

Achieving Healthy Forests and Rangelands: National Fire Plan Performance Update

U.S. Department of Agriculture
U.S. Department of the Interior



Achieving Healthy Forests and Rangelands:

National Fire Plan Performance Update

Contents

Introduction	1
Background	3
Leadership and Organization	4
Commitment	4
Healthy Forests Initiative	4
Firefighting	6
Workforce Development	6
Training	7
Equipment	7
Facilities, Construction, and Maintenance	8
Communities Protected	8
Emergency Stabilization and Rehabilitation	8
Hazardous Fuels Reduction and Ecosystem Restoration	9
Forest Health Protection	12
Community Assistance	14
Research	17
Stewardship Contracting	19
Contracting	19
Accountability	20
Future Vision	23
Summary	23
Success Stories	23

Achieving Healthy Forests and Rangelands:

National Fire Plan Performance Update



“The principles behind the Healthy Forests Initiative were not invented in the White House... They are founded on the experience of scientists, forestry experts, and, as importantly, the firefighters who know what they’re talking about. Chief Tom O’Keefe, of the California Department of Forestry, is among those who have seen the consequences of misguided forest policy. He put it this way: ‘A lot of people have been well-intentioned. They saved trees, but they lost the forest.’ We want to save the forests.”

President George W. Bush
Healthy Forests Restoration Act Signing
December 3, 2003

Introduction

As the fourth year of the National Fire Plan (NFP) implementation comes to a close, success was once again realized in all key areas. Building on the strong foundation of three previous years, firefighters were trained and at the ready for the season's suppression activities; fuels treatment goals are being exceeded as agencies use new tools available from the President's Healthy Forests Initiative and the Healthy Forests Restoration Act; and collaboration and communication for even stronger partnerships among Federal agencies and bureaus, State and local governments, Tribes, and citizens reached new heights.

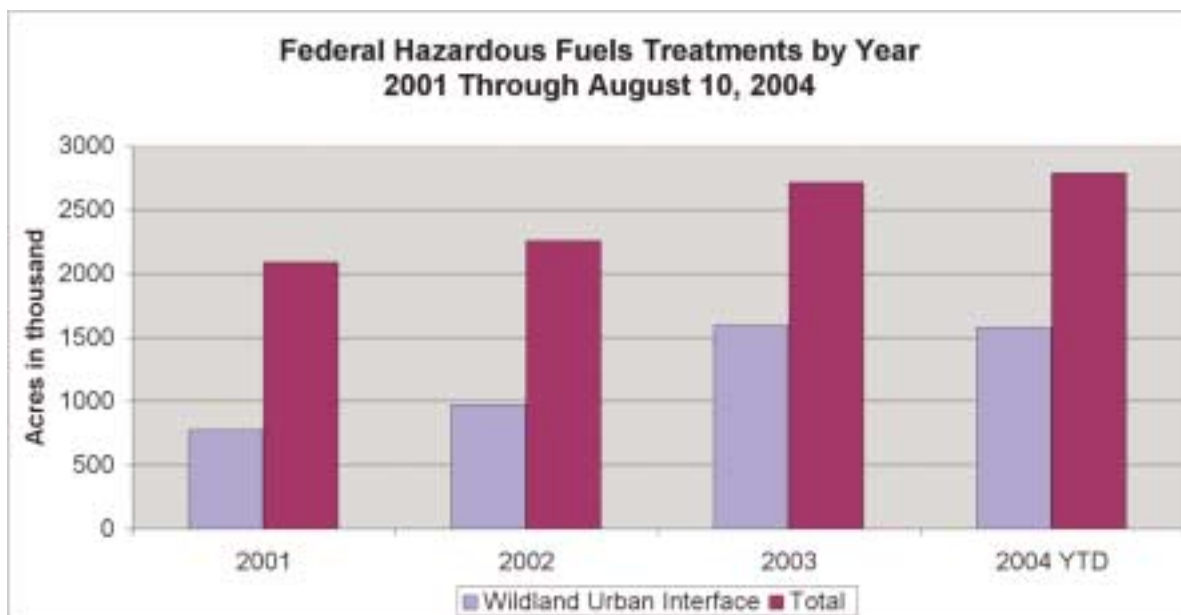
Unusually damaging wildland fires threaten natural resources on some 190 million acres of public land in the lower 48 states as well as the lives, livelihoods, and well-being of millions of Americans. The fires of 2000, which burned over 8 million acres, galvanized widespread and unwavering bipartisan support for a major new federal land management objective—reduce the risk of catastrophic wildland fire as reflected in the National Fire Plan (NFP). In 2002, President Bush initiated his Healthy Forests Initiative and, a year later, Congress passed the Healthy Forest Restoration Act to give agencies and communities more tools to address risks of catastrophic wildland fires and improve forest and rangeland health.

This update describes how, under the President's Healthy Forests Initiative (HFI) and the Healthy Forests Restoration Act (HFRA), the Departments of Agriculture and Interior are making progress to reduce the risks of catastrophic wildland fire.

An excessive buildup of fuel lies at the heart of our wildland fire problem. Forests that early explorers and settlers described as open parklands having perhaps 25 trees per acre now often contain more than 1,000 trees packed into the same space. These smaller, weaker, disease prone, and drought-impacted trees provide previously unseen levels of fuels for the fires that inevitably reach our forests. As a result of fuel loads, today's fires are often far more damaging than those of the past. Outside the forests, flammable invasive species have altered fire dynamics in woodlands and grasslands to the detriment of biological diversity whose decline may also be found in overstocked forests.

Changing patterns of human settlement impact the relationship of people and wildland fire. As more and more people move into naturally vegetated areas the potential for fire-caused human harm increases.

Under the auspices of the National Fire Plan, the President and the Congress have acted in concert to reduce fuels, protect communities, and educate the public. They have done so through increased funding (fuels reduction monies, for example, are 250% greater than before the NFP). They have done so with administrative and legislative actions creating unprecedented levels of cooperation and consultation between federal, state, tribal, and local interests (such as the Wildland Fire Leadership Council). And they have done so by streamlining processes (e.g., implementing National Environmental Policy Act analyses as Congress originally envisioned).



These efforts are producing results.

In removing hazardous fuels:

- With nearly two months to go in FY 2004, federal agencies have already removed fuels from 2.6 million acres, or 97% of their target. Additionally, in FY 2004 the bureaus plan on removing hazardous fuels from another 1.1 million acres using programs outside the National Fire Plan (e.g., habitat restoration and range management).
- Agencies have already made 2004 the most successful year ever for fuels treatments.
- Federal agencies have already removed hazardous fuels from 1.6 million acres of Wildland Urban Interface (WUI) lands in FY 2004, 185,000 acres (113%) over their target. In 2004, more WUI acres will be treated than ever before.
- During the last four years, the agencies treated some 10 million acres, as many as they did in the previous eight years.
- During the last four years, they treated approximately 5 million WUI acres.

In helping communities:

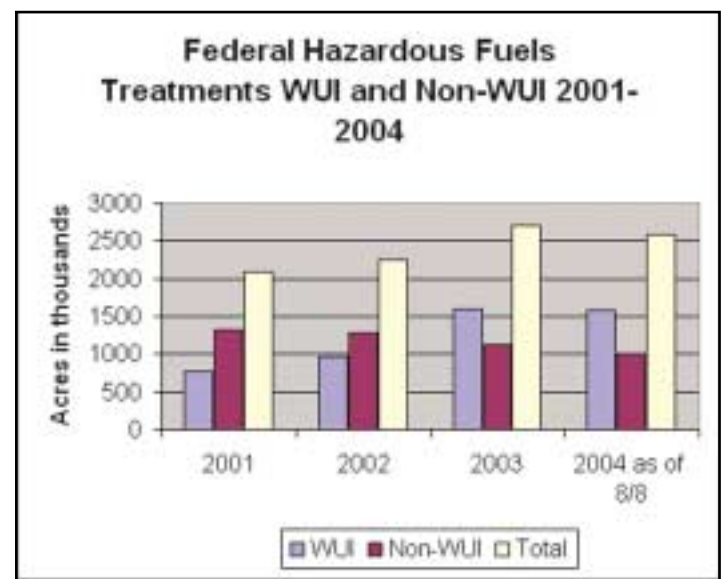
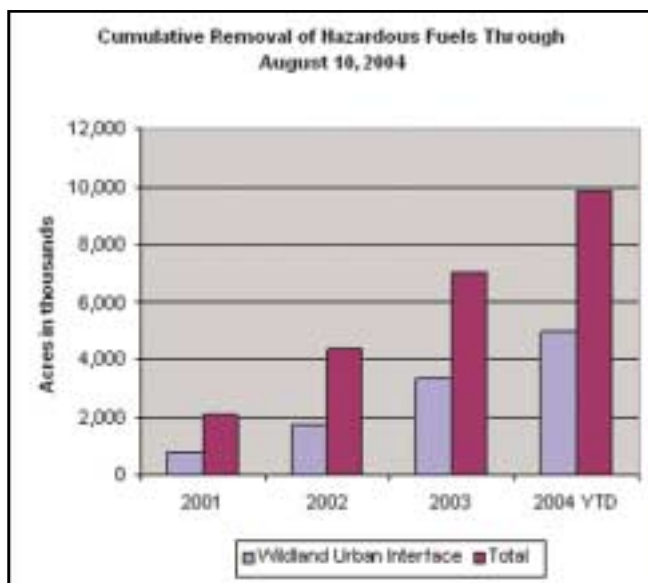
- The Western Governors Association, National Association of Counties, Society of American Foresters, National Association of State Foresters, and the Communities Committee developed guidance on preparing community protection plans now being used by some 300 locales.

- Under the National Fire Plan, the agencies have assisted tens of thousands of communities and departments with almost \$300 million dollars.
- The agencies will help communities fight the risks of wildland fire with grants of more than \$157 million in FY 2004.

In cutting red tape to get projects done quicker:

- The Forest Service is using expedited Healthy Forests Initiative (HFI) streamlined land-management processes on nearly 400 projects in 2004.
- In FY 2004, DOI bureaus are using the concise HFI streamlined project analysis on over 100 projects covering over 40,000 acres.
- The Forest Service is employing the expedited National Environmental Policy Act (NEPA) processes in the Healthy Forests Restoration Act on 30 projects this year.
- Looking ahead, the Bureau of Land Management (BLM) intends to use the HFRA NEPA procedure on over 30 projects reaching an estimated 23,000 acres in FY 2005 while the Forest Service also looks to use the tool over 30 times in FY 2005.

