you wonder how it happened. What was the turning point?

The key to our success, you believe, is a principle the Forest Service has followed for decades: "Sustainability is the guiding star for our stewardship of America's lands." You're not sure where the principle came from, but you know it underpins our mission of caring for the land and serving people.

You decide to figure it out from the very beginning, from the earliest days of the Forest Service. You start to leaf through old histories, and the story begins to unfold.



**Sugar Maple**

## A Story of Conservation: From the 1800's to the 1980's

The story of the Forest Service is a story of conservation. The beginnings of conservation can be traced to a love for the land by America's earliest pioneers, the very ones who tamed it and changed its character. Love for the land pervades, for example, the journals drafted by Captains Meriwether Lewis and William Clark on their historic journey in 1804–06 from St. Louis, MO, to the mouth of the Columbia River.

Without the help and friendship of American Indians along the way, especially the Nez Perce, Lewis and Clark would have failed in their mission. Yet their journey paved the way for subsequent military missions that, just seven decades later, would vanquish the proud Nez Perce and destroy their way of life. Removing the American Indians—together with their broadcast burning, which kept many landscapes open and varied—inexorably changed the face of the land.

Early pioneers initiated other changes as well. For example, Lewis and Clark took every opportunity to exterminate the “white bear.” So began a campaign that would wipe out the grizzly bear from most of its once extensive range in the lower 48 States. The wolf, the cougar, the bison, and many other species suffered similar fates, with some driven altogether into extinction. Perhaps the best known case is the passenger pigeon; birds that once darkened midwestern skies by the billions were reduced to a sole survivor who died in the Cincinnati Zoo in 1914.

**“...I ascended the hills from whence I had a most pleasing view of the country, particularly of the wide and fertile vallies formed by the missouri and yellowstone rivers, which occasionally unmasked by the wood on their borders disclose their meanderings for many miles in their passage through these delightfull tracts of country.”**

**-Captain Meriwether Lewis  
(April 25, 1805)**



## Forest Service Beginnings

**"...in Wildness is the  
preservation of the World."**

**-Henry David Thoreau,  
Walking (1862)**

With the disappearance of so many species, the land lost a measure of the wildness that pioneers such as Daniel Boone and Davy Crockett treasured on the frontier. They moved with the frontier for its wildness, helping to tame it as they went. The unresolved conflict between love for the land and the drive to tame it for resource extraction fueled land use debates well into the 20th century.

Love for the frontier and the wildness of nature found literary expression in the works of Henry David Thoreau, James Fenimore Cooper, and Henry Wadsworth Longfellow. Inspired by Frederick Edwin Church's 1860 masterpiece "Twilight in the Wilderness," the Hudson School artists celebrated the sublime beauty of the American landscape in their paintings.

A turning point in the story of conservation came with George Perkins Marsh's 1864 classic *Man and Nature*, which showed how humans had historically harmed the Earth, thereby dooming earlier civilizations. Marsh inspired many Americans to question the widespread belief that the Nation's natural resources were inexhaustible.

Critics began to focus on land remaining in the public domain. Since the founding of the Republic, the purpose of the Federal Government had been to give away or sell off wildlands in the public domain for settlement by the millions who flocked ever westward in search of opportunity. Too often, Federal largesse had led to vast clearcuts by profiteers who then moved on to virgin timber lands, leaving behind miles of slash. The slash fueled enormous wildfires, leading to eroded hillsides and degraded streams prone to severe flash flooding.



**"No national forest shall be established, except to improve and protect the forest within the boundaries, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States."**

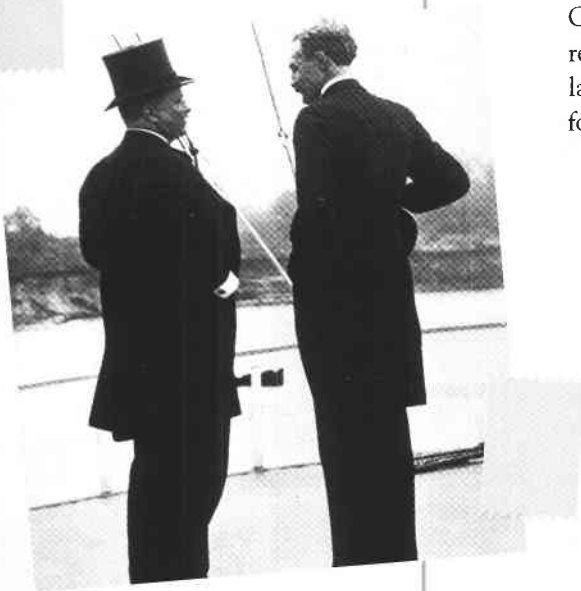
**-Organic Act (1897)**

Reaction to the abuse gave rise to America's forestry and conservation movements. Key early figures were Franklin B. Hough, Bernhard E. Fernow, and Gifford Pinchot. From the 1870's on, these visionaries worked tirelessly, through the Division (later Bureau) of Forestry in the U.S. Department of Agriculture, to introduce sustainable forestry in the United States.

