

**HEALTHY FORESTS**  
***An Initiative for Wildfire Prevention  
and Stronger Communities***



**AUGUST 22, 2002**

# **Healthy Forests**

## ***An Initiative for Wildfire Prevention and Stronger Communities***

### **Executive Summary**

The American people, their property, and our environment, particularly the forests and rangelands of the West, are threatened by catastrophic fires and environmental degradation. Hundreds of millions of trees and invaluable habitat are destroyed each year by these severe wildfires. These unnaturally extreme fires are caused by a crisis of deteriorating forest and rangeland health, the result of a century of well-intentioned but misguided land management. Renewed efforts to restore our public lands to healthy conditions are needed.

#### **This fire season is already one of the worst in modern history.**

- Already more than 5.9 million acres of public and private land have burned this year, an area the size of New Hampshire and more than twice the average annual acreage, with more than a month of fire season remaining. Fires have burned 500,000 acres more than they had at this time during the record-setting 2000 fire season.
- Hundreds of communities have been affected by these wildfires. Tens of thousands of people have been evacuated from their homes, and thousands of structures have been destroyed. With more people living near forests and rangelands, it is becoming increasingly difficult to protect people and their homes. Land managers must do more to address the underlying causes of these fires.

#### **Catastrophic fires are caused by deteriorating forest and rangeland health.**

America's public lands have undergone radical changes during the last century due to the suppression of fires and a lack of active forest and rangeland management. Frequent, low-intensity fires play an important role in healthy forest and rangeland ecosystems, maintaining natural plant conditions and reducing the buildup of fuels. Natural, low-intensity fires burn smaller trees and undergrowth while leaving large trees generally intact. Natural fires also maintain natural plant succession cycles, preventing the spread of invasive plant species in forests and rangelands. This produces forests that are open and resistant to disease, drought, and severe wildfires.

Today, the forests and rangelands of the West have become unnaturally dense, and ecosystem health has suffered significantly. When coupled with seasonal droughts, these unhealthy forests, overloaded with fuels, are vulnerable to unnaturally severe wildfires. Currently, 190 million acres of public land are at increased risk of catastrophic wildfires.

#### **These deteriorated forest and rangeland conditions significantly affect people, property, and ecosystem health.**

- Fuels have accumulated so significantly that fires no longer burn at natural temperatures or rates, making them dangerous to fight and difficult to control. Catastrophic wildfires grow extremely quickly, making them difficult to control if they are not stopped immediately. For example, the Rodeo fire in Arizona grew from 800 acres to 46,000 acres in just one day.

- Nearly 83 percent of firefighters surveyed identified the need for fuels reduction as the top priority for improving their safety.
- Catastrophic wildfires burn at much higher temperatures than normal fires, causing long-lasting and severe environmental damage. A large, catastrophic fire can release the energy equivalent of an atomic bomb. Rather than renewing forests, these fires destroy them. While most natural fires burn at ground level and at relatively low temperatures, these catastrophic fires burn at extreme temperatures, destroying entire forests and sterilizing soils. These extreme fires can even kill giant sequoia trees that have survived centuries of natural fires. It can take as long as a century for forests to recover from such severe fires.

**Enhanced measures are needed to restore forest and rangeland health to reduce the risk of these catastrophic wildfires.**

Federal, state, tribal and local governments are making unprecedented efforts to reduce the buildup of fuels and restore forests and rangelands to healthy conditions. Yet, needless red tape and lawsuits delay effective implementation of forest health projects. This year's crisis compels more timely decisions, greater efficiency, and better results to reduce catastrophic wildfire threats to communities and the environment.

The Healthy Forests Initiative will implement core components of the National Fire Plan's 10-year Comprehensive Strategy and Implementation Plan. This historic plan, which was adopted this spring by federal agencies and western governors, in collaboration with county commissioners, state foresters, and tribal officials, calls for more active forest and rangeland management. It establishes a framework for protecting communities and the environment through local collaboration on thinning, planned burns and forest restoration projects.

## **The Healthy Forests Initiative**

President Bush is directing Agriculture Secretary Veneman, Interior Secretary Norton and Council on Environmental Quality Chairman Connaughton to improve regulatory processes to ensure more timely decisions, greater efficiency, and better results in reducing the risk of catastrophic wildfires by restoring forest health. This includes:

- Improving procedures for developing and implementing fuels treatment and forest restoration projects in priority forests and rangelands, in collaboration with local governments.
- Reducing the number of overlapping environmental reviews by combining project analysis and establishing a process for concurrent project clearance by federal agencies.
- Developing guidance for weighing the short-term risks against the long-term benefits of fuels treatment and restoration projects.
- Developing guidance to ensure consistent NEPA procedures for fuels treatment activities and restoration activities, including development of a model Environmental Assessment for these types of projects.