Success requires private sector involvement. To that end, Congress granted Forest Service and BLM authority to enter into stewardship contracts allowing contractors to keep vegetative materials removed from public lands as partial payment for the service rendered. The biomass can then be used for energy production or as a raw material. The bureaus will sign about 80 stewardship contracts covering nearly 60,000 acres in FY 2004.



The wildland fire problem before us requires that we adopt a long view. It was a century in the making and will require many years to fix. We have, however, built a solid foundation for success and the National Fire Plan and related tools should continue to help us fulfill our responsibilities as stewards of the public lands while better protecting people and communities.

Background

In FY 2000, the Departments of Agriculture and the Interior prepared a report recommending how to respond to severe, ongoing fire activity; reduce impacts of fires on rural communities and the environment; and ensure sufficient firefighting resources in the future. The report, *Managing the Impacts of Wildfire on Communities and the Environment: A Report to the President in Response to the Wildfires of 2000*, is known as the National Fire Plan.

In FY 2001, the Secretaries of Agriculture and the Interior joined the governors and other partners in developing the 10-Year Comprehensive Strategy. A broad collaborative group representing Federal agencies, States, local governments, conservation and commodity groups, and tribal interests developed this long-term strategy for the NFP. It was the first nation-

al long-term comprehensive strategy for wildland fire management.

The NFP laid the foundation for a long-term program to reduce fire risk and restore healthy fire-adapted ecosystems in the Nation's forests and rangelands. The intricate nature and scope of issues and jurisdictions required new approaches, with unprecedented collaboration among a wide variety of stakeholders. This report outlines the progress in implementing the NFP during its fourth year.





Leadership and Organization

The Wildland Fire Leadership Council (WFLC) completed a highly successful second year by working to eliminate interagency, interdepartmental differences for a seamless delivery of a coordinated fire protection program. Major WFLC accomplishments included the following:

- Approving a monitoring protocol for fuels projects.
- Approving completion of the LANDFIRE project with an accelerated completion schedule.
- Implementing cost-effectiveness recommendations.
- Approving national fuels treatment plans.
- Creating a strategic issues panel.
- Approving an interagency policy for emergency stabilization and rehabilitation treatments that ensures consistency in the timing and funding of treatments and monitoring.
- Adopting field guidance to establish broad, national, compatible standards for identifying communities at risk, while still allowing maximum flexibility at the State and regional levels for risk determinations.
- Adopting a common budget structure for wildland fire management appropriations.

- Adopting interagency direction for the Implementation Plan of the 2001 Federal Wildland Fire Policy.

Commitment

Reducing the risks and consequences of severe wildland fires remains at the forefront for the Bush Administration and Congress. Bipartisan congressional support has provided five Federal agencies with the necessary funding critical to NFP implementation.

Healthy Forests Initiative

Since its initiation in August 2002 by President Bush, we have made much progress on implementing the Healthy Forests Initiative (HFI). Through the Initiative, the Administration has completed several administrative reforms, including the following:

1. Agencies established new procedures provided under the National Environmental Policy Act to enable priority fuels treatment (thinning and prescribed fire) and forest rehabilitation (reseeding and planting) projects—identified through collaboration with State, local, and tribal governments and with interested persons—to proceed quickly without the need for lengthy environmental documentation. The Forest Service has used these procedures on over 600 high-priority treatments. The Department of the Interior bureaus have used the new procedures on over

200 projects.

2. Agencies improved administrative appeal rules to focus on substantive issues of forest health projects and to encourage early public participation in project planning. The revised Forest Service appeal rule became effective in June 2003.
3. The U.S. Fish and Wildlife Service and National Oceanic and Atmosphere Administration provided guidance for consultations under the Endangered Species Act. Emphasizing long-term benefits to threatened and endangered species, they published a final rule in December 2003 to expedite Endangered Species Act (Section 7) consultations for forest health projects that are unlikely to harm threatened or endangered species or their habitat.
4. The Council on Environmental Quality provided guidance to improve environmental assessments for priority forest health projects. Nearly 40 new streamlined environmental assessments are complete or in process.

Collaboration and coordination lie at the core of NFP successes. Federal agencies, their partners at State and local governments, and individuals and community organizations continue to make significant progress working together.

In FY 2003, two key memoranda of understanding (MOUs) were signed that exemplify collaboration and coordination among a host of partners in wildland fire management.

The Coordination and Cooperation of Federal Fire Department Wildland Fire Assistance Programs MOU provides a general framework of cooperation for managing and delivering assistance programs to rural and volunteer fire departments among the signatory agencies, which include the Department of the Interior agencies, the USDA Forest Service, and the Federal Emergency Management Agency.





The Department of the Interior and the International Association of Fire Chiefs signed an MOU to support the collaboration goals of the 10-Year Implementation Plan on September 25, 2003. The agreement enhances the relationship between the federal agencies and local fire departments on a wide range of issues related to wildland and wildland urban interface fires.

The Development of a Collaborative Fuels Treatment Program MOU provides a general framework of collaboration for hazardous fuels treatments. Working in partnership, the Federal agencies, State and local governments, and Tribal partners are developing long-term investments and sequencing of projects to ensure location of projects implemented across landscapes and land ownerships. Signatories to this agreement include the five Federal agencies, the National Association of State Foresters, the National Association of Counties, and the Intertribal Timber Council.

The Departments of Agriculture and the Interior also established a Fire/Air Issues Coordination group to ensure coordination among the agencies and bureaus on a broad spectrum of fire/air quality issues that include enhancing relationships with external partners and air quality issues revolving around prescribed fire activities.

Firefighting

Fire preparedness, a key element of the NFP, incorporates all components necessary to prepare for and fight wildland fires, including workforce planning, training, equipment availability, and facilities maintenance. All of this enables Federal wildland fire management agencies to strengthen and enhance initial attack and fire suppression efforts.

Initial attack activities were highly successful in FY 2003, with 98 percent of all unwanted fires contained in 24 hours. During the 2004 fire season, these high levels of success in suppressing unwanted fires on initial attack continue.

Workforce Development

In FY 2003, with NFP funding, the Departments of Agriculture and the Interior continued the fire suppression successes of previous years by maintaining a highly trained and responsive firefighting workforce.

The Department of the Interior initiated a Human Capital Resource Study for the firefighting workforce planning and development effort. The USDA Forest Service cooperated in this study. This group is reviewing the current workforce and designing a plan of action to address workforce and workload gaps, create a leadership pipeline, backfill retiring managers, and fill new positions with qualified personnel.

Training

In addition to recruiting and retaining a highly qualified firefighting workforce, the agencies are pursuing an aggressive program of firefighter training and employee development. With support from NFP funding, the agencies have accomplished the following:

- On June 28, 2004 the new National Advanced Fire & Resource Institute (NAFRI) began operations at a new modern facility located within one mile of the Tucson Airport. It replaced a nearly 40-year old facility at Marana, Arizona.
- The Incident Qualifications and Certification System began implementation in FY 2003. This system enables incident managers to consistently analyze training and workforce needs, design training programs, and find common solutions to workforce-related issues. The system serves as an interface between qualified individual resource needs for fire or other incident management needs, while improving the efficiency of identifying appropriate personnel in the resource ordering system.
- The increasing importance of a workforce qualified in safe and effective hazardous fuels reduction techniques led to the beginning of a multi-year program to improve the infrastructure and curricula of the prescribed Fire Training Center and Fire Use Training Academy.
- The five Federal wildland fire management agencies, with support from the U.S. Department of Labor, continued to operate the Wildland

Firefighter Apprenticeship Program in California, where 660 firefighters graduated from the academy. Additionally, 110 participants completed training at the National Interagency Prescribed Fire Training Center, and 35 participants completed training at the Fire Use Training Academy.

- Interagency Federal wildland fire management specialists provided two training sessions for members of the New York City Fire Department. Following their initial training, the participants were assigned to a western wildland fire in August 2003. Additionally, interagency specialists continue to provide training and leadership for other Federal, State, and local agencies that work within the Incident Command System.
- The Wildland Fire Lessons-Learned Center has made available an online navigable library of information directed at safety, training, and workforce development from after-action reviews and studies. This Web site provides real-time information and answers to questions on issues facing fire managers and firefighters.

Equipment

In FY 2004 the NFP supported some 18,000 firefighters, nearly 1,800 engines, 170 dozers, 160 water/foam tenders, and some 80 tractor plows.

During the second year of a national contract for firefighting resources, the USDA Forest Service contracted 93 engines of varying sizes from 28 companies



across the West. Additionally, 52 20--person firefighting crews were also hired through this contract.

On April 23, 2004 the National Transportation Safety Board (NTSB) issued recommendations regarding large airtankers. In response to those recommendations the Departments of Agriculture and Interior grounded 33 large airtankers. After inspections called for by the NTSB, seven of these tankers were returned to service in July 2004. In addition to these aircraft the National Fire Plan is funding 23 Type I helicopters, 55 Type II helicopters, 76 Type III helicopters, 77 single engine airtankers, and 3 water scoopers.

Overall, these resources have allowed firefighters to extinguish 99 percent of all fires on initial attack.

During 2003, through the Federal Excess Personal Property program, the USDA Forest Service loaned 51 twin-engine airplanes, 91 single-engine airplanes, and 135 helicopters to State wildfire agencies to increase their firefighting capabilities on State and private jurisdictions. These aircraft are also available to help firefighting on Federal land through cooperative agreements. The States provide all flight personnel, maintenance, and repair to the aircraft.

Facilities, Construction, and Maintenance

In FY 2003, the agencies accomplished work on 171 facilities totaling \$43.8 million in expenditures. Projects ranged from crew quarters and offices to equipment facilities, fire stations, airtanker bases, helibases, water systems, and lookouts.

Communities Protected

Significant impacts to rural and urban communities from fire activity in neighboring forest lands occurred in 2003. Numerous communities faced significant threats from approaching wildland fires, and thousands of people were evacuated from their homes. Increasingly, fires in the wildland-urban interface are posing tough challenges to fire managers in the area of ensuring firefighter and public safety, while striving to reduce the impacts to the communities. Property owners; communities; and Federal, State, and local fire managers have once again joined forces to meet those challenges in protecting property and lives. Through strong, proactive partnerships, community planning, hazardous fuels treatments, and public recognition that suppression efforts alone are not enough for saving communities, people have worked together to reduce risks to their neighborhoods before wildfires arrives.

Emergency Stabilization and Rehabilitation

Post-fire rehabilitation work improves lands that are unlikely to recover naturally from the effects of wildfires and includes emergency stabilization treatments, essential in protecting life and property downstream of the burned area. The work, often implemented over the course of several years following a wildfire, includes reforestation, road and trail rehabilitation, fence replacement, fish and wildlife habitat restoration, invasive plant treatments, and replanting and reseeding with native or other desirable vegetation. These treatments generally maintain water quality subsequent to damaging fires.