In 1891, Congress passed a bill designed to address the fraudulent acquisition of Federal lands. Attached was a one-sentence rider allowing the President to establish forest reserves from land in the public domain. President Benjamin Harrison used his new authority to create the first forest reserve—the Yellowstone Park Timberland Reserve, covering more than 1.2 million acres.

In the 1897 Organic Act, Congress specified three purposes for the forest reserves: forest protection, watershed protection, and timber production. Congress placed the reserves under management by the General Land Office (precursor of the Bureau of Land Management) in the U.S. Department of the Interior.

Unfortunately, the forest reserves' administration in the highly politicized Interior Department was often corrupt and inefficient. In 1905, President Theodore Roosevelt transferred the reserves, which by then comprised more than 75 million acres in the West, to the Bureau of Forestry under Gifford Pinchot. Pinchot renamed the agency the Forest Service; the forest reserves became our first national forests. Together, Roosevelt and Pinchot laid the foundations for the Forest Service's conservation mission of caring for the land and serving people.



## Early Accomplishments

**"Conservation is the foresighted utilization, preservation, and/or renewal of forests, waters, lands, and minerals, for the greatest good of the greatest number for the longest time."**

**-Gifford Pinchot,  
Breaking New Ground (1947)**

**"The Forest Service does God's work."**

**-Stephen E. Ambrose, historian**

During the first part of the 20th century, protection of the newly created national forests from fire and abuse was of paramount importance. Rangeland use and claims staked for mineral extraction were important on many national forests; timber and other uses remained comparatively insignificant. The Great Depression created opportunities for the Forest Service to play a major role in helping people survive through conservation work programs (especially the Civilian Conservation Corps) and projects on the national forests.

Through the 1911 Weeks Act, Congress authorized land purchases for addition to the National Forest System, primarily to protect the headwaters of major river systems. Over decades, almost 25 million acres of often degraded lands were added in the East and South. By 2000, after years of careful stewardship and recovery from abuse, our eastern and southern national forests included many of the healthiest forest lands in their regions.

In 1954, millions of acres of unprofitable farmlands purchased by the Government on the Great Plains were added to the National Forest System. The Forest Service formed most of the lands into our national grasslands, administered for grazing under longstanding cooperative agreements. By 2000, there were 20 national grasslands covering more than 3.8 million acres.



**"A wilderness, in contrast to those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain."**

**-Wilderness Act (1964)**

## **Postwar Controversies**

Love for the land translated into a powerful movement within the Forest Service to leave our wildest remaining areas in a wilderness state. Early wilderness leaders included Aldo Leopold, Arthur H. Carhart, and Robert Marshall. In 1924, the Gila River headwaters on New Mexico's Gila National Forest were designated as the Nation's first wilderness. Over the next four decades, the Forest Service set aside a total of 9 million acres as wilderness. The 1964 Wilderness Act gave legislative protection to the burgeoning national wilderness system. By 2000, about 35 million acres of national forest land had been designated as wilderness, almost a fifth of the National Forest System and some four-fifths of all wilderness in the lower 48 States.

Following World War II, the national forests played a growing role in timber production to help fulfill the American dream of owning a single-family home. Soaring recreational use in the postwar period contributed to disputes over the relative merits of the various national forest uses. The Multiple-Use Sustained-Yield Act of 1960 directed the agency to give all uses equal priority.



**"It is the policy of Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes...The establishment and maintenance of areas of wilderness are consistent with the purposes and provisions of this Act."**

**-Multiple-Use Sustained-Yield Act (1960)**

Controversy was only just beginning. Battles between competing interest groups over clearcutting and other land use decisions caught the Forest Service in the middle. Public demands for more environmental protections and more input into agency decisionmaking led to a series of new laws, including the National Environmental Policy Act (1969), Endangered Species Act (1973), Forest and Rangeland Renewable Resources Planning Act (1974), and National Forest Management Act (1976). These laws required far-reaching Forest Service administrative reforms to better protect habitat for native species and to include the public in agency planning.

Greater public input into Forest Service planning did not always produce greater public satisfaction with agency programs. In the 1980's, the Forest Service remained torn between competing demands: At one extreme, powerful interest groups maneuvered to intensify resource extraction; at the other extreme, some groups lobbied to eliminate resource extraction altogether. All groups tried to increase their share of the uses on national forest lands to the exclusion of other groups. Failure often precipitated public appeals and litigation, frequently under the very laws designed to achieve consensus.

By the end of the 1980's, the Forest Service faced the daunting challenge of extricating itself from a litigational quagmire, while restoring public confidence in agency programs. As the Forest Service prepared to enter the 1990's, a new approach was sorely needed. A tradition was at stake—the tradition of conservation leadership.



"The days have ended when the forest may be viewed only as trees, and trees viewed only as timber. The soil and water, the grasses and the shrubs, the fish and wildlife, and the beauty that is the forest must become integral parts of resource managers' thinking and actions."