President Bush will work with Congress on legislation to further accomplish more timely, efficient, and effective implementation of forest health projects. Such legislation should:

- Authorize agencies to enter into long-term stewardship contracts with the private sector, non-profit organizations, and local communities. Stewardship contracts allow contractors to keep wood products in exchange for the service of thinning trees and brush and removing dead wood. Long-term contracts provide contractors the incentive to invest in equipment and infrastructure needed to productively use material generated from forest thinning, such as small-diameter logs, to make wood products or to produce energy.
- Expedite implementation of fuels reduction and forest restoration projects, particularly in high priority areas, consistent with more targeted legislation passed in July.
- Ensure that judges consider long-term risks of harm to people, property and the environment in challenges based on short-term risks of forest health projects.
- Remove a rider that imposed extraordinary procedural requirements on Forest Service appeals that are inconsistent with pre-existing requirements of law.

President Bush will work with Congress on legislation to supplement the Agriculture and Interior Departments' effort to fulfill the original promise of the 1994 Northwest Forest Plan by:

- Removing needless administrative obstacles and providing authority to allow timber projects to proceed without delay when consistent with the Northwest Forest Plan.
- Renewing the commitment to a balanced conservation strategy in the Pacific Northwest that reflects the needs of both local communities and the environment. The Northwest Forest Plan represents a compromise to bring balanced, long-term forest management to federal forests in western Washington, western Oregon, and northern California. The purpose of the Plan was to protect the forests and ensure a dependable, sustainable timber harvest from federal land in the Pacific Northwest.

## **The Need for Healthier Forests**

### **Federal lands are increasingly vulnerable to catastrophic fires.**

Under normal conditions of forest and rangeland health, fires play a vital role in removing excess fuels and maintaining normal plant composition and density. These fires tend to burn at ground level, generating low temperatures and moving relatively slowly. When burning through forested areas, these fires remove underbrush and dead growth while healthy, mature trees survive. Without active management of forests and rangelands, large, expensive, and damaging wildfires will occur more frequently, causing greater damage to people, property, and ecosystems. Intelligent active land management that minimizes the risk of severe fires is needed to protect forest and rangeland ecosystems.

About 190 million acres of federal forests and rangelands in the lower 48 states face high risks of catastrophic fire due to deteriorating ecosystem health and drought. For instance, many ponderosa pine forests are 15 times more dense than they were a century ago. Where 25 to 35 trees once grew on each acre of forest, now more than 500 trees are crowded together in unhealthy conditions. Drought conditions coupled with years of fuel buildup from fire suppression and reduced thinning make these lands vulnerable to intense and environmentally destructive fires.

### **This fire season is among the worst in modern history.**

- More than 5.9 million acres have burned so far this year, 500,000 acres more than the previous record-setting 2000 fire season, and more than double the acreage of the 10-year average. Hundreds of millions of trees were destroyed by these fires. Major fires burned in Alaska, Arizona, California, Colorado, Georgia, Idaho, Minnesota, Montana, New Mexico, Nevada, Oregon, South Dakota, Utah, Washington, and Wyoming.
- Fires are burning with greater speed and intensity than ever before. For example, the 468,000-acre Rodeo Fire in Arizona grew from 800 acres to 46,000 acres in just one day, destroying homes and forests owned by the White Mountain Apache Tribe. The 137,000-acre Hayman Fire was five times bigger than the previous largest fire in Colorado's modern history, and forced evacuations in over 80 communities. The 471,000-acre Biscuit Fire is the largest fire in Oregon's modern history, threatening over 4,000 homes. The 147,000-acre McNally Fire threatened sequoias along the Trail of 100 Giants in California.

### **Catastrophic wildfires harm people, property, and the environment.**

#### ***Harm to People and Local Communities***

- **Firefighters Are At Risk:** Large, severe wildfires create unsafe conditions for both firefighters and the public. Twenty wildland firefighters have been killed this year. Over the last ten years, 189 wildland firefighters have been killed, and hundreds have been injured. A national survey revealed that nearly 83 percent of all firefighters identified "fuels reduction" as the single most important factor for improving their margin of safety on wildfires (Wildland Firefighter Safety Awareness Study, Tri-Data, 1996).

- **Increased Air Pollution:** Smoke from wildfires can significantly affect air quality in neighboring cities and towns. Several Colorado communities experienced significantly impaired air quality caused by fires for several weeks this summer; Denver experienced the highest level of fine particulates ever recorded in the state. The 1999 Big Bar Fire Complex in northern California caused violations of federal and state health-based air quality standards for 22 days, and closed schools in two counties for several days.

**Large fires cause significant air pollution**



- **Fires Force Thousands to Evacuate:** Tens of thousands of people from 200 communities were forced to flee wildfires this summer. In Colorado alone, more than 77,000 residents were evacuated from their homes for periods of a few days to several weeks and the resulting damage and loss of property cost the insurance industry more than \$80 million.
- **Property Damage:** This year more than 2,300 homes and structures were destroyed by wildfire, causing millions of dollars in damage.