Project Accomplishments

Fires in FY 2003 burned more than 3.8 million acres nationally across all ownerships. Some of these fires decimated forest and rangeland resources, creating the need for rehabilitation on thousands of acres of forest and rangelands and hundreds of miles of streams, roads, and trails, as well as of facilities such as fences and recreational sites. This workload is added to the ongoing rehabilitation work from the FY 2001 and FY 2002 fires. In FY 2004, some 5.5 million acres have burned, mostly in Alaska.

Stabilization funding was authorized on Federal lands for emergency stabilization projects. Emergency stabilization includes stabilizing slopes with log structures, straw wattle, and straw mulch; installing larger culverts to handle increased water flows; and reseeding burned areas.

A good example of a typical emergency stabilization project is the construction of a diversion ditch near Provo, UT. Over 50 homes immediately below the Springville fire area were threatened by debris and mud flow. With NFP support, a diversion ditch was constructed to capture and deflect debris and mud away from the homes. Shortly afterwards, a moderate rain storm in late August created the expected torrents. Debris and mud flowed down the hillside threatening the homes with damage and destruction. The diversion ditch saved the homes, diverting the mud to a holding area. This project was a cooperative effort between the USDA Forest Service, Natural Resources Conservation Service, and the Cities of Provo and Springville, UT.

In FY 2003, NFP funding was used on 536 rehabilitation projects in 21 States. These projects treated 2.5 million acres through invasive plant control, seeding, planting, and watershed improvements on Federal lands at a cost of \$84 million. In addition, nearly 400 projects accomplished more than 3,226 miles of trail reconstruction, roadwork, riparian enhancement,

fencing, and boundary line location. So far in FY 2004, NFP funding has been used on 250 projects in 13 states. They reach nearly 150,000 acres and more than 2,700 miles of trails.

Monitoring

In May 2003, the General Accounting Office (GAO) released the report Better Information Needed on Effectiveness of Emergency Stabilization and Rehabilitation Treatments. GAO recommended that to ensure effective emergency stabilization and rehabilitation treatments, "...Interior and USDA (1) specify procedures to be used to monitor treatment effectiveness, including type and extent of monitoring data collected and methods to collect these data, and (2) develop an interagency system to collect, store, and disseminate information on monitoring results."

In response, the WFLC directed an interagency team to design monitoring objectives and protocols and identify research and development needs for monitoring. WFLC approved the monitoring plan in May 2004.

The agencies continued to evaluate the effectiveness of commonly used emergency stabilization treatments to ensure that treatments chosen by land managers were appropriate and effective for the situation. Already preliminary results are being provided to emergency stabilization and rehabilitation specialists through annual interagency training. The third annual workshop was held in April 2004 in Denver, Colorado. More than 100 Department of the Interior,

USDA Forest Service, and other agency personnel who work in the Emergency Stabilization and Rehabilitation (ESR) program attended.

Collaboration and Coordination

The Departments of Agriculture and the Interior established the National Burned Area Emergency Response Coordinating Group to coordinate program issues, program implementation, and training. The team accomplishments include the following:

- Policy direction in the department manuals of each agency.
- Joint training sessions to develop and maintain skills for emergency stabilization and rehabilitation specialists.
- Draft handbook direction.

Hazardous Fuels Reduction and Ecosystem Restoration

Heavy fuel accumulations and altered vegetation composition and structure, in combination with sustained drought, are contributing to increased fire intensity, spread, and resistance to control throughout many parts of the United States. Fire occurrence records show increases in numbers of large wildland fires over the last two decades. The destruction caused by these fires is further compounded by the growth of communities adjacent to public lands, putting homes and other structures closer to areas where large wildland fires occur. In recent years, these



Thinned stand of trees before fire



Thinned stand of trees after fire



Stands of non-treated trees after fire



Stands of thinned trees after fire

changes have resulted in wildland firefighters spending more time and effort protecting structures.

In response to the risks posed by heavy fuel loads, the NFP established an expanded, intensive, long-term program of hazardous fuels reduction on Federal and adjacent lands. This program emphasizes cooperation and collaboration among Federal agencies; State, local, and Tribal governments; and other stakeholders to achieve the fuels reduction goals and objectives of the 10-Year Comprehensive Strategy Implementation Plan and the President's Healthy Forests Initiative. The hazardous fuels reduction program strives to reduce the risk to human well-being and important landscapes, such as municipal watersheds, as well as to improve forest and rangeland health.

Fuels Reduction and Restoration Treatments

Fuels reduction and restoration treatments are designed to reduce the risks of catastrophic wildland fire to people, communities, and natural resources. Such treatments accomplish these goals by removing or modifying wildland fuels to reduce the potential for severe wildland fire behavior, lessen post-fire damage, limit the spread and proliferation of invasive species and diseases, and maintain and restore healthy diverse ecosystems. Treatments are accomplished using prescribed fire, mechanical thinning, herbicides, grazing, or combinations of these and other methods.

During the FY 2003 wildland fire season, Federal wildland fire management agencies treated 2.7 million acres of hazardous fuels on Federal and adjacent lands through planned treatments, a 20 percent increase over 2002. The program continues to emphasize reducing risk to people and communities through treating hazardous fuels within the wildland-urban interface. In FY 2003, 1.6 million wildland-urban interface acres received treatment, a 64 percent increase over FY 2002. Managers used prescribed fire on 75 percent of the acreage treated, mechanical methods on another 17 percent, and a variety of other means on the remainder. The majority (65 percent) of mechanical treatment acres occur in the wildland urban interface.

In 2004 the bureaus had treated 2.6 million acres under the NFP by the beginning of August. Of those projects, some 1.7 million were in the wildland urban interface. Over a million more acres are receiving fuels treatments through programs other than the National Fire Plan.

Wildland Fire Use

In addition to implementing specific preplanned fuel reduction and restoration treatment projects, current fire policy encourages the use of wildland fire to achieve resource benefits in remote areas and wild lands where fires do not threaten communities.

An additional 719,000 acres of wildland fuels were treated on Federal lands through wildland fire use in FY 2003. Wildland fire use is the management of nat-

urally ignited wildland fires to accomplish specific resource management objectives, including ecosystem maintenance and restoration.

Improving Land Condition (Summary)

In FY 2004, hazardous fuels treatments under the NFP will reach 2.7 million acres. Other programs, e.g., forest and rangeland management or habitat restoration, will improve the fuels condition on another 1.1 million acres. In addition, an as yet unknown number of acres will be improved through wildland fire use in 2004. The total from these three sources will likely exceed 4 million acres for FY 2004.

Planning

Project planning was an important aspect in preparing the program of work for fuels treatments. Treatments must address high-priority needs, include local, citizen-driven solutions, and be completed in a manner consistent with land use plans and environmental goals. With an emphasis on wildland-urban interface treatments, planning and consultation for fuels reduction projects involve more cooperators and a higher level of complexity than in the past.

The USDA Forest Service and the Department of the Interior agencies continue to work under the draft Cohesive Fuels Treatment Strategy prepared in FY 2002 as the interim guidance for targeting fuels treatments to highest-priority areas. The draft strategy

points the way to push high-priority areas to treat and treatment methods to use, and doing so in ways that address multiple concerns voiced by various segments of society. Early and frequent collaboration with interested citizens and the application of lessons learned from each project have led to early success and will continue to be key components of the strategy.

Fire Management Plans (FMPs) are strategic plans that define a program to manage wildland and prescribed fires and implement nonfire fuels treatments based on an area's approved land management plan. An inter-agency template was adopted to improve FMP consistency across agency boundaries and to facilitate developing multiagency and landscape-scale FMPs. The Federal wildland fire management agencies committed to updating or completing FMPs on all administrative units with burnable vegetation by the end of FY 2004. All agencies are on schedule for meeting the FY 2004 deadline.

The Departments of Agriculture and the Interior established the multiagency LANDFIRE project to develop a comprehensive package of Geographic Information System (GIS)-based spatial data layers, models, and tools to support analyses for prioritization and planning of fuels treatments at the national and local levels. The spatial datasets for LANDFIRE will be maintained at 30-meter resolution. Two pilot projects are already underway in central Utah and northeastern Montana. These



areas were selected based on ecological diversity, extensive plot data, and previous and ongoing fieldwork. Special care was taken to include both forested and nonforested ecosystems. Full project implementation began in 2004 under an accelerated schedule. The first prototype will be delivered in September 2004. Coverage for the western United States will be complete by the second quarter of 2006 and for the eastern United States two years later.

Biomass Utilization

Biomass thinning and utilization of hazardous fuels continue to increase on Federal lands. To implement the NFP, the President's Healthy Forests Initiative, and the National Energy Policy, land management agencies are pursuing strategies to expand forest and fiber markets. Forest restoration treatments are producing timber and special forest products and wood fiber for energy production.

Examples of biomass utilization projects supporting the fuels treatment program include the following:

- The Forest Residue Bundling Evaluation project examines equipment designed to compress slash for more efficient removal and transport from treated areas. It is being tested on seven different western forest sites with a range of species, terrain, and fuels treatment productivity. Soil disturbance, residual stand impact, and operational performance are measured at every site. In addition, each site has hosted a public demonstration day for technology transfer. Support for the project has involved grassroots partnerships with industrial users, John Deere Corporation, local governments, State and Federal land management agencies, USDA Forest Service Research and Development, and contractors.
- The Small Diameter Utilization program continues as a collaborative effort among USDA Forest Service forest management program; State and Private Forestry, which includes Cooperative Forestry and Forest Products Laboratory (FPL), the Fire and Aviation Management (FAM) program, Research and Development, and the Forest Health Protection (FHP) Program; States; universities; and nongovernmental organizations to support vegetation management/fuels reduction efforts on National Forest System lands.

On June 18, 2003, the Departments of the Interior, Agriculture, and Energy initiated the Memorandum of Understanding (MOU) on Policy Principles for Woody Biomass Utilization for Restoration and Fuel Treatments on Forests, Woodlands, and Rangelands. The MOU outlines the key policy components of a national biomass utilization strategy. The preamble

aply summarizes the policy:

"The Secretaries support the utilization of woody biomass by-products from restoration and fuels treatment projects wherever ecologically and economically appropriate and in accordance with the law."

This policy is the first major step in developing a comprehensive Federal bioenergy and wood products strategy to address forest health and hazardous fuel reduction objectives.

Forest Health Protection

Seventy million acres of all forest land are at high risk to insect- and pathogen-caused mortality. Twenty-one million of these acres coincide with acres at risk from fire. Of those, 33 million acres are at risk of insect and disease mortality on National Forest System lands. The NFP has enhanced efforts to implement insect and disease prevention and suppression treatments.