-Senator Hubert Humphrey (1976)

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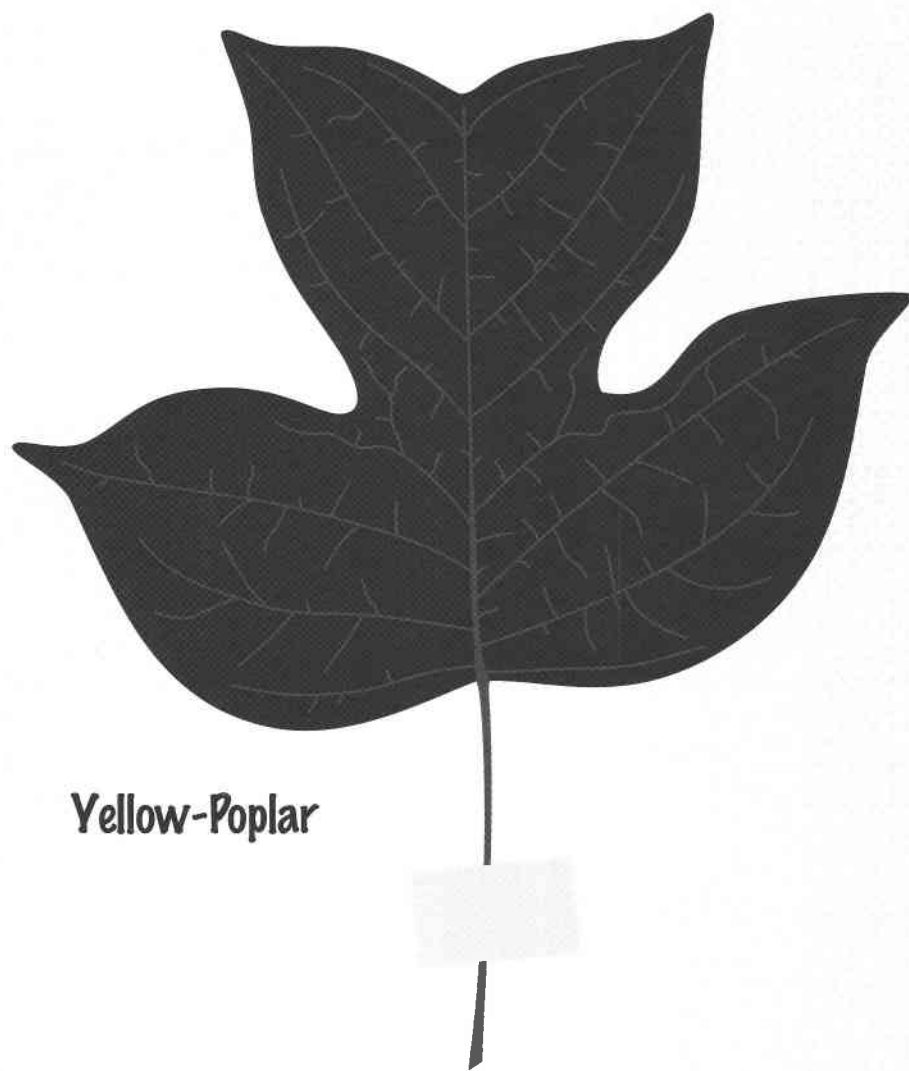
### **National Forest Management Act**

Passed in 1976, the National Forest Management Act required the Forest Service to:

- formulate long-term plans for land and resource management on each national forest and grassland,
- involve the public in forest planning and other major agency actions, and
- "preserve and enhance the diversity of plant and animal communities...so that it is at least as great as that which would be expected in a natural forest."

A Committee of Scientists was appointed to draft guidelines for devising sound forest plans. The guidelines were the basis for the first forest planning rule, adopted in 1979 and amended in 1983. In the 1980's, based on the planning rule, most national forests started preparing new 10-year forest plans with public input.

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**Yellow-Poplar**

## A Story of Conservation: Forest Service Milestones in the 1990's

"I am convinced that with an ecosystem approach to multiple-use management, our forests and rangelands can contribute to a better living for present and future generations by providing security and stability to regional economies and rural communities."

-Chief Edward Cliff (1970)



The new Chief in 1987, F. Dale Robertson, faced a public wary of anything the Forest Service said or did. Many accused the agency of overcutting old growth and failing to protect endangered species on the national forests and grasslands.

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### Aldo Leopold's Land Ethic

Beginning in the 1930's, Aldo Leopold pioneered the twin fields of ecology and wildlife management based on a conviction that land is more than mere terrain. Land includes native plant and animal communities, the soils and waters that sustain them, and the people who depend on them for rich and healthy lives. Leopold was the first to advocate a land ethic: an obligation to respect the rights of the land and to protect its health by nurturing its biotic and abiotic processes. Leopold's land ethic became the basis for ecosystem management.

*The "key-log" which must be moved to release the evolutionary process for an ethic is simply this: quit thinking about decent land-use as solely an economic problem. Examine each question in terms of what is ethically and esthetically right, as well as what is economically expedient. A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.*

-Aldo Leopold, *A Sand County Almanac* (1949)

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In 1970, faced with a similar crisis of confidence over clearcuts on Montana's Bitterroot National Forest, Chief Edward Cliff had responded with a visionary policy shift: He called for an ecosystem-based approach to land and resource management. Ecosystem management, as it came to be known, drew on insights made by Aldo Leopold after he left the Forest Service in the 1930's to found the new field of wildlife management.