***Disruption to Local Economies***

Large, catastrophic fires threaten economic sustainability of communities dependent on wildlands and natural resources. Tourism and recreational interests (such as outfitters, guides, camping and fishing), the wood products industry, ranching, and the service industries that support them are all affected by the loss of resources to wildfires. Destroyed forests and damaged watersheds impose a variety of economic costs to communities.

- **Reduced Tourism:** In July, smoke from the Big Elk Fire reduced tourism in Rocky Mountain National Park, depressing the local economy. In Sedona, Arizona, occupancy rates and revenues at one popular resort hotel fell to less than half of normal mid-summer rates.
- **Damage to Municipal Watersheds:** Severe wildfires degrade water quality, decrease storage capacity, and jeopardize the physical structure of municipal watersheds. For instance, the 1996 Buffalo Creek Fire burned 12,000 acres in Colorado’s South Platte River drainage, forcing the Denver Water Board to spend more than \$20 million to address sediment problems caused by erosion into one of Denver’s primary municipal water supply reservoirs.

## *Environmental Damage*

Severe wildfires can damage soils, water quality and quantity, fisheries, plant communities, wildlife habitat, and endanger species. Damage to watersheds and loss of resources may have cascading effects outside of the burned areas. For example, fisheries can be severely impacted by sedimentation and siltation following fires. Rehabilitation can reduce but cannot eliminate these impacts.

- **Damaged Fisheries:** Critical trout fisheries throughout the West and salmon and steelhead fisheries in the Pacific Northwest can suffer from increased water temperatures, sedimentation, and changes in water quality and chemistry.
- **Destroyed Endangered Species Habitat:** Ironically, while fuels reduction projects are often delayed or prevented due to litigation over Endangered Species Act requirements, catastrophic fires that could be prevented by these projects can have devastating consequences for endangered species. For instance, the Biscuit fire in Oregon has destroyed 125,000 to 150,000 acres of spotted owl habitat.

- **Soil Sterilization:** Wildfires often require extensive site rehabilitation to protect resources and nearby communities from floods and landslides. Topsoils exposed to extreme heat can become water-repellant, and soil nutrients may be lost. It can take decades or even centuries for ecosystems to recover to pre-fire conditions.

### **Fire so hot it can sterilize the soil**



- **Soil Erosion:** The protective covering provided by foliage and dead organic matter is removed, leaving the soil fully exposed to wind and water erosion. Accelerated soil erosion occurs, causing landslides and threatening aquatic habitats.
- **Spread of Invasive Plant Species:** Non-native woody plant species frequently invade burned areas. When weeds become established they can dominate the plant cover over broad landscapes, and become difficult and costly to control.
- **Disease and Insect Infestations:** Unless diseased or insect-infested trees are swiftly removed, infestations and disease can spread to healthy forests and private lands. Timely active management actions are needed to remove diseased or infested trees.

## Photo Essay-Changes in Forest Condition



**Bitterroot National Forest 1895**

### **Natural Forest Conditions**

The 1895 photo shows natural forest stand conditions that evolved from regularly occurring, low-intensity, surface burning. The forest was open and dominated by fire-tolerant, fire-adapted ponderosa pine.



**Bitterroot National Forest 1980**

### **Unmanaged Forest**

The 1980 photo (from the same place) shows how the forest has changed dramatically since 1895. Over the years small trees have established into dense thickets. These fire-intolerant tree species now crowd the forest, pre-disposing the area to insect infestations, disease outbreaks, and catastrophic wildfires.



**Bitterroot National Forest 2001**

### **Catastrophic Wildfire**

In this 2001 photo (again, from same place) no “forest” and only a few trees survived the severe fire. Note the beginning of erosion in the stream channel. (The house had been moved prior to the fire however, this is seldom an option for residents.)



## **Overview: Current Efforts to Control Wildfires and Restore Forest Health**

Faced with conditions that are ripe for catastrophic and uncontrollable fires, firefighters are doing an outstanding job this year, controlling over 99 percent of wildfires on initial attack. (For example, on July 14, 504 new fires started, but only five grew to burn more than 500 acres). In this fire season alone, more than 500 large fires have already been contained. But when fires escape initial efforts to control them, they can become uncontrollable, costly and environmentally destructive.

Although firefighting efforts are largely effective, they are dangerous, uncertain, and expensive. The real solution to catastrophic wildfires is to address their causes by reducing fuel hazards and returning our forests and rangelands to healthy conditions. Tree thinning and removal of dense underbrush can ensure thriving forests while reducing risks of catastrophic fires and the dangers they pose to firefighters.