In FY 2003, for example, \$17 million of NFP funds were allocated for Forest Health Protection (FHP), of which \$8 million were used to implement insect and disease prevention and suppression treatments on 781,790 acres; \$2.7 million were used to treat a total of 78,675 acres for invasive weeds; \$5 million were allocated to implement a new program of prevention and restoration; and \$1.3 million were allocated for forest health monitoring.

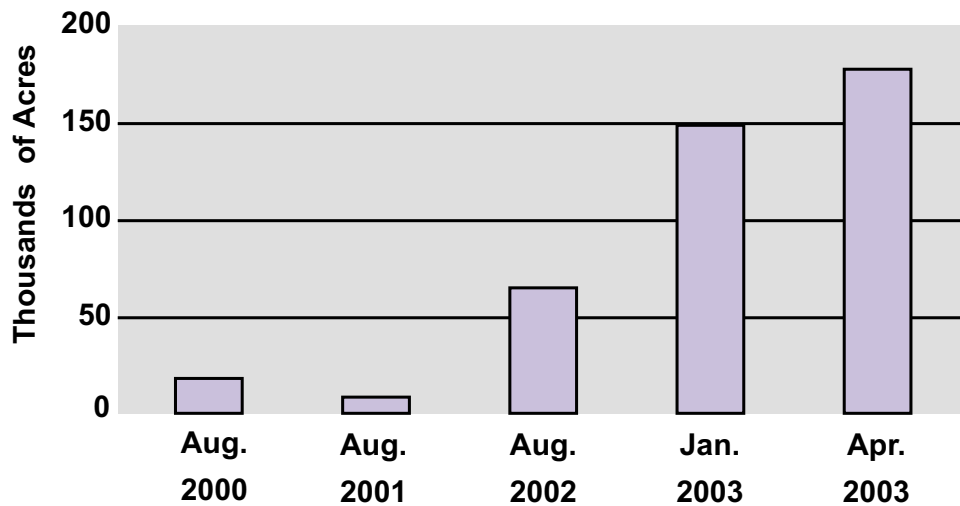
Of the \$5 million, \$3 million were used to fund a prevention and restoration program for southern pine beetle infestations in 10 Southern States, which included support of restoration technology activities with USDA Forest Service Research and Development. The focus of this program is on State and private lands, with dollars being matched by the States. State, private, and Federal lands were included in the large-scale, watershed-level activities that targeted high-risk areas identified in the NFP.

Six Western States—Alaska, Arizona, California, Colorado, Idaho, and Washington—received \$2 million of the \$5 million for prevention and restoration activities impacted by western bark beetle infestations. Again, State, private, and Federal lands were included in the projects designed to take a proactive approach at minimizing infestations while restoring areas infested in the past where key seed sources were lost to mortality.

Funds for forest health monitoring supported aerial survey and evaluation monitoring projects. These 17 projects targeted NFP issues, including fire risk, invasive species, and fire effects to determine cause, extent, and severity.

Examples of FHP projects supporting the hazardous fuel reduction program include the following:

Area Affected by Bark Beetles on the San Bernardino National Forest



- Oak decline and red oak borer—Interior Highlands of Arkansas and Missouri

Aerial surveys of parts of the Ozark National Forest indicate up to 300,000 acres may have 14–45 percent mortality of red oaks. An additional 4–8 percent may have severe dieback. Oak decline is a complex phenomenon with no single cause. Old age, severe overstocking, droughts, repeated insect defoliation, and secondary insects, such as the red oak borer, however, lead ultimately to mortality. In FY 2003, FHP spent \$414,000 for prevention and restoration activities on the Ozark and Ouachita National Forests. The activities included sanitation cut and thinning to release young hardwoods on 2,620 acres.

- Western bark beetle outbreak— San Bernardino Mountains

Severe overstocking exacerbates the effects of the drought in forests. Southern California forests have begun restoration of these damaged acres. FHP allocations for restoration, prevention, and suppression projects exceed \$2.5 million on Federal and cooperative lands in southern California.

Forest Health Monitoring— Evaluation Monitoring Projects

Since 2001, the NFP has provided funding for 17 Forest Health Evaluation Monitoring projects

designed to help land managers make on-the-ground decisions. These are special studies conducted by Federal, State, and university partners to determine the extent, severity, and causes of undesirable changes in forest health. In FY 2003, for example, a total of \$575,000 was allocated to eight Forest Health Monitoring Evaluation Monitoring projects that targeted NFP issues, including fire risk, invasive species, and fire effects.

Web-Based Model for Biomass and Carbon Estimation (COLE)

In this project, specialists are developing a prototype, interactive, Web-based model for estimating fire-related characteristics using annual forest inventory data (<http://ncasi.uml.edu/COLE>). Once completed, this model will provide customized, up-to-date, and accurate information based on Forest Health Monitoring and Forest Inventory Analysis (FIA) data that can be used for hazardous fuels reduction, rehabilitation, and restoration efforts. The model can also be used for other data summaries, including biomass inventory and forest health indicators.

Downed Deadwood Biomass in Northeast and South

Specialists are developing preliminary regional models of live and dead woody biomass for the northeastern and southeastern United States using Forest Health Monitoring and Forest Inventory Analysis data. Mapping and validation efforts continue.



Fire Effects Assessment in Rocky Mountains

An assessment of fire effects on forest resources in the Northern and Central Rocky Mountains is in progress. Forest Inventory Analysis plots affected by fires of 2000 and 2001 were re-measured to determine fire mortality, fire intensity, disturbance, or damage or other changes, such as species composition, invasive weeds, soil changes and forest structure.

Sudden Oak Death in Oregon

New locations of Sudden Oak Death were discovered in Oregon during special detection surveys. Eradication treatments were implemented in southern Oregon. Monitoring continues to test effectiveness of eradication efforts and to detect any new infestation.

Fire Hazards from Forest Inventory Analysis Data in North Central Region

This project is constructing 30-m x 30-m resolution maps and digital data layers of forest fuel loadings for the 11-State North Central Forest Inventory Analysis region with 60- to 80-percent accuracies suitable for use by projects such as Coop Agriculture Pest Survey (CAPS) and LANDFIRE; constructing similar maps and digital data layers portraying the suitability of forested areas for treatments to reduce forest wildfire risks; and extending the mapping techniques for national use with other FIA and FHM observed plot variables.

Swiss Needle Cast and Fire in Oregon

This project is quantifying the changes in tree mor-

phology (foliage/branch quantity, distribution, and dynamics) resulting from Swiss needle cast; linking these changes in tree morphology and dynamics to resulting alterations of fuel loads and potential fire behavior in trees with varying degrees of Swiss needle cast damage. This project is also establishing the best procedure for rating Swiss needle cast damage (for example, needle retention, live crown to sapwood ratio, and crown transparency) in other stands, and for linking the needle cast rating to implied fire risk and behavior.

Hydrologic Data Harvester for Experimental Forests

This project is establishing a baseline response of watersheds to climate variability for monitoring environmental change and assessing disturbance effects that require long-term records of streamflow and meteorology. This baseline response allows for the hydrologic comparison of control, burned, and managed watersheds.

Community Assistance

Wildland-urban interface areas exist wherever homes and businesses are built among trees, brush, and other flammable vegetation. Wildland-urban interface communities exist throughout the United States, in both rural locations and urban areas. Fires move from forest, brush, or grassland into communities or from communities into adjacent wildlands. Either way, community involvement is a key element in reducing fire hazards near communities and in restoring damaged landscapes. Community assistance programs focus on building community capacity to develop and carry out citizen-driven solutions that will reduce the



community vulnerability to risks associated with wildland fire.

Communities need many types of assistance. Agencies provide support for educating citizens, community protection planning, and training and equipping firefighters; purchasing equipment; and treating vegetation and landscapes around communities. State foresters delivered a wide range of assistance through grant programs that emphasize working together at all levels of government and encouraging active participation from citizens and landowners.

The Firewise Communities Program

The Firewise Communities Program, funded by the National Fire Protection Association, the Departments of Agriculture and the Interior, and many State, Federal, and nonprofit partners, is a highly successful part of community hazard mitigation efforts. The program encourages communities and homeowners to take responsibility for hazard mitigation through land use planning, building codes, landscaping codes, zoning, and fire protection.

This was the fourth year of national-level workshops since the NFP was initiated. More than thirty workshops have been offered to date. They have attracted more than 3,500 people from 2,000 communities and 48 States. In FY 2003 alone, 14 national workshops were conducted for 1,300 participants. Workshop attendees represent a spectrum of community leaders, including land developers, builders, the Insurance Services Office, the Institute for Business & Home Safety, and the American Red Cross. Currently, more than 30 national sponsors support the workshops. As a spin-off from the national workshops, about 500 State and local one-day workshops were conducted

around the country, reaching 5,000 community leaders in more than 1,000 communities.

In FY 2002, the cooperating agencies established the Firewise Communities/USA recognition program, which provides special recognition to communities that demonstrate distinctive efforts and commitment to addressing wildfire threats to their community. By participating in the program, neighborhoods across the Nation that are already addressing the wildfire issue are encouraged and acknowledged. Since FY 2002, 38 States have adopted the Firewise/USA recognition program.

State Fire Assistance Program (USDA Forest Service)

The SFA program, authorized by the Cooperative Forestry Assistance Act of 1978, provides technical and financial assistance to States to meet all aspects of wildland fire management. The NFP expanded SFA efforts, providing a renewed focus on the wildland-urban interface problems in virtually every State with emphasis on hazard mitigation. The following four key elements guide delivery of hazard mitigation funds:

1. Fire prevention and mitigation.
2. Information dissemination and education.
3. Fuel mitigation treatments.
4. Homeowner and community hazard mitigation projects.

In FY 2003, SFA grants exceeding \$96 million were awarded to States to address protection needs on private and State lands. All funds are matched dollar for dollar from States and other sources, including donat-



ed labor from citizens and businesses at the local level. In many reported cases, matching contributions exceeded the required amount. Grants funded an estimated 6,800 mitigation/education campaigns and 1,200 fire management plans and risk assessments. Also funded were 4,500 hazard mitigation projects, and approximately 135,000 acres of hazardous fuels were treated on non-Federal lands. Training was provided for 32,300 firefighters using State Fire Assistance funds.

Rural Fire Assistance (Department of the Interior)

Congress appropriated \$10 million in FY 2004 for the Rural Fire Assistance program of the Department of the Interior. Grants providing technical assistance, training, supplies, equipment, and public education support will be awarded to about 1,400 rural fire departments, thus enhancing firefighter safety and strengthening wildland fire protection capabilities. The Rural Fire Department (RFD) funds are matched on a 90/10 split, with RFDs being required to contribute a minimum of 10 percent in dollars or in-kind services.