After the 1970's, interest in ecosystem management waned as land managers came under renewed pressure to increase outputs such as timber. But researchers continued to take an ecosystem-based approach, providing clues to the long-term health and productivity of the land. Research on Oregon's Willamette National Forest, for example, indicated that there was more to our northwestern coniferous forests than just trees, suggesting the need for a broader approach to Federal resource management.

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### **Message From Chief F. Dale Robertson (1992)**

Putting this in simple terms, we have been courting the ecosystem approach for 3 years and we like the relationship and the results. Today, I am announcing the marriage and that the Forest Service is committed to using an ecological approach in the future management of the national forests and grasslands.

By ecosystem management, we mean that an ecological approach will be used to achieve the multiple-use management of the national forests and grasslands. It means that we must blend the needs of people and environmental values in such a way that the national forests and grasslands represent diverse, healthy, productive, and sustainable ecosystems.

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Impressed, Chief Robertson renewed the call for ecosystem management. He believed that if the land could be managed for healthy ecosystems, then viable populations of native species could be sustained and the requirements of the National Forest Management Act would be met. In 1992, he spoke before Congress on the need for ecosystem management.

Robertson's successor, Chief Jack Ward Thomas, echoed the call for ecosystem management. He defined its goal as ecosystem sustainability: Land and resource use must not be allowed to undermine the health, diversity, or productivity of ecosystems on which future generations will depend for a continuous flow of resource benefits.

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### **Message From Chief Jack Ward Thomas (1995)**

Our land ethic is to: Promote the sustainability of ecosystems by ensuring their health, diversity, and productivity.

This ethic provides the constancy of purpose and direction that permeates all we dream, do, and say. Our land ethic has evolved through the thinking and experience of Forest Service pioneers such as Gifford Pinchot, Arthur Carhart, Bob Marshall, Aldo Leopold, and others. Growing understanding of the complexity of ecosystems has expanded thinking on sustainability—from emphasis on sustained yields of products to sustaining the ecosystems that provide a variety of benefits. Increased understanding of ecosystem function will demand rigorous research and continuing evolution on management concepts and actions.

Through ecosystem sustainability, present and future generations will reap the benefits that healthy, diverse, and productive ecosystems provide. Our ethic includes the active use of ecosystems, through both preservation and manipulation to gain these benefits—so long as this does not unduly impact ecosystem sustainability.

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**"Planning for the multiple use and sustained yield of the resources of the national forests and grasslands should operate within a baseline level of ensuring the sustainability of ecological systems and native species. Without ecologically sustainable systems, other uses of the land and its resources could be impaired."**

**-Committee of Scientists,  
Sustaining the People's Land (1999)**

Sustainability resonated with researchers and managers alike. In 1997, a Committee of Scientists was commissioned to review and evaluate the Forest Service's planning procedures. Based on the committee's report, the Forest Service formulated a new rule for national forest management planning. The rule was finalized in December 2000.

The new planning rule confirmed ecological sustainability as the guiding principle for managing our national forests and grasslands. Only healthy ecosystems, the Committee of Scientists noted, can sustain all the uses and values mandated by law—recreation, range, timber, watersheds, and fish and wildlife. The new rule also facilitated greater public participation throughout the forest planning process.

The revised planning rule emphasized the use of science in planning, partly through regional ecosystem assessments on a landscape level. That guidance drew on successes in the 1990's in landscape-level planning across jurisdictions, beginning with the Northwest Forest Plan.

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### **Northwest Forest Plan**

By the 1990's, bitter disputes over old-growth logging had all but paralyzed forest management on public lands in the Pacific Northwest. In April 1993, President Bill Clinton brought all sides together in Portland, OR, to reach agreement. The resulting Northwest Forest Plan established the first framework for cooperative planning and decisionmaking on an ecoregional basis. The courts declared the plan sufficient to settle all lawsuits at the time. The plan's success precipitated other ecoregional assessments and frameworks for collaboration in the interior Columbia River Basin, the Sierra Nevada, the southern Appalachians, and the Ouachita Highlands in the Southeast.

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## Healthy Watersheds

Through international collaboration, the Forest Service worked to extend sustainable forestry worldwide. Following the 1992 Earth Summit, the agency joined in the Montreal Process, an international initiative to develop criteria and indicators for sustainable forest management of temperate and boreal forests. In the 1995 Santiago Declaration, 12 countries—including the United States—endorsed the criteria and indicators.

The next step was to mobilize domestic support for the criteria and indicators. In 1999, the Forest Service helped organize a Roundtable on Sustainable Forests, which included representatives from the U.S. forest products industry; nongovernmental organizations; and Federal, State, and local governments. Participants agreed that the Montreal criteria and indicators provided a sound common basis for evaluating the sustainability of America's forests, both private and public.

The new Chief in 1997, Mike Dombeck, took the helm of an agency still adrift, buffeted by agendas set by competing resource interests. He turned things around by helping the Forest Service set its own Natural Resource Agenda, with watershed health as a first priority.

The Forest Service was rooted in watershed protection. The National Forest System was founded in part “for the purpose of securing favorable conditions of water flows” (Organic Act of 1897). Forest Service research had shown that healthy watersheds were the foundation for sustainable forest and grassland ecosystems, which in turn supported prosperous rural communities. Managing for healthy watersheds was a sound basis for fulfilling the agency's mission of caring for the land and serving people.