### **Firefighters are effective in part because of additional federal resources provided for both firefighting and forest health programs.**

- So far, 1,932,000 acres of land have been treated with thinning or prescribed burning to reduce the accumulation of hazardous fuels; agencies expect to treat 2.5 million acres by the end of the year. Another 2.5 million acres of federal and private lands have been protected from insects and disease that contribute to fire hazards.
- More than \$2.2 billion in funding was provided in 2002 for fire prevention, suppression and restoration, \$743 million more than was available in 2000.
- This support has funded a total of 17,080 fire fighting personnel, 4,900 more than were available in the 2000 fire season. These funds also provided 377 additional fire engines, as well as additional aircraft, bulldozers, water tenders and other equipment.
- One military unit (500 firefighters) has been assigned to wildfire fighting. And firefighters from Australia, New Zealand, and Canada are assisting in firefighting efforts under cooperative agreements signed by Secretaries Veneman and Norton.

### **A comprehensive 10-year strategy to make communities safer from wildfires.**

On May 23, 2002, Secretary Norton and Secretary Veneman signed an historic agreement with 17 western governors, county commissioners, state foresters, and tribal officials on a plan to make communities and the environment safer from wildfires through coordinating federal, state, and local action.

Under the 10-year Comprehensive Strategy Implementation Plan, federal wildfire agencies, affected states, counties, local governments and tribes agreed to the same goals, implementation outcomes, performance measures and tasks that need to be accomplished by specific deadlines. The comprehensive agreement covers all phases of the fire program, including fire preparedness, suppression and prevention, hazardous fuels management, restoration of burned areas, community assistance, and monitoring of progress.

*A key priority of the plan is more active forest and rangeland management to reduce the accumulation of fuels and to restore ecosystem health.*

The plan specifically calls for active forest and rangeland management, including thinning of forests and rangelands that produce forest by-products, biomass removal and utilization, and other tools that will meet long-term ecological, economic, and community objectives. (For examples of this work, see photographs on next page.)

The plan also establishes 23 priority tasks for federal, state, and local governments, including:

- Developing and implementing a process for federal, state, tribal, and local governments to collaborate on the annual selection of fuels treatment and burned area rehabilitation projects to make sure that priority areas near communities and ecosystems at risk of catastrophic fire are treated in timely fashion; and
- Developing and implementing consistent and effective procedures for procurement, contracting, grants and agreements to support fuels treatment projects.
- Assessing federal regulatory processes governing projects and activities and identifying measures to improve timely decision-making.

**The Administration is working to prevent future large, catastrophic fires by carrying out fuel treatment programs such as thinning and prescribed burning.**

The Forest Service and Interior Department are planning to treat more 2.5 million acres of land this year with thinning or prescribed burns that reduce the accumulation of hazardous fuels and restore forest health. At the beginning of August last year, these agencies had treated 1,573,000 acres. This year, the agencies have already treated 459,000 acres more than last year – a nearly 30 percent increase.

**Fuels treatment projects have prevented or stopped fires.**

- A recent study by the Western Forest Fire Research Center concluded, “Our results unanimously indicate that treated stands experience lower fire severity than untreated stands that burn under similar weather and topographic conditions.” (“Effects of Fuels Treatment on Wildfire Severity,” Omi and Martinson, March 2002)
- **Black Butte Ranch:** Fuels treatment projects in the Black Butte Ranch area of Oregon significantly reduced wildfire damage. Stands of Ponderosa pine had been thinned and the understory treated through hand-piling, mowing and burning. These treatments reduced damage to the Ponderosa stands and provided firefighters with open, defensible space and anchor points for low intensity backfires that protected more than 1,200 homes from the Cache Mountain Fire.
- **Medicine Fire:** Fuels treatment conducted by the Round Valley Indian Tribe in 2001 was instrumental in stopping the Medicine Fire near Riverside, California. The fire spread rapidly uphill until firefighters stopped the blaze at the Perry Ridge fuel break. Without the fuel break, the fire could have burned over 1,000 acres, consuming valuable timber

## Fuel Reduction in Rocky Mountain National Park

**Before fuel treatment**



**During reduction project**



**After completion of fuel reduction and removal**



and watershed resources, threatening the Round Valley Reservation and other nearby communities.

- **Mill Creek Fires:** Prescribed burning in California has helped control fires. Several arson fires in the Mill Creek drainage adjacent to the Cow Mountain Recreation Area in California have burned thousands of acres. Concerned stakeholders worked with the BLM to schedule a prescribed burn in the fall of 1981, but before the burn could be completed an arsonist set another fire that burned over 26,000 acres, including 35 structures. Fire suppression and rehabilitation costs exceeded \$2 million. BLM and the California Dept. of Forestry and Fire Protection implemented a prescribed burn in the Mill Creek drainage in 1997. When another arsonist struck in July 2001, the fire was stopped at less than 10 acres, preventing potential damage to public and private resources and saving fire suppression and rehabilitation costs.