Department of the Interior also provides other grants in support of the NFP, other than the awards cited above. The money comes from funds appropriated for preparedness and fuels reduction work, and is awarded primarily to States, local governments, small businesses, and nonprofit entities. The awards assist communities in preparedness and hazardous fuels reduction training and monitoring activities on adja-

cent non-Federal lands where activities benefit resources on Federal land.

Volunteer Fire Assistance Programs (USDA Forest Service)

Approximately \$15.4 million in grants were awarded to States through the VFA Program in FY 2003. These funds were passed to 6,139 volunteer fire departments serving 10,400 small communities to help them organize, train, and equip firefighters. Special emphasis was placed on the needs of the departments with wildland and dual wildland/ structure protection responsibilities common in the interface. Grants funded training for 20,900 firefighters and purchased more than \$12.5 million worth of equipment with emphasis given to personal protective equipment. Funds were also used to upgrade equipment loaned to the States and communities through the Federal Excess Personal Property program. The State or local recipient matches all VFA grant funds dollar for dollar.

Economic Action Programs (EAP) enhance the ability of communities and private enterprises to treat forest lands and use restoration byproducts. The NFP has benefited from those established programs that aid in local planning and stimulate local community action. EAP managers work directly with communities to foster collaboration across ownership boundaries in order to develop strategies that address social, environmental, and economic changes.

As a result of NFP funding, USDA Forest Service EAP employees and delivery partners strengthen rural economies by assisting locally owned, natural resource-based businesses and by helping increase

business diversity in communities. A special focus on energy independence in FY 2002 and FY 2003 targeted the use of woody biomass and tapped entrepreneurial ingenuity while addressing hazardous fuels management.

As a result of NFP-EAP funding, rural communities and organizations were involved with 258 projects in FY 2003. NFP-EAP assistance has enabled wildfire and hazardous fuels management issues to be included as components in more than 295 local strategic plans over the last 3 fiscal years; 75 were done in FY 2003, even with reduced NFP-EAP funding levels.

Funds allocated across the Nation addressed a full range of financial and technical assistance programs, including fuel reduction and utilization projects; bioenergy feasibility studies; wood utilization and product/market feasibility studies; modification or development of long-term fuels hazard reduction projects; and community economic development planning to expand or diversify the use of forest products.

In FY 2003, the Forest Products Lab Technology Marketing Unit (TMU) (Madison, WI) used approximately \$1 million to continue the nationwide effort to use small-diameter material, formerly unmerchantable species, and low-valued trees. The Forest Products Lab, as well as other technology transfer centers, plays an important role in providing technology transfer for community projects and entrepreneurial efforts.

The TMU assists communities, organizations, and enterprises through technology transfer and other technical assistance that ranges from answering questions over the phone to onsite visits and working side by side with small businesses.

Pueblo, CO

The USDA Forest Service provided assistance to the town of Westcliffe Park to explore market expansion opportunities for building a pavilion made from small-diameter roundwood as the structural building elements. The pavilion has been constructed and provides a large public gathering place within the community, is helping to expand business opportunities for use of small-diameter timber, and uses material removed from forest fuel reduction activities.

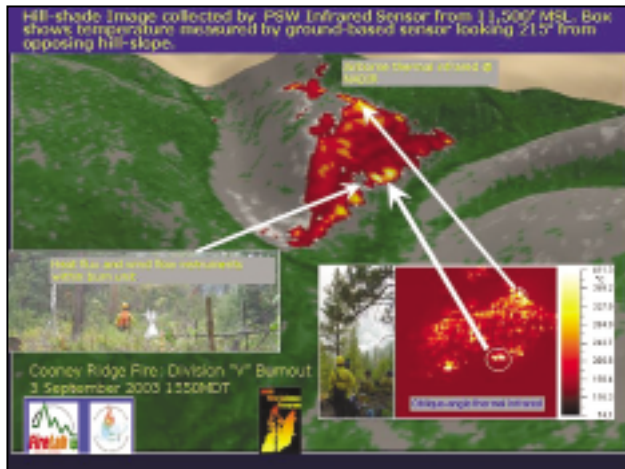
Darby, MT

Partnering with the Friends of the Darby Library, the USDA Forest Service provided funds and technical expertise for the architectural and engineering design of a new library that will use small-diameter roundwood as a structural building element. Construction material will be from fire-killed trees.

Research

Three different Federal organizations provide research for Federal wildland fire management, including the Joint Fire Science Program, USDA Forest Service Research and Development, and the U.S. Geological Survey. Colleges and universities also con-





tribute greatly to wildland fire research. These organizations often leverage and complement each other to accomplish research goals. A Fire Research Coordination Council comprising leaders of major fire research programs guides fire science and technology transfer efforts.

Funding for 78 USDA Forest Service and Department of the Interior research teams that started in FY 2001 and FY 2002 continued under the NFP. Because of the long-term nature of research, many teams have multi-year projects. Joint Fire Science Program projects are more narrowly focused and are funded for discrete time periods. The Joint Fire Science Program has funded approximately 225 projects since its inception in FY 1998 with 45 new projects being funded in FY 2004. Both USDA Forest Service Research and Development and the Joint Fire Science program produce annual business summaries that fully detail accomplishments.

Of particular note, in the spring of 2003, the USDA Forest Service and the Joint Fire Science Program sponsored three workshops. Held on the heels of three massive 2002 fires—the Hayman in Colorado, the Rodeo-Chediski in Arizona, and the Biscuit in Oregon—these workshops brought managers and researchers together to discuss information needs, identify knowledge gaps, and pinpoint needed research. The results are summarized in a publication, “Executive summary for the wildland fire workshops, March–April 2003: Bridging the worlds of fire managers and applied fire researchers,” which is available from the Pacific Northwest Research Station. The results of these workshops were used, in part, to frame Joint Fire Science Program Announcements for Proposals in FY 2004 and will be used again in FY 2005.

Research Supporting Firefighting Capacity

Examples of NFP and JFSP research projects include the following.

USDA Forest Service Research

Projects based at the Pacific Northwest and Pacific Southwest Research Stations are producing expertise in fire season forecasts. Researchers are making maps linking weather conditions and fire occurrence since 1895 and using this information to develop 3- to 12-month fire forecasts. These short-range predictions enable agencies to better anticipate firefighting needs, thus increasing fire preparedness.

Researchers at the Rocky Mountain Research Station are working to improve knowledge about post-fire restoration efforts. Research data collected with funding from the NFP were used to validate post-fire water erosion prediction project software, FSWEPP. Results were used to target rehabilitation treatments on numerous fires throughout the Western United States. Users were from every National Forest System region and several dozen foreign countries.

Joint Fire Science Program

Four rapid response teams were deployed in the summer of 2003 and another in 2004 to gather time-sensitive information from ongoing wildfires. By gathering data from active wildfires during or immediately after they burn, researchers can learn from these events in ways that cannot be duplicated with any other methods. Teams worked together to combine ground-based measurements with aircraft-borne, remote sensing fire behavior data to produce maps of fire activity that were supplied to incidents and fire managers in near real time. Such efforts increase knowledge of fire behavior and effects while aiding

fire suppression and wildland fire use management.

Personnel at the Remote Sensing Applications Center are refining and validating the next generation of imagery-based, burn-severity maps used by Burned Area Emergency Response (BAER) teams. Data for this project come from satellites, which make imagery and imagery-derived products rapidly available to BAER teams. Processes have been established to acquire low- to moderate-cost imagery from a variety of satellites, depending on which one has timely data for fire areas. BAER teams use this improved information to assess burn severity and design appropriate rehabilitation treatments.

Combining ground- and aerial-based observations to characterize fire intensity.

Stewardship Contracting

Congress enacted legislation proposed by the Bush Administration to expand stewardship contracting authority to all USDA Forest Service units and the Bureau of Land Management. This authority enables Federal agencies to enter into long-term (up to 10 years) contracts or agreements with small businesses, communities, and nonprofit organizations and individuals to reduce wildfire risk, improve forest and rangeland health, and achieve other land management goals. Stewardship contracts focus on desirable end results on the ground that improve forest health and provide benefits to communities.

The new authority enables contractors to keep wood and other vegetative materials in exchange for services, including thinning trees and the removal of brush and dead wood to prevent catastrophic wildfire while improving environmental conditions and adhering to applicable environmental regulations. Long-term contracts foster public/private partnerships to restore forest and rangeland health by giving contractors the incentive to invest in equipment and facilities needed to productively use vegetative material from forest thinning to make useful wood products or to produce biomass energy, all at savings to taxpayers.

In 2004, over 80 stewardship contracts/agreements will be in place by the end of the fiscal year.

Contracting

The USDA Forest Service and the Department of the Interior developed a joint action plan to enhance procurement and meet NFP goals. Accomplishments under this action plan:

- Provide NFP funds and project approvals to field managers early in the fiscal year by separate letters from the USDA Forest Service and Department of the Interior. This will continue

to be an annual requirement.

- Issuing on November 5, 2002, a joint memorandum, "Using Contracting and Assistance to Support the National Fire Plan," declaring authority to provide contracting support among the agencies.
- Providing permanent legislation for stewardship contracting for both the USDA Forest Service and the Bureau of Land Management in Public Law 108-7, the consolidated Appropriations Resolution for FY 2003.
- Establishing an NFP contracting website to assist communities by providing applicable information on all aspects of the NFP.
- Developing a MOU to enhance coordination of Federal assistance to fire departments.
- Developing a draft MOU to initiate a partnership with the Small Business Administration to identify and increase contract awards to small, local businesses and recipients.
- Redefining the Contracting Strategy Team as established in Departments of the Interior and Agriculture memorandum dated January 2001. New team members from each bureau of the Department of the Interior and the USDA Forest Service were identified and have met throughout the fiscal year to discuss items such as the progress in fuels and rehabilitation contracting.

The USDA Forest Service has also met with community-based forestry groups at the Washington Office level and regional level throughout the year on topics such as types of projects available and use of best-value contracting procedures.

In FY 2003, under the leadership of the WFLC, the Department of the Interior awarded over \$89 million in wildland fire program contracts, grants, and cooperative agreements, primarily to local vendors. As of June 30, 2004, the Department of the Interior bureaus had awarded about \$40 million in fuels treatment contracts.

Examples of contracting efforts supporting the NFP include:

- The Interior Department's land management bureaus established the goal that 50 percent of obligated funds in the hazardous fuels reduction and rehabilitation programs be done by contract in FY 2004, with an interim goal of 35 percent of obligated program funds in FY 2003. Actual accomplishments in FY 2003 exceeded 56 percent, surpassing not only the FY 2003 but also the FY 2004 goal.