In 1999, the Forest Service broke new ground by launching a series of collaborative large-scale watershed restoration projects. Around the country, 15 large watersheds, providing water for millions of people and habitat for numerous sensitive and threatened species, were chosen to become national prototypes for watershed management. The projects ranged from the 3-million-acre Blue Mountain Demonstration Area in Oregon to the multi-state Chesapeake Bay Watershed Partnership in the mid-Atlantic region.

In 1999, in collaboration with Federal partners, the Forest Service issued a unified Federal policy for watershed management on Federal lands covering more than 800 million acres. A model for landscape-level management, the policy was designed to improve water quality, protect the health of aquatic ecosystems, and increase public involvement in Federal watershed management.

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## **Natural Resource Agenda**

Formulated in 1997, the Natural Resource Agenda was designed to regain the initiative for the Forest Service in the debate over public land management. At its core were four focal areas, each chosen as a basis for consensus:

- **Watershed health:** Mandated by the 1897 Organic Act, watershed protection is fundamental to the Forest Service mission. Healthy watersheds are the foundation for sustainable forest and grassland ecosystems, which in turn support prosperous rural communities.
- **Sustainable forest ecosystems:** Ecological sustainability is the key to conserving and restoring the health of the land.
- **Recreation:** The dominant use of the national forests and grasslands, recreation means furnishing all Americans with a variety of dispersed recreation opportunities while protecting wildland values.
- **Sound forest roads:** Sustainable forest management and recreation both depend on a sound system of forest roads.

The Natural Resource Agenda was the basis for a series of successful Forest Service initiatives. By 2000, the agency had retaken control of its own destiny.

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**"Our greatest value to society in the future will be to develop and deliver good science on watershed conservation and then help people to develop a shared vision for managing healthy watersheds."**

**-Chief Mike Dombeck (1999)**

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#### **Message From Chief Mike Dombeck (1998)**

In recent years, much has been written, said, and done about the Organic Act's provision for timber production. What is far less understood is the act's strong focus on watershed maintenance and restoration. In fact, the need to protect and enhance water supplies, including flood protection, was the driving force behind the Organic Act, other early forest legislation, and later laws such as the Clean Water Act.

Watershed maintenance and restoration are the oldest and highest callings of the Forest Service. Our collective challenge is to find ways to involve more people, to provide cleaner water, and to make decisions that afford even greater protection of, and benefits from, our natural resources as we carry out our multiple-use mandate. We must work with State and local governments and communities to link neighborhood creeks and tree-lined streets to our sea-bound rivers, State and national parks, and forests.

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In 1997, with Forest Service participation, the Federal Government launched the American Heritage Rivers initiative to help communities revitalize their economies, protect natural resources, and preserve the history and culture of their rivers. The President initially designated 14 American Heritage Rivers. Founded upon the belief that what is good for the environment is also good for the economy, the initiative brought together citizens, businesses, and Government to clean up rivers, rejuvenate surrounding areas, and stimulate economic growth.

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### **Water Wars Ahead?**

In the 21st century, water-related issues could become a major source of conflict. Because healthy forest lands supply America's cleanest water, the Forest Service is poised for watershed conservation leadership. Consider:

- In the United States, 35 percent of our freshwater fish, 38 percent of our amphibians, and 56 percent of our mussels are imperiled or vulnerable.
- Dams, ditches, and levees fragment water courses and alter streamflow.
- Billions of people worldwide lack basic water services.
- Millions die annually from water-borne diseases.
- Agricultural production is constrained by a lack of irrigation water.
- Groundwater supplies are consumed faster than they are replenished.
- In the United States, 75 percent of our outdoor recreation occurs within half a mile of a stream or water body.
- 50 million Americans fish each year.

In 1991, at the time of the Gulf War, a source in Jordan told the *Washington Post*: "You think we have bad fights over oil. Just wait until we start fighting over water."

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In the 1990's, Forest Service scientists made advances in water quality research. Scientists at the Forest Products Laboratory, for example, demonstrated that low-cost, fiber-based water-filtering technology can remove toxic materials, pesticides, and herbicides from polluted water. Field trials in the watershed serving New York City (with more than 9 million people) and elsewhere showed that contaminated water from old, abandoned mines could be cleaned up.

**"There are few more irreparable marks we can leave on the land than to build a road. Our overriding objective is to work with local people to provide a forest road system that best serves the management objectives and public uses of national forests and grasslands while protecting the health of our watersheds."**

**-Chief Mike Dombeck (1998)**

A lasting contribution to watershed protection came through the formulation of a new rule for managing forest roads. Most forest roads were built to support timber harvests. In the 1990's, declining harvest levels left the Forest Service with 380,000 miles of roads designed primarily for a vastly diminished use. Congressional funding was slashed to about 20 percent of what was needed to maintain existing roads; by 2000, the Forest Service was saddled with a road maintenance backlog of \$8.4 billion—more than twice its entire annual budget at the time. Deteriorating forest roads were causing landslides, soil erosion, and stream siltation, destroying habitat for sensitive species and reducing safe public access.