**The Administration is working to make its fuels treatment and forest health programs even more effective.** Actions taken to improve the programs include:

- **Procedural Improvements:**
  - ✓ A Cohesive Fuels Treatment Strategy for all Forest Service and the Department of the Interior agencies is being developed that places a priority on selecting projects where the risk of catastrophic fires to communities and ecosystems is the greatest.
  - ✓ Forest Service, Interior, state, local and tribal officials are working together to jointly select and prioritize fuels treatment projects.
  - ✓ The process for selecting final fuels treatment projects has been accelerated to October of each year to make better use of fall and winter prescribed fire conditions.
  - ✓ A common reporting system has been developed for fuels treatment projects across all agencies.
- **Management Effectiveness:**
  - ✓ The Department of the Interior has appointed a full-time fuels treatment director to insure accountability for fuel treatment projects.
  - ✓ The Forest Service and the Department of the Interior are developing common performance measures that are consistent with the Government Performance and Results Act and are outcome oriented.
  - ✓ The agencies are including implementation of the National Fire Plan as an element in annual performance evaluations of field staff, and specifically including staff's effectiveness in completing required fuels treatment work.
- **Critical Research:** Over 167 research projects on a variety of subjects both ecological and socio-economic are currently in progress. Studies range from impacts of wildfires on communities, impacts of fuel treatments of wildfires, preventing wildfire disasters in the wildland urban interface, to the utilization of small diameter wood products.

### **The Administration is restoring record amounts of burned forests and rangelands.**

- The Forest Service and Department of the Interior will stabilize and rehabilitate more than 2.5 million acres of land this year. Stabilization treatments stop the immediate loss of soil from wind and water erosion and protect municipal watersheds. Rehabilitation restores habitat, native plant cover, forest cover, rehabilitates roads and trails, and prevents the spread of invasive grasses and weeds.
- A Native Plant Report has been submitted to Congress that includes plans and recommendations to supply native plant materials for emergency stabilization and longer-term rehabilitation and restoration efforts. Working with a variety of federal, state, and local partners, including private sector growers, the native plant material development program has provided \$12 million to secure a reliable source of native vegetation for ecosystem restoration projects.

### **The Administration is providing more than \$428 million in fire prevention, preparedness, and suppression assistance this year to thousands of communities.**

The Forest Service, Department of the Interior and the Federal Emergency Management Administration provide funding for equipment, personnel, training, community hazard mitigation plans, market utilization of small diameter materials, fuels reduction projects, and cost reimbursement to thousands communities and local, rural and volunteer fire departments. These agencies are writing a memorandum of understanding to better coordinate all future grants given to communities.

### **Federal assistance is supporting volunteer firefighting and forest health efforts.**

In the last two years, there has been an increase in federal assistance and support to rural and volunteer fire departments, which in turn respond to fires on federal lands. Volunteer and rural fire departments are the first line of initial attack in up to 90 percent of all wildfires. Federal assistance has improved rural and volunteer fire departments' capabilities by providing personal protective gear, equipment, and training. Last year, more than 12,000 volunteer and municipal firefighters received federal training, and more than 40 new volunteer fire departments were organized.

### **Student Conservation Association volunteers have enlisted in the fight against wildfires.**

Student Conservation Association volunteers are also doing vital work on many forest health restoration and fire safety education projects. Recognizing the urgency of the wildfire threat, SCA has quadrupled the number of volunteers providing fire-related services in the last year. SCA has enlisted hundreds of volunteers to assist property owners along the wildland-urban interface in identifying and implementing strategies for protecting their homes and properties from wildland fires. SCA volunteers conduct fire audits in rural communities, help homeowners create defensible space around their homes, and work to reduce fuel loads and remove invasive species. SCA volunteers give over one million hours of service each year to ensure the health of America's forests, parks and wild lands.

## **The Need for Improved and Accelerated Forest Management**

### **Procedural delays are stalling critical forest and rangeland management projects.**

Although federal, state, local, and tribal officials, working with communities, non-profit organizations and the private sector, are making great efforts to reduce the risk of catastrophic fires and restore forest and rangeland health, these vital projects are often significantly delayed and constrained by procedural delays and litigation. Given the urgency and scale of the work to be done, it is imperative that we act quickly. We must reverse a century of misguided mismanagement of our forests. We must undertake a new century of forest restoration – yet land managers and local communities are too often held back by red tape and litigation.