- The Bureau of Land Management succeeded in awarding approximately 70 new indefinite delivery – indefinite quantity (IDIQ) contracts for fuels reduction services across the Western States. These awards were primarily to small local vendors and facilitated the efficient award of a large number of fire program actions in the closing months of FY 2003. They can be renewed for up to four years, thus eliminating the need for new competitions with each requirement, providing reduced procurement lead time and cost to procure. Awards to new vendors will be made as minimum order quantities as reached on the current awards.
- The Bureau of Land Management awarded the first two contracts under the new stewardship contracting authority at the end of FY 2003 for innovative resource management at its Bobar Stewardship Project, Medford District, and the Frazier Mountain Stewardship Project, Vale District, in Oregon. This new contracting authority, piloted by the USDA Forest Service in FY 2002-2003, gives the Bureau of Land Management the ability to have private sector entities reduce hazardous fuel loads on Bureau of Land Management lands and offset the costs by removing and marketing biomass materials as part of the process.
- The Fish and Wildlife Service's Region 3 contracting office entered into a 5-year IDIQ contract for the acquisition of up to 60 Marsh II amphibious firefighting vehicles and trailers. This contract, in support of the NFP, resulted from a competitive solicitation that used the streamlined commercial item process. Delivery orders may be placed by contracting officers from the bureaus of the U.S. Department of the Interior and the USDA Forest Service. The Fish and Wildlife Service's Region 3 has already ordered four of these vehicles with trailers for a total of \$336,760. This long-term IDIQ contract saves time and administrative expense of competing individual items, plus it provides continuity of support to the Fire Program without having to change contractors.
- The Bureau of Land Management California State Office reported accomplishments in the NFP contracting program, including:
 - o 75 community-based projects, using \$3.5 million wildland-urban interface funds, targeting fuel reduction treatments on 7,122 acres in and around communities-at-risk.
 - o 20 California Department of Forestry (CDF) projects, using \$1.2 million wildland-urban interface funds, targeting fuel reduction treatments on 1,279 acres.
 - o 40 rural fire departments funded to improve their wildland firefighter safety and capacity with \$348,000 Rural Fire Assistance funds, targeting wildland firefighting equipment, training, and community education.

Accountability

Oversight, coordination, program development, integration, and monitoring are critical to successful implementation of the NFP. In response to congressional direction, a full range of joint accountability measures, including budget and financial systems, reports, and oversight reviews for assessing and evaluating program accomplishments, have been developed.

Actions to Promote Accountability

Transparent, well-articulated, consistent policies and procedures provide for better oversight and review, and lead to greater accountability. Partners and stakeholders of the NFP cooperate on many accountability efforts. Such efforts include the following:

Cost Containment

In FY 2003, the USDA Forest Service and Department of the Interior directed fire suppression financial oversight to key field leadership and established criteria to serve as thresholds for initiating large fire cost reviews.

Basing information on these criteria, national interagency teams composed of representatives from various Federal and State agencies completed five Large Incident Strategic Decision and Assessment Oversight Reviews. The reviews revealed generally cost-effective, efficient management at the incident level, with the appropriate emphasis on cost-containment priorities demonstrated by Command and Agency Administrator leads. Reviews took place on the Aspen Fire (AZ), Fawn Peak Complex (WA), Northwest Montana Area Command (MT), Northern Rockies Geographical Area Command Center (MT, ID, WY), and the B&B Complex (OR).

Each review developed recommendations to further improve efficiency and reduce operational costs. Overall, the reviewed fires were professionally managed with a great deal of agency administrator cost containment direction and interaction with the incident management teams. In October 2003, the WFLC considered the findings and recommendations of

these reviews. Most were endorsed, with additional consideration of the larger strategic issues to continue in FY 2004. The WFLC also convened a special Strategic Issues Panel to look more closely at costs and opportunities to improve cost containment. The panel provided the WFLC its findings on August 10, 2004.

Common Budget Structure

The ability to compare budget information is essential for consistent accountability, agency comparability, unit cost calculations, and performance measurements. On June 20, 2003, the WFLC approved a joint proposal by the Departments of the Interior and Agriculture for a common budget structure for all wildland firefighting agencies.

The new structure proposed for FY 2005 establishes a common definition for similar activities, reduces the total number of budget items, and highlights key portions of the wildland fire management appropriations linked to performance measures. This work represents a first between two departments and displays a significant effort to ensure accountability and reduce costs.

Performance Measures

Outcome-based performance measures are the cornerstone of the 10-Year Comprehensive Strategy and Implementation Plan. Those measures—adopted and approved by the Secretaries of Agriculture and the Interior, 17 Western governors, and numerous stakeholders—establish a long-term commitment to protect communities and the environment from the impacts of catastrophic fire. The measures will indicate trends, unit costs, changes in the landscape, and other fea-



tures associated with specific actions and outcomes. The performance measures are an integral part of each wildland firefighting agency's individual performance evaluation, and as such, represent a commitment to Congress and the public to use wisely funds and resources.

The USDA Forest Service and the Department of the Interior have taken several steps to ensure that National Fire Plan activities meet the priorities and objectives described in the 10-Year Comprehensive Strategy, the collaborative plan for National Fire Plan. These actions include the following:

Implementation Plan Task Item Tracking

Tasks and action items from the 10-Year Implementation Plan are intensively tracked and updated to reflect accomplishments and monitor delays in achieving action items. Reports from this tracking are the focus of the monthly conference calls held by the Wildland Fire Leadership Council. Of these tasks, one deserving notable mention is the revision of the regulatory process through implementation of the President's Healthy Forests Initiative.

Standardized Performance Measures. The Department of the Interior and Department of Agriculture established a standard set of performance measures that provide the public land managers valuable data for trends, cost analyses, and program accomplishment. The measures also link with the agencies' strategic plans and the Government Performance and Results Act.

Standardized Interagency Accomplishment Reporting System. The agencies established a real-time accomplishment reporting system for managers at all levels to plan and monitor fuels treatments, stabilization and rehabilitation, and community assistance work.

Senior Level Management Oversight. The Wildland Fire Leadership Council—consisting of the heads of all five wildland firefighting agencies, senior level managers at the Departments of Agriculture and the Interior, and leadership from the National Association of State Foresters, National Association of Counties, National Governors Association, and the Intertribal Timber Council—meets quarterly to coordinate National Fire Plan and Federal Wildland Fire Management Policy issues for seamless delivery of the wildland fire program. Accomplishments of the council to date include the following:

- Adopting a standardized fire management plan template for use by all Federal wildland fire management agencies.
- Developing the action plans and monitoring mechanisms for each task in the 10-Year Implementation Plan.
- Executing a Memorandum of Understanding between States and Federal agencies for standardized priority setting for hazardous fuels projects.



Future Vision

National Fire Plan implementation continues with enhanced collaborative efforts that crossed many boundaries. The Departments of Agriculture and the Interior are committed to continuing these successes.

Communication and collaboration remain critical as agency representatives expand partnerships for even greater successes in future years. To ensure the lines of communication remain open and productive, dialogue with nongovernmental entities and others from the local to the national level will continue to be enhanced. Open lines of information-sharing and discussion, as well as continued engagement with all partners for support of the NFP, will remain a priority. Top leadership continues to make a concerted effort to fully integrate the NFP into overall agency programs.

Summary

The NFP presents unique opportunities and challenges. The agencies will build on the solid foundation of these early years and continue the progress of protecting human lives and property, protecting communities and natural resources, and reversing the trend of declining health of forest and rangeland ecosystems. The agencies will continue to develop effective and consistent fire management policies for a seamless approach to fire management.

Success Stories

Black Canyon City Wildland Urban Interface Project — Arizona

In June, 2004 the “Agua Fire” started in a residential area in Black Canyon City. Fifteen residences were threatened and the fire soon moved north toward other structures. Assisted by federal and municipal agencies, the Arizona State Land Department, the BLM and Black Canyon City Fire Department worked together to safely suppress the fire at 20 acres of private land. The fire was halted at a fuel break – a fuel break that was constructed based on a risk assessment developed in 2001.

The success of this operation can be credited in part to three years of community prevention and mitigation efforts planned and performed jointly by the BLM and Black Canyon City Volunteer Fire Department. The fire spread to the east and west, reaching the fuel break and stopping its westward spread. That allowed firefighters to concentrate efforts on the east end and the residences immediately threatened. Several years of cooperation and commitment by the BLM and Black Canyon City Fire Department, as well as hard work by the residents, succeeded in preventing this fire from burning for miles along the river bottom and destroying many homes adjacent to the river.

Fuel Treatment Aids Firefighters in Suppressing the Sellin Fire -- Minnesota

A prescribed burn conducted May 4, 2004 on the Big Stone National Wildlife Refuge, created a barrier to fire spread when a lightning caused, wind driven wildfire burned 334 acres of tall grass and flood killed timber at Big Stone NWR on May 11, 2004. Wind speed and direction during the wildfire were aligned to push the fire rapidly off refuge lands. Suppression efforts were challenged by high winds, inaccessible terrain, and an impending tornado watch. The prescribed fire area served as an anchor point for burnout operations on one flank of the wildfire, and served as an anchor point for air tanker drops on the head of the fire. The prescribed fire area also prevented head fire from spreading onto private land. Fire spread on private land would have put several homes and farms at risk, disrupted commercial business at a gravel quarry, and required the closure of a State highway for several hours.

HFI Pocatello/Inkom Air Quality Projects – Idaho

The Pocatello/Inkom area is listed as a National Ambient Air Quality Standard (NAAQS) PM-10 nonattainment zone. It was because of this fact the area was selected as one of ten nationwide projects under the President’s Healthy Forests Initiative, which seeks to find efficiencies in the environmental analysis process so projects aimed at protecting communities may be implemented more quickly. Specifically, it was important for these projects to test and document the amount of particulate matter released into the air during a fire. In an effort to better understand the level of smoke emissions, the Bureau of Land Management (BLM) in Pocatello, Idaho decided to monitor two prescribed burns – Portneuf Westbench Cinnamon Ridge Project and the Buckskin Fuels Management Project for this purpose.

Once completed, the air quality study on the two projects found that on a 24-hour average, PM-10 concentrations were far below the 150 micrograms per cubic meter limit. This showed that the prescribed fires on both Cinnamon Ridge and Buckskin did not contribute towards exceeding the air quality standards and was unlikely to have any negative effects on the health or welfare of the people of the Pocatello area. Overall, the projects were found to be extremely successful monitoring PM-10 emissions from the prescribed burns. Similar projects are expected to continue.