In September 2000, the Forest Service released a new road management policy. Under the new policy, the agency began working with local communities and others to identify needed roads and to prioritize needed roadwork. Unneeded roads were to be obliterated, starting with the ones that posed the greatest risks to public safety or environmental health. All adverse environmental effects from road construction, reconstruction, and maintenance were to be minimized.

The new roads rule removed forest roads as a topic for congressional debate. In fiscal year 2001, for the first time in years, congressional funding for forest roads jumped—by about 18 percent.

A good way to minimize adverse effects associated with forest roads was to stop building roads in roadless areas, long a bone of contention between competing resource interests. Following passage of the 1964 Wilderness Act, the Forest Service began inventorying roadless areas for possible designation by Congress as wilderness. Areas passed over for wilderness designation were sometimes planned for timber harvest, but opponents often used litigation to block planned sales. Divisive debates over resource use in roadless areas dragged on for decades, draining Forest Service resources and polarizing the public.

By 1998, remaining inventoried roadless areas covered some 58.5 million acres, or about 31 percent of the National Forest System. The Forest Service resolved to decide their future once and for all. In January 2001, after more than a year of environmental impact analysis and public hearings that generated 1.6 million comments, President Clinton announced a new rule for conserving roadless areas larger than 5,000 acres.

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### **Roadless Area Conservation**

The Forest Service's roadless area conservation initiative promised to preserve values unique to a dwindling portion of our increasingly developed American landscape. Roadless areas are a biological refuge for native plant and animal species and a bulwark against the spread of nonnative invasive species. As a baseline for natural habitats and ecosystems, roadless areas offer rare opportunities for study, research, and education. In addition, they provide unique opportunities for dispersed recreation; sources of clean drinking water; and large, undisturbed landscapes that offer privacy and seclusion. Their conservation will preserve a small piece of our pioneer heritage for future generations.

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## Healthy Vegetation

The new rule prohibited road construction and reconstruction, along with timber harvest, except under special circumstances (such as for fire protection). No other uses were prohibited; however, the rule required managers, during forest plan revision, to analyze roadless areas for their special characteristics and to manage them to conserve those special values.

In the 1990's, the Forest Service prepared the first comprehensive data bases of forests at risk from uncharacteristic fire effects (due to fire severity stemming from human activities) and from disease and insect infestations. These and other data bases, such as the Forest Inventory and Analysis, laid the foundations for resource management across jurisdictions on a watershed basis. They were key to overcoming forest health threats in the 21st century.

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### **The South Canyon Fire**

On July 6, 1994, on the outskirts of Glenwood Springs, CO, what was supposed to be a routine fire suppression effort on Storm King Mountain resulted in 14 firefighter fatalities. The South Canyon Fire riveted the attention of firefighters and the general public nationwide. The subsequent investigation report culminated in the 1995 Federal Wildland Fire Management Policy and Program Review. Among other things, the new interagency policy emphasized firefighter and public safety and focused renewed attention on fire use for wildland health.

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Uncharacteristic fire effects emerged as our worst threat. Three factors changed the face of wildland fire management in the 1990's: the impact of the 1994 South Canyon Fire; the rising number of large fires (with 1,000 acres burned or more); and the growing number of homes built by people from urban and suburban areas in fire-prone rural areas, the so-called wildland/urban interface.

The 1994 fire season was pivotal. In that year, more than 1.4 million acres burned on the national forests and grasslands. It was only the third time since 1919 that the National Forest System had seen more than a million acres burn in a single fire season; the other 2 years were 1987 and 1988. The trend was clear: The fires we had postponed for 70 years would no longer wait. Large fires were returning to the interior West.

The fires were stoked by fuel buildups due to decades of fire exclusion. By 2000, 56 million acres of national forests were at risk from wildland fires that could compromise ecosystem integrity and human safety.



**Fire managers faced a quandary: How could they meet traditional expectations for fire protection by a public that chose to live in a fire-prone environment?**

The heightened fire risk was exacerbated by the growing wildland/urban interface. A rising population density in many rural areas placed people and communities in forest ecosystems naturally prone to fire, increasing the threat to life and property. In the 1990's, fires in California, Colorado, Florida, New Mexico, and elsewhere forced hundreds of thousands to flee their homes and left thousands of homes in ashes.

Following an exceptionally severe fire season in 2000, the Forest Service mobilized support for a national plan to address the Nation's fire problem. The President signed the plan and Congress appropriated funding. The agency immediately began implementing the plan, recruiting 3,500 new firefighters in time for the next fire season.

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### **The National Fire Plan**

In September 2000, the President signed a Federal plan to better manage fire for the health of our communities and environment. Congress appropriated funds to support the plan, including \$1.1 billion for the Forest Service in fiscal year 2001. Among other things, the plan called for increasing our national firefighting capabilities, rehabilitating and restoring lands and communities affected by fire, and using techniques such as prescribed fire to reduce hazardous fuels. The National Fire Plan offered unprecedented opportunities for investing in the long-term health of the land while making our rural communities better places to live and work.

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## Healthy Fish and Wildlife

Traditionally, the Forest Service focused on improving habitat for big game and sport fish for the benefit of hunters and anglers, largely neglecting other species. By the late 1980's, however, the Endangered Species Act had changed the agency's focus. Many species listed as endangered, such as the Canada lynx, the northern spotted owl, and the California condor, depended on habitat found on our national forests and grasslands.