Federal land managers must comply with thousands of pages of laws, regulations and administrative rules before implementing thinning and other fuels reduction projects on the ground. Additional analysis is frequently conducted in anticipation of administrative appeals and litigation. This causes frequent and often considerable administrative delays. For example:

- It can take six months to prepare environmental planning documents for even routine prescribed fire treatments. More complicated projects can take two years or longer.
- Timber sales to achieve fuels reduction and forest health objectives, consistent with forest health management plans, can take two to four years to prepare and complete.
- A study commissioned by the Forest Service in 2001 found that project decisions by the agency involve as many as 800 individual requirements and over 100 points where various laws and required processes interact. The study concluded that “the process interaction between laws is extremely complex” making the project planning process “highly susceptible to recursion/interruption and even non-completion.”
- Forest Service officials have estimated that planning and assessment activities consume 40 percent of total work at national forests – at a cost of more than \$250 million per year. Planning costs for a single project can exceed \$1 million. Although some of this planning is indispensable, improved procedures could shift up to \$100 million a year from unnecessary or excessive planning to ecosystem restoration work.
- The Forest Service is required to prepare 15-year forest plans for each of the 125 units in the National Forest system, part of planning the Forest Service does for fuels treatment projects. Recent forest plans and the associated environmental analysis are often over 800 pages long and require as long as 10 years to prepare, at an average cost of \$9 million each.

A June 2002 Forest Service study, *The Process Predicament*, concluded that the agency “operated within a statutory, regulatory, and administrative framework that has kept the agency from effectively addressing rapid declines in forest health.” Three factors contribute most directly to project delay.

- 1) Excessive analysis: Confusion, delays, and costs of required consultations and studies.

- 2) Ineffective public involvement: Procedural requirements that create disincentives to collaboration in national forest management.
- 3) Management inefficiencies: Poor planning and decision-making, a deteriorating skills base and inflexible funding rules, compounded by the sheer volume of the required paperwork and the associated proliferation of opportunities to misinterpret or misapply required procedures.

The report concluded that “Requirements for environmental analysis go well beyond what is required for fully informed decision-making.”

**The appeals process is complex, time consuming and burdensome.**

- Between January of 2001 and July of 2002, 48 percent of all Forest Service mechanical fuels reduction projects were appealed. In northern Idaho and Montana, 100 percent of mechanical fuels reduction projects were appealed.
- The Payette National Forest in Idaho reports that every thinning project or timber sale is appealed and litigated. Seven cases currently are in litigation.
- The complexity of the protests has grown as well. While earlier protests might raise three or four issues, current protests often raise 20 or more issues.
- The Forest Service appeal requirements add a statutory minimum of three and a half months to project preparation. However, the increasing complexity and sophistication of appeals is lengthening this timeframe, in some cases adding as much as a year or more to the administrative process.
- Most frequently, appeals do not change the underlying decision. Approximately one in ten Forest Service projects are overturned on appeal. Nevertheless, decision-makers must frequently prepare projects with appeals in mind, adding significant time and cost without improving the quality of the decision.

For example:

- On one project to reduce severe fire risk in a municipal watershed, the Santa Fe National Forest spent nearly five years and more than \$1 million compiling documentation that could withstand the expected appeals and litigation.
- Following the historic fires of 2000, the Bitterroot National Forest spent 15,000 person-days (57 person-years) preparing analysis and documentation to do recovery work in a portion of the burned area, at a total cost of over \$1 million including \$100,000 in printing and mailing costs alone. The Forest Service felt this level of preparation was necessary to “fully document their ‘hard look’ at all the issues and their full compliance with every potentially applicable procedural requirement.”

## **Delays caused by appeals can be disastrous when fires strike.**

- **Baca Ecosystem Management Area:** This project in Arizona was designed to reduce fuel loading on over 7,000 acres, close 89 miles of unneeded roads, and restore degraded riparian conditions throughout the watershed. A lawsuit was filed in May, 2000, seeking to stop the removal of trees and citing concerns about wildlife issues. The Forest Service was not able to persuade the court that the short-term effects of forest thinning were acceptable given the threat of catastrophic fire to the long-term health of the watershed. This year, the Rodeo fire burned over 460,000 acres of forested lands and destroyed over 450 homes, as well as more than 90 percent of the Baca project area. Although a settlement of the lawsuit had allowed thinning work to begin on 1,300 acres of land, at the time of the fire only 300 acres had been treated to withstand fire.
- **Coconino National Forest:** In 1996, the Forest Service proposed a thinning project on the Coconino National Forest in Arizona to reduce fire risks to habitat and known nesting sites of the northern goshawk. Thinning near the nesting sites was dropped from the project because of objections from local environmentalists and the Forest Service's desire to avoid time-consuming appeals and possible litigation. Later that year a catastrophic fire burned through the area, completely destroying both habitat and nesting sites.
- **Six Rivers National Forest:** In the winter of 1995, a severe storm blew down trees on 36,000 acres in California's Six Rivers National Forest. The Forest Service proposed to remove downed trees on a portion of the storm area to reduce fuel loads, which had increased to 10 times the manageable level, creating a severe fire hazard. Complex analysis requirements under the Northwest Forest Plan and administrative appeals prevented work on the project from beginning until the summer of 1999. By fall of 1999, only 1,600 acres (5 percent of total) had been treated before a 59,000-acre fire burned through the project area; more than 17,000 acres were severely burned. Fire recovery efforts, which required 18 months of additional analysis, were appealed and subsequently litigated. The recovery project was ultimately enjoined in April 2002 after seven years of administrative and legal process that produced over 10,000 pages of documentation.
- **Insect Infestations:** Unless insect-infested trees are swiftly removed, infestations can spread to healthy forests and private lands. In the Southeast, southern pine beetle infestations have repeatedly spread from national forests to private lands because the Forest Service was unable to complete environmental analysis and take action soon enough to prevent it.