Prescribed Fire Stops Spread of Wildfire at Loxahatchee National Wildlife Refuge -- Florida

A prescribed burn conducted last month for 7,000 acres of the Arthur R. Marshall Loxahatchee National Wildlife Refuge has been credited with halting the spread of a 4,000-acre wildfire ignited by a lightning strike. Only 80 acres of the 147,392-acre refuge, locat-



ed in Palm Beach County, Florida, were burned by the wildfire in mid-July.

The U.S. Fish and Wildlife Service often uses prescribed burning as a land management tool. Since October 2003, the Service's Southeast Region has done 324 prescribed burns on about 130,670 acres.

The first 5,000 acres of the prescribed fire treatment for A.R.M. Loxahatchee National Wildlife Refuge were burned on June 3-4, 2004. The remaining 2,000 acres were completed on June 29. Staff members from the Service's Southeast Regional Fire Management Branch, six Florida refuges and one fish hatchery participated, including A.R.M. Loxahatchee, Merritt Island, Lake Woodruff, J.N. Ding Darling, Florida Panther, and Key Deer National Wildlife Refuges and Welaka National Fish Hatchery.

Big Branch Marsh National Wildlife Refuge - Louisiana.

Fire insurance risks for local residents of Lacombe, LA will be dropping thanks to award-winning fire prevention methods of cutting back brush and selective prescribed burning, as well as the Department of the Interior's Rural Fire Initiative grant program, which provided equipment and support to local volunteer fire departments. A recent review indicates the U.S. Fish and Wildlife Service cooperative partnerships have led to a reduction of Insurance Service Office (ISO) fire rating from 5 to 3 for St. Tammany Fire Protection District #3. This is an example of how more money is saved on residents home and fire insurance than the amount of taxpayer dollars dedicated to reduce the fire threat and restore habitat. Media are invited to a short field tour immediately following the news conference/media availability showing how fuel reduction efforts by mechanical and prescribed fire have helped reduce the risk to local resi-

dents and businesses while enhancing wildlife habitat.

HFI Pilot Environmental Assessment Weaver Mountain Project -- Arizona

This effort reduces excessive fuels in interior chaparral vegetation in order to improve wildlife habitat and livestock forage and reduce the potential for severe wildfires within the 14,000 acre project area. BLM completed the environmental assessment in August 2003. The project will take several years to complete. In the spring of 2004, managers treated 1,100 acres with prescribed fire and plan to do another 900 acres this fall.

Moving Forward with Old Fashion Methods -- Arizona

A recently approved Forest Health Initiative Grant designed to assist the Pine Lake community in the Hualapai Mountains with drought conditions and Bark Beetle infestations is providing dollars to complete wildfire risk reduction treatments. The Pine Lake Community, including local residents and county, state and federal governments, is working together on this project.

The Forest Service funded grant is a 50-50 cost share between Forest Service and Pine Lake community residents. Firefighters are burning brush piles created by area residents removing excess hazard fuels from their property. A second burn was conducted to enhance the effectiveness of an existing fuel break on the south end of the community.

Some of Pine Lake's cost share is homeowner labor as they complete treatments outlined during a collaborative multi-agency risk assessment completed for their property. Robert Taghon, a recent arrival to the area, and his two sons are expert loggers and equestrians

with ample draft horse logging experience. Using horses and their private portable sawmill, the family is removing hazardous excess fuel from steep terrain, and will cut useable logs into lumber for resale to offset the cost to residents.

Prescribed Burns Used To Improve Habitat -- Arizona

Three interagency prescribed burns in 2004 were designed to use fire as a substitute for regular flooding on the Imperial and Havasu Wildlife Refuges. Regular floods no longer remove buildup in cattail and bulrush marshes, the preferred habitat of the endangered Yuma Clapper Rail. The 1,044-acres of burned area will improve habitat for the bird, according to the research of U.S. Geological Survey biologist and University of Arizona Professor Dr. Courtney Conway. The burns also broke up hazardous fuels in the refuges. The burn partners were the Bureau of Land Management Yuma Field Office, Bureau of Indian Affairs Fort Yuma Agency, and the Arizona Fire District of the U.S. Fish and Wildlife Service.

Whiskeytown National Recreation Area Reduces Hazardous Fuels in Shasta - California

The National Park Service at Whiskeytown National Recreation Area and the Western Shasta Resource Conservation District (WSCRD) joined forces during Spring 2004 to reduce hazardous fuels in and around the community of Shasta. A heavy snowstorm in late December left broken limbs, branches and trees throughout western Shasta County. The damage was particularly noticeable in Shasta, which is just outside the Park's east boundary. The storm damage, com-

bined with the already high hazardous fuel conditions, had the potential to increase the risk of wildfire spread during the hot summer months.

On two weekends in February and March, employees from Whiskeytown and WSCRD provided chippers, technical assistance and support to residents to dispose of storm damage debris and excess brush from their properties. In addition to this project, Whiskeytown awarded WSCRD a grant to reduce 80 acres of hazardous fuels in areas adjacent to the Park boundary. Grants and cooperative projects are two ways that Whiskeytown supports hazardous fuels reduction and works with partners to protect communities at risk.

Plumas National Forest Awards National Fire Plan Community Protection Grants - California

Two protection grants for hazardous fuel reduction work in Yuba and Butte Counties were awarded by the Forest Service. These small communities are located at the top of heavily forested ridges where fuel breaks around private property would increase survivability from fires and provide greater public safety. The project will complete the remaining 5 miles of a 17-mile sheltered fire break. Chaparral brush and a mixture of conifers are to be removed by hand and pulling equipment.

Reducing the Risk, Reaping the Benefits -- California

Hazardous fuel reduction projects around the Sawmill-Hungry Gulch community helped save more than 100 homes during the Sawmill Fire.



Residents participating in the Kern Valley's "Fire Safe Community Chipper Days" this spring cleared debris off roofs and thinned vegetation around homes. The Fire Safe Council purchased a chipper with BLM grant money and the BLM fire crews thinned vegetation 20 feet on either side of the main road. BLM also co-hosted a National Firewise Workshop in the area and is currently hosting a Student Conservation Association Fire Education Team to supplement their wildfire outreach and education efforts.

Eby Creek Fuels Reduction Project -- Colorado

The Eby Creek Fuels Reduction Project, adjacent to the town of Eagle, Colorado, was carried out by the Bureau of Land Management's Glenwood Springs (Colorado) Field Office in collaboration with several partners, including the Eby Creek Homeowners Association, the town of Eagle, and Eagle County. The project, completed in November 2003, required coordination with the homeowners, whose Eby Creek subdivision was built into existing trees within 20 feet of public land without defensible space.

As a result of this project, which involved tree thinning on 46 acres of public land, the homeowners association acquired a grant from Eagle County to treat 20 acres within the Eby Creek subdivision in the spring and summer of 2004. The treatments on public and private lands are dependent on each

other for achieving the fuels reduction necessary for the community's protection. Some of the biomass from the BLM's tree-thinning work was hauled to the Bureau's East Eagle Restoration Project, which seeks to close and reclaim unauthorized Off-Highway Vehicle trails.

Uncompahgre Plateau Partners -- Colorado

A public field trip to view a proposed treatment site represents a major milestone as the first collaborative plan of the Uncompahgre Project. Thirty-five people representing federal, state and local agencies, as well as local interest groups, prioritized more than 20 watersheds on the roughly 1.5 million acres on the Uncompahgre Plateau. Specialists from all elements of the partnership worked together to create a coordinated, interagency plan to serve as a guide for planning at the watershed scale.

The Dry Creek-Spring Creek Vegetation Management Strategy is the first of several interagency watershed-level plans within the project area. The plan was developed to remedy vegetation imbalance and reach ecological health on BLM (14,000 acres) and Forest Service (6,800 acres) managed lands over the next ten to fifteen years.

Using HFI Tool Speeds Removal of Hazardous Fuels -- Florida

By using the HFI Categorical Exclusion, the staff at





Big Cypress National Preserve was able to start work quickly on a project to reduce hazardous fuels on 1,000 acres of overgrown abandoned fields along Highway 41, the Tamiami Trail that passes through the park. The staff at Big Cypress estimates that using the HFI Categorical exclusion saved them two to six months of analysis allowing them to invest their resources in cutting brush and non-native trees to reduce the fire hazard to a private business, several structures, two Indian villages, as well as the highway. Additional homes and structures will be protected with completion of the project.

Wildland Fire Education Curriculum -- Florida

The Florida Division of Forestry has developed an educational CD-ROM to help citizens understand fire protection in the wildland urban interface (WUI). Funded by the National Fire Plan, the interactive training tool, entitled *Living on the Edge in Florida*, uses video clips, downloadable Adobe PDF files, virtual reality graphics, interactive exercises, internet links and a companion website to create an enjoyable, "user-friendly" way to learn about wildland fire and fire protection in interface areas.

Training begins with a self-contained tutorial on wildland fire and proceeds to an introduction to the Firewise Communities program, and video clips on Firewise landscaping and on why homes burn. Internet links allow users immediate access to a wealth of related information. The Florida Division of Forestry and its partners will use ***Living on the Edge in Florida***: (1) to expand the state's success with Firewise Communities workshops, (2) to provide a

training tool for individual use in professional offices, and (3) to train future leaders in high school and community college classes.

Hazardous Fuels Reduction -- Florida

Fire management treatments in forested areas adjacent to residential areas can reduce fuel loads and in turn hazardous fire conditions. At the same time, these treatments can affect the forest characteristics that attracted people to live in these areas in the first place, such as scenic beauty, seclusion, and naturalness. With funding by the National Fire Plan, scientists from the USDA Forest Service are working with partners at seven universities across the country to evaluate public perceptions of fire management treatments and aesthetic values. Data collection has begun in areas around the Boundary Water Canoe Area in Minnesota and in Florida. Potential study areas have been identified in Michigan, Minnesota, and Wisconsin. The results of this work will assist land managers in choosing treatment strategies and communication avenues that will reduce controversies and strengthen constituency support for fire management treatments.

Interagency Prescribed Burns on Fish and Wildlife Refuges -- Georgia

The Bureau of Land Management's (BLM) Jackson Hotshots completed prescribed burning on U.S. Fish and Wildlife (FWS) Refuges in the Southeast during 2003 and 2004. The BLM entered into a partnership with Region four of the FWS to reduce fuel load on national wildlife refuges.



Fuels were reduced on 25,000 acres during last years' efforts, the most successful operation ever held in Region four. The Hotshots are currently operating three modules on Wildland Urban Interface refuges in the southeast: Sand Hill Crane Refuge in Mississippi, the Savannah Coastal Refuge in Georgia, Marriott Island in Florida, the Talladega Ranger District in Alabama and the Santee Refuge in South Carolina. To date, approximately 4,000 acres of prescribed burning have been completed this year.