The wolf is a case in point. Once hunted nearly to extinction, the wolf was reintroduced in the 1990's on national forests ranging from Tennessee and North Carolina (the red wolf) to the Southwest, northern Rockies, and Great Lakes region (the gray wolf). The reintroduced wolves nearly doubled their population annually. Similarly, plans were formulated to reintroduce grizzly bears into wilderness areas in the Bitterroot Mountains of Idaho and Montana.

Other Forest Service initiatives in the 1990's included protecting and improving habitat for the Kirtland's warbler in Michigan, bats in the Southwest, and the red-cockaded woodpecker in the Southeast. Some partnership programs were partly or wholly educational, such as Taking Wing (for waterfowl and upland game birds), Partners in Flight (for neotropical migrant birds), Get Wild (for terrestrial and semiaquatic wildlife), Animal Inn (for species dependent on dead trees), and Answer the Call (for quail). Similar programs for fish and other aquatic species included Fish Watch, Pathway to Fishing, Adopt a Watershed, and Future Fisherman's Foundation.



**"Given the fundamental importance of water to all life, healthy watersheds are the basic measure of our mission to care for the land and serve people."**

**-Chief Mike Dombeck (2000)**

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### **Serving People by Caring for the Land**

By sustaining healthy watersheds, the Forest Service has fulfilled its mission of serving people. Consider:

- By 2000, more than 60 million Americans got their drinking water from watersheds that originated on our national forests and grasslands. More than 3,400 communities in 33 States relied on our national forest lands for their drinking water.
  - By 2000, 38 percent of the entire runoff in the Pacific Northwest came from national forest land; in California, it was 45 percent. Most of the water that flowed into San Francisco Bay originated on a national forest.
  - By 2000, more than half of the Nation's blue-ribbon trout streams were on our national forests.
  - By 2000, 181 of the 327 watersheds identified by The Nature Conservancy as critical for the conservation of biodiversity in the United States were on our national forests and grasslands.
  - By 2000, the marginal value of water on national forest lands was more than \$3.7 billion per year. This amount did not include the value of maintaining fish and wildlife or the savings to municipalities from reduced filtration costs. Nor did it account for the millions of visitor-days when people found fulfillment on a cool, clear stream or lake.
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## Healthy People— Thriving Communities

**"For 92 years, the education of our rural school-children was dependent on the harvest of trees. This legislation reduces State dependence upon natural resource decisions to fund education."**

**-Chief Mike Dombek (2000)**

In the 1990's, the Forest Service worked tirelessly to reduce the economic dependency of rural communities on national forest timber harvest receipts. Since 1908, States had received 25 percent of Forest Service revenues to help fund rural schools and roads in counties with national forests. Payments were never stable, tied as they were to fluctuating and controversial timber sales. By the late 1990's, with timber sales in decline, payments to States were rapidly dropping.

The Forest Service worked with Congress to find a solution. In October 2000, the President signed the Secure Rural Schools and Community Self-Determination Act, stabilizing payments to rural counties by providing about \$1.1 billion above current payments over 5 years. Counties would no longer depend on controversial timber sales to fund their local schools and roads.

By the 1990's, recreation was the dominant use of the national forests and grasslands, eclipsing commercial resource extraction. Recreation programs were designed to furnish all Americans with a variety of dispersed recreation opportunities while protecting the wildland values that drew visitors and supported a bustling tourism trade.

A growing number of visitors placed potential strains on the land; three-quarters of the Nation's outdoor recreation occurred within half a mile of a stream or water body, posing a potential threat to watershed health. The Forest Service faced daunting challenges in meeting visitor expectations for enjoyable access to recreational activities while conserving a high-quality wildland experience—the very thing visitors came for.

To meet the challenge, the Forest Service crafted a Recreation Agenda to protect and maintain the essential wildland character of our national forests and grasslands. The new agenda made good social science research the basis for recreation management decisions. The agency adopted a customer-driven approach, relying on sound marketing to deliver the right services in the right way. The agenda included a new commitment to reaching youth and underserved populations, thereby building future constituencies and extending the benefits of outdoor recreation to all Americans.

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## **Wilderness Agenda**

Wilderness values are unique. Wilderness provides our cleanest water and air, critical habitat for many native plants and animals, quiet venues of unmatched scenic splendor for solitary enjoyment, and economic benefits to communities through tourism and recreation.

By the 1990's, only 5 percent of the original American wilderness remained protected in designated wilderness areas, mostly in steep, sparsely forested areas at high elevations in the West. Challenges to wilderness included wildland fire management as well as water and air quality, a proliferation of motorized vehicles, and habitat loss through encroachment by invasive nonnative species.

In 1999, the Forest Service rededicated itself to effective wilderness management through a new Wilderness Agenda to guide the wilderness program into the 21st century. The agenda committed the Forest Service to work for more wilderness designations, especially in underrepresented ecosystems such as old-growth and bottom-land forest. The agenda also called for meeting threats to wilderness through inventory, monitoring, and a common information delivery system across agencies.