## **Court injunctions can have broad impacts on management activities.**

- In some judicial districts, courts have provided injunctive relief to litigants based on short-term grounds, without deference to expert assessments of long-term risks to property or potential long-term environmental harm from delaying forest health projects. For instance, in the Six Rivers National Forest case discussed above, the court gave more weight to the Beschta Report, a short and generalized paper commissioned by the Pacific Rivers Council in 1995, than the extensive and detailed risk analysis already conducted by the agency for that specific project.



- Concern that inadequate documentation will lead to court injunctions creates a chilling effect on other similar projects. This leads Forest Service staff to conduct additional analysis and planning to attempt to avoid litigation – delaying other needed work and increasing the chance of long-term risk of resource and property damage.
- Court injunctions against regulatory agencies’ decisions approving short-term impacts on species, water quality and other resource values can affect Interior land management agencies as well. For example, litigation filed against the National Marine Fisheries Service has led to injunctions stopping projects proposed by the BLM and Forest Service.

**Congress has recognized the effects of regulatory and administrative delays this fire season.**

- In July 2002, Congress passed legislation recognizing the urgency of the severe fire threat posed to private homes from fire and diseased trees in the Black Hills National Forest and the procedural problems that could delay prompt action.
- This measure expedited fuels treatment projects to address severe fire conditions, and avoids the constraints posed by ongoing litigation to address those conditions in high priority areas. The bill cites pending litigation (*Sierra Club v. US Forest Service*) as preventing “timely action to reduce the risk of wildland fire.” The legislation exempts forest management activities in the Black Hills from environmental laws such as the National Environmental Policy Act and the National Forest Management Act. The legislation also exempts timber cutting as part of a fuels treatment project from public notice and comment as well as judicial review and appeals.

## **The Squires Fire:**

### **A Case Study in Fire and Forest Management Obstacles and Effects**

The history of the Squires Fire provides a good example of the legal and regulatory obstacles to effective land management efforts to reduce fire hazards and promote forest health. Studies of the fire also demonstrate the nature and effects of wildfires burning on both treated (thinned) and untreated land.

In 1996, the Bureau of Land Management (BLM) began planning a project to restore forest health and reduce the hazardous accumulation of fuels on 24,000 acres of BLM land in the Squires Peak area near Medford, Oregon. It took six years of analysis and legal review, 830 pages of documentation, several appeals and two lawsuits before work was allowed to begin work on the Spencer Lomas Project fuels treatment project, a 430-acre portion of the original 24,000-acre project.

When the Squires Fire was ignited by lightning on July 13, 2002, approximately 80 acres of the Spencer Lomas project remained untreated, and subsequently burned. Because firefighters were unable to quickly extinguish the fire, it burned more than 2,800 acres of forest, including more than 800 acres of private land. The fire burned the habitat of threatened spotted owls and the Gentner's Fritillary, an endangered flowering plant, as well as three million board feet of commercial timber. The fire cost \$2 million to suppress, and will cost about \$1 million to rehabilitate.

#### **The value of fuels reduction projects.**

Observations of the fire behavior on both treated and untreated areas starkly illustrate the value of fuels reduction projects: While untreated forest burned intensely, destroying trees and causing lasting damage to the ecosystem, the fire dropped to the ground when it burned into the treated areas, and burned with the low-intensity heat characteristic of normal wildfires, leaving space where firefighters could safely attack the fire.

*As the accompanying photos of the Squires Fire show, the difference in fire behavior between thinned and unthinned areas was dramatic.* Although tree loss was minimized in treated areas (see photos on page 19), in areas that were left untreated, the fire burned tree canopies and destroyed most trees (see photos on page 20).

#### **Legal and regulatory obstacles to timely implementation of fuels projects.**

For six years, the Department of the Interior tried to get regulatory and judicial approval to thin and manage the area to improve habitat and the vitality of trees.