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## **Restored Trust and Confidence**

In 1993, the Forest Service joined in the Urban Resources Partnership to help “green” our urban communities. Each partnership established its own mission and investigated natural resource conditions and community needs, then applied for project grants. By 2000, the Forest Service was participating in 13 partnerships nationwide, from South Florida to Seattle, WA.

By 2000, there were signs of growing public confidence in the Forest Service. Favorable reports again outweighed negative stories in the media. Contentious debates had all but ceased in Congress over levels of timber harvest and appropriations for forest roads. For fiscal year 2001, in a striking vote of confidence, Congress raised the Forest Service’s annual budget from \$2.9 billion to \$4.4 billion, a 47-percent increase and the largest in agency history.

At the same time, for two key appropriations—for the National Forest System and for construction—Congress reduced the number of budget line items from 34 to just 13, giving the agency more flexibility. But that’s not all. The Forest Service assumed stewardship of more than a quarter million acres of public lands by acquiring Land Between the Lakes in Tennessee and the Baca Ranch in New Mexico. Altogether, the agency’s new resources and responsibilities reflected a measure of restored trust and confidence in the Forest Service’s conservation leadership.



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### **Accomplishments for 2000**

[From Chief Mike Dombeck's December 15, 2000, speech]

Our 192 million acres of national forests and grasslands include:

- 3,400 watersheds
- 34.7 million acres of wilderness
- 383,000 miles of road system, including 7,700 miles of National Scenic Byways
- 4,300 miles of National Wild and Scenic Rivers

On our national forests and grasslands, we have:

- Provided drinking water for 60 million people
  - Performed watershed improvements on 35,500 acres
  - Restored or enhanced 470,500 acres of wildlife, fish, and Threatened and Endangered Species habitat
  - Completed forest insect and disease treatments on 800,000 acres
  - Performed reforestation activities on 267,000 acres
  - Offered 2.3, harvested 2.9, and placed under contract 4.5 billion board feet of timber
  - Maintained 249,000 miles of the landline boundary system
  - Permitted 9.3 million animal head months of livestock grazing
  - Processed 1,070 energy and bonded nonenergy operations
  - Maintained 23,000 developed recreation sites and 4,300 campsites
  - Maintained 133,000 miles of hiking, horse, and off-highway vehicle trails and 6,700 miles of scenic and historic trails
  - Completed forest health surveys and evaluations on 788 million acres (all ownerships)
  - Assisted 146,700 woodland owners
  - Assisted 690 rural communities in using local strategic plans
  - Reduced hazardous fuel on 1.4 million acres
  - Assisted 2,450 community/volunteer fire departments
  - Developed 2,505 research products, including books, papers, articles, reports, audiovisual materials, and other technical documents
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**Shagbark Hickory**

## A Firm Foundation for the Future

Now you are stumped. Your review of Forest Service history has revealed no single turning point on the course to the future. The changes along the way were truly a gradual unfolding of a national purpose, with important contributions at every stage.

In the year 2050, as the Forest Service approaches its sesquicentennial, the agency's accomplishments can be traced all the way back to 1905, to the wisdom and foresight of Theodore Roosevelt and Gifford Pinchot in founding our National Forest System. Their vision of conservation inspired every subsequent Forest Service achievement, from pioneering a national wilderness system to reformulating a multiple-use principle based on conserving the health of the land.

Sustainability, you now know, is key. In your reading of Forest Service history, a single trend stands out: the rise of sustainability as the overarching objective of Forest Service land and resource management. Simply put, sustainability means conserving productive ecosystems, including habitat for native species, and never abusing the land or its resources.

At different times, you realize, sustainability has taken different forms. It started from seeds planted in the early 1900's in the fertile soils of conservation. It was nurtured through the land ethic developed by Aldo Leopold, rising like a strong young sapling in the open fields of conservation. In the 1970's, it began to establish dominance through the agency's new ecosystem-based approaches. Finally, in the 1990's, sustainability came to full maturity, the dominant tree in a forest of ideas on land and resource management.

**"We did it, and because we did it some 175,000,000 acres of National Forests today safeguard the headwaters of most Western rivers, and some Eastern rivers as well."**

**-Gifford Pinchot,  
Breaking New Ground (1947)**

**"The policy of sustainability should be the guiding star for stewardship of the national forests and grasslands...Most basically, we compromise human welfare if we fail to maintain vital, functioning ecosystems."**

**-Committee of Scientists,  
Sustaining the People's Land (1999)**

**"Sustainable development, to put it simply, is a way to fulfill the requirements of the present without compromising the future."**

**-Secretary of State James Baker  
(1990)**

Today, in the year 2050, sustainability remains the guiding star for stewardship of America's public lands. It is the bedrock principle for the network of watershed-based cooperative stewardship groups that now cover most of the Nation, steering major land management decisions in directions based on sound conservation science.

In the middle of the 21st century, one of our most pressing challenges is to unite the world behind a science-based agenda for resolving international disputes over water. The Forest Service is playing a leading role in drafting an international Water Resources Agenda based on the mutual interests of the contending parties, beginning with watershed health.

The seeds for the new international agenda, you now see, were planted in the 20th century through the twin concepts of ecological sustainability and sustainable development—concepts rooted in the American tradition of conservation. You feel proud to be part of that tradition.

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