- In 1996, BLM began planning the 24,000-acre Appleseed Landscape Project, designed to improve forest health, create greater resistance to drought and insects, and to minimize the risk of wildfires while capturing the commercial value of the excess trees. The project emphasized preserving the largest and healthiest trees as part of its efforts to promote overall forest health.

- On March 20, 1997, BLM began the required National Environmental Policy Act (NEPA) review process. At the same time, BLM inventoried the forest areas and performed the “survey and manage” review for animal and plant species required by the Northwest Forest Plan.
- After two years of inventory, survey, review, and project design analysis, BLM released an environmental assessment for the Appleseed Project on June 24, 1999. After a two-month comment period, BLM responded by dividing the Appleseed Project into several smaller projects.
- On August 26, 1999, BLM proposed the first of these projects, the 430-acre Spencer Lomas Project. Despite having assessed this area as part of its analysis of the Appleseed Project, BLM prepared a new environmental assessment for the Spencer Lomas Project, and performed surveys for additional plant and animal species as required by the Northwest Forest Plan. The Spencer Lomas environmental assessment was released for public comment on July 31, 2000.
- After completing the environmental assessment, BLM advertised the contract in September 2000, beginning a 30-day public comment period. During this period, several protests were filed with BLM. Although a sale auction was held, protests caused BLM to delay the award of the contract for 24 days. Each protest required BLM to perform additional reviews. BLM spent four months preparing materials in response to the protests, before ultimately denying the protests.
- Protestors appealed BLM’s denial to the Interior Board of Land Appeals (IBLA) in February 2001, and sought a stay of the project from the IBLA. After considering the stay requests, BLM awarded the sale to Superior Lumber Company in 2001. The contract called for the work to be performed over a three-year period. Superior Lumber began operations on the project shortly after the contract was awarded.
- In May 2001, IBLA denied requests for a stay of the Spencer Lomas project and dismissed several appeals as well. Other appeals of the project are still pending before IBLA. Despite the fact that appeals were still pending before IBLA, protestors filed suit in federal court on July 12, 2001, seeking a temporary restraining order and a preliminary injunction against the Spencer Lomas project.
- In July and August of 2001, federal rulings were issued denying the efforts to stop the project. A few weeks later, the plaintiffs voluntarily dismissed their lawsuit with prejudice.

**Aftermath of the Squires Fire  
The Healthy Forest Area Survives**

**Fire behavior in a small area that was thinned:  
Fire burns low and on the ground**



**Trees in thinned forest survive fires unharmed and renewed**



**Aftermath of the Squires Fire  
The Unhealthy Area is Destroyed**

**Fire behavior in unthinned forests:  
Fires burn at high temperatures and reaches tops of trees**



**These severe fires destroy forests,  
killing trees, sterilizing soils and accelerating erosion**



## **Fulfilling the Promise of the 1994 Northwest Forest Plan**

The Northwest Forest Plan was adopted in 1994 and was intended to end court injunctions that brought timber production in the Pacific Northwest to a standstill by providing an adequate level of habitat protection for old growth forest species and a predictable timber supply for economic stability. Although the Plan has successfully protected old growth trees, it has failed to deliver on its promise of a sustainable forest economy. Litigation and procedural delays have prevented implementation of the Plan in the balanced manner that was intended. In addition, the complexity of the Plan has created administrative gridlock due to expensive and burdensome processes and analysis requirements that go beyond legal requirements.

At the time the Plan was completed, it was announced that the Plan would yield about one billion board feet of timber per year when fully implemented. That promise has not materialized. In fact, timber production has fallen from the high point of 889 million board feet in Fiscal Year 1997 to just 308 million board feet offered for sale in FY 2001. The projected sustainable timber supply has failed to materialize, and the fire-prone areas of the forest are unhealthier now than before the Plan existed.

Of the 24.5 million acres covered by the Plan, approximately 80 percent of the area's designated forest reserves are managed for habitat value rather than timber production. Thinning and timber salvage activities are supposed to be allowed in some of these areas if a federal inter-agency group decides it is appropriate to meet the desired conditions for the land. But this process has not worked as it was intended.

Because of procedural and judicial delays, agencies were only able to offer for sale less than 40 percent of the planned timber volume in 2001 – much less than what was promised in the Plan. The job creation and retraining programs promised in the Plan also have not been successful. As a result, economic declines continue in many communities in the area covered by the Plan. Many of the most isolated and heavily forest-dependent communities are still struggling and the remaining jobs are not comparable in pay to traditional timber industry jobs lost.

A coalition of public land counties, timber companies and labor unions have filed four lawsuits challenging different aspects of the Northwest Forest Plan. Their central concern is that the Northwest Forest Plan is not living up to its original objectives. The Administration is working with interested elected officials, and community leaders to identify ways to put the Northwest Forest Plan back on track and resolve the pending litigation. The Northwest Forest Plan was designed to preserve both habitat and the forest economy; new efforts are needed to deliver on its promise.