Okefenokee National Wildlife Refuge -- Georgia

An extensive system of fuel breaks and prescribed fire treatments were put into place before the Blackjack Bay fires burned over 124,000-acres, allowing fire crews to successfully contain the fires on the refuge. The vegetation treatment developed in collaboration with local state and industry forestry partners minimized resource damage and suppression costs during the fires. In 2003 and 2004, the Refuge worked with local landowners to complete plans to begin managing lightning-caused wildfires for resource benefit, a practice commonly called "fire use."

Thinning Brush Reduces Risk to a Growing Community -- Idaho

In 2003 fire managers at Deer Flat National Wildlife Refuge in Nampa completed four projects to reduce wildfire risk in this fast-growing community, with a number of subdivisions along the Refuge boundary, where numerous fast-moving lightning and human-caused fires occur each year. Fire staff used a contracted tracked brush cutter to reduce ladder fuels on 70 forested acres. This treatment, in combination with past ladder fuel and fuel break treatments, will reduce potential fire behavior, and increase the effectiveness of local engine crews when fires occur.

Successful Fuels Treatment on the White Earth Reservation -- Minnesota

In April of 2004 after the implementation of the Nayatawash treatment, a wildfire start on the White Earth Reservation took a run towards the edge of the community. Air and engine resources were attempting direct attack on the flanks, but they were making minimal progress. The head of the fire was moving at some 10,000 feet per hour with 15-20 foot flame lengths. When the fire hit the previously treated area, the flame lengths dropped to one foot and the rate of speed was less than 1,000 feet per hour. This fire behavior change enabled ground and air resources to stop the fire saving a number of buildings and lowering overall suppression costs.

Volunteer Fire Departments were key resources during the suppression effort. Two of the three responding fire departments have received Rural Fire Assistance grants. Equipment purchased from RFA grant money was put to good use during the suppression effort, as were the strengthened relationships between the FWS and the fire departments.

Confederated Salish and Kootenai Tribes Forestry Department, Schley WUI Homesite -- Montana

The Tribal Schley Homesite area has been a Wildland Urban Interface (WUI) area at high risk of wildfire since 1990. In fiscal year 2002 the Confederated Salish and Kootenai Tribes (CSKT) Forestry Department worked with the Student Conservation Association (SCA) to inventory standing and down fuels, and thin, prune, pile, chip and haul-off the slash. This successful 100-acre treatment project saved money, mitigated

potential airshed impacts, and greatly reduced the risk of fire immediately adjacent to the homes.

In 2003 and 2004 the CSKT then sponsored SCA crews to conduct home site risk assessments and work with the Geographic Information System shop to map them and link the data to homesite mapping layers. The SCA crews made homeowner contacts, passed out risk-abatement literature during the assessments, and passed out prevention information at local schools and community fairs.

Improving Fire Preparedness with New Equipment -- Nevada

The Humboldt-Toiyabe National Forest used National Fire Plan funds to provide a new fire truck to the community of Jarbidge, NV. In this cooperative effort with the state, the Nevada Division of Forestry provided the seasonal personnel to operate the truck this summer. The truck is equipped with 125-gallon tank, and will serve as an initial attack vehicle. Jarbidge is one of Nevada's "at risk" communities, in a steep canyon and completely surrounded by National Forest.

Creating Fuel Breaks -- Nevada

The Bureau of Land Management (BLM) Winnemucca Field Office created three fuel breaks along highway rights-of way in cooperation with the State of Nevada Department of Transportation. Since then, BLM has completed maintenance and extensions of three major fuel breaks. These fuel breaks stopped two

fires along state highways when a driver ignited a blaze along a 10-mile stretch of highway. When firefighters arrived at the scene, they found that much of the fire had been stopped by the fuel break on the west side of the road. As a result, the Andorno Complex fires consumed only 12 acres. The fuel breaks have successfully protected BLM's fire rehabilitation work and reduced the risk to local citizens, ranches and the public.

Copper Hill Management Area -- New Mexico

The Copper Hill Management Area is very close to Penasco, Picuris Pueblo, and surrounding communities. Forestry research at Copper Hill was initiated in 1965 under the Kennedy administration and has continued until present day. This site has been thinned and logged many times over the last 50 years, but fire has never been used as a management tool, and never has the community benefited so well.

In collaboration with eight Northern Pueblos, and with funds jointly provided by the New Mexico Environmental Department and the New Mexico State Game and Fish, the BLM is contracting local crews to assist with prescribed fire. Local residents are harvesting fuel wood, local cooks are providing food and the community center is rented and being used as a base camp during prescribed fire operations. Above all, the risk of fire to the communities has been reduced.

Fuel Break Work Pays Off -- New Mexico

Fire management investments don't often pay imme-



diate returns, but they did this year in southwestern New Mexico. A blaze erupted about noon May 8, 2004 near Pinos Altos, north of Silver City in Grant County. As night approached, work by BLM and other firefighters and an air tanker had minimal effect on the 5-acre blaze. With evening approaching, the fire was rapidly moving to the southwest, toward several communication towers. About 6:00 p.m., when the fire reached a 50-acre fuels break created only months before, the show was over. Minor clean up the next day was all that was required.

Credit goes to the BLM-Las Cruces field office, which joined the Forest Service, New Mexico State Forestry and others in clearing small diameter ponderosa pine, pinon pine and juniper around the small community at the southern tip of the Gila National Forest. The project cleared about 150 acres last year.

Bobar Stewardship Contract and Landscape Project -- Oregon

The Bobar Project involves both commercial (2,600 acres) and non-commercial thinning (2,300 acres) including one of the first stewardship contracting pilot projects. The Bobar Stewardship contract implements a portion of the larger Bobar Landscape Project that is economically challenged due to the large amount of non-commercial material as well as the marginal value of the small diameter (6 to 12 inches) commercial material.

Coordinating with adjacent landowners and National Fire Plan funding aided hazardous fuels reduction across ownership boundaries onto private lands. More than 1,000 acres of non-commercial treatments have been implemented, reducing fire hazard while at the same time restoring the health of these important oak woodland and shrubland plant communities, another 400 acres are currently under contract to be completed by this summer. The commercial thinning is expected to be offered for sale in 2005.

Fire Science Research -- Washington

Fire science research and technology development is a critical foundation for each of the five key points addressed in the National Fire Plan. A research team is analyzing how wildland fires impact soil productivity, tree growth rates, decomposition of organic matter, and site sustainability as part of the North American Long-Term Soil Productivity research funded by the National Fire Plan. The scientists are examining plots of forest and Weyerhaeuser land in California, Washington, and Oregon.

Biomass Utilization -- Washington

Researchers are using National Fire Plan dollars to reduce wildland fire risk and stimulate the local econ-

omy by conducting a study on the Starkey Experimental Forest in the Wallowa Whitman National Forest. Researchers are discovering new ways to use small diameter trees more efficiently. The overabundance of ladder fuels, typical on the forest, is chipped and used to fuel electrical generation. Sawmills can also use the small diameter trees. This project, one of 12 in the nation, is part of the restoration efforts on the Blue Mountain Demonstration Area.

Wildland Urban Interface and Prescribed Fire -- Washington

The Methow Valley Ranger District of the Okanogan-Wenatchee National Forest in Washington State used National Fire Plan funds to conduct two prescribed burns in the wildland urban interface near the town of Winthrop, Washington. The Kiosk burn reduced hazardous fuels, reintroduced fire into the ecosystems, and reduced wildfire risk to homes by burning slash and fallen trees. This project was conducted after the area was mechanical thinned. The Canyon burn treated 365 acres between a ridge-top road and the Canyon Creek drainage.

Sun Mountain Ranch Wildfire Urban Interface Project -- Washington

Residents of the Sun Mountain Ranch, a private subdivision in north-central Washington, are learning how to make their 750-acre development less prone to wildfire hazards thanks to funds from the National Fire Plan. The Wildland Urban Interface project here is helping to protect over a hundred homes that are already built in this scenic residential area in Okanogan County, less than one mile southwest of the historic town of Winthrop. It's a strip of private land about 40-miles wide sandwiched between National Forest and nearby BLM lands. Although the primary beneficiaries of this project are the subdivision landowners, surrounding properties also benefit from the reduced risk of wildfire.

The treatments are expected to reduce the risk of stand-replacing crown fires by thinning the trees and removing ladders fuels. These treatments will also help protect the structures in this subdivision.

The U.S.D.A. Forest Service, the Washington Department of Natural Resources, and the local fire district actively participated in planning, designing, and implementing the project. The Bureau of Land Management assigned a wildlife specialist and an archaeologist to conduct wildlife and cultural resource surveys within the project area. Residents of the neighborhood were also participants in this project.

As of June 2004, a majority of the project area has been thinned, construction of a fuel break is completed, most of the slash has been chipped and

burned, and a sizable portion of the bitterbrush pruning has been hand cut. Resource specialists with the Bureau of Land Management, Spokane BLM District, will continue to monitor these efforts

Work Protects Youth Camp -- Wyoming

The Shoshone National Forest, using a local timber purchaser and the Youth Conservation Corps, completed a Firewise fuels mitigation project sponsored by the National Fire Plan at the Fremont County Youth Camp. The project removed infested trees causing safety and fuels hazards in the County's Youth Camp. First, the merchantable post/pole and small sawlogs and firewood were removed. The Youth Conservation Corps then continued thinning and piled the slash to complete the project.

Fuel Break Helps Protect Town -- Wyoming

The Bighorn National Forest constructed a 300 foot-wide, 2-mile long, fuel break west of Story, Wyoming, as one of the first projects after contractors developed the Story Wildfire Assessment and Mitigation Plan (SWAMP) with National Fire Plan dollars funded through State grants. The Bighorn National Forest and residents of Story also looked at the Forest adjacent to Story to develop the Story Fuels Project to compliment the town efforts. The National Fire Plan funded the Story Fuels Project on the Tongue Ranger District.

The planning process is completed to treat over 600 acres adjacent to the town. The contract to thin small trees and brush is currently being prepared and will open for bid soon.

Seminole Dam Housing Area WUI Fuels Project -- Wyoming

The BLM teamed up with the City of Rawlins, Carbon County Fire Departments and the Bureau of Reclamation to reduce fuels at the Seminole Dam (BOR). The lodge pole pine and juniper studding the hills above the dam provide both a scenic setting for the housing area and a fuel source for potential wild-fires. The fuels crew spent ten days cutting trees and brush around the fuel depot and on the hills surrounding the structures. Crews hauled the materials off site to totally remove the flammable material from the project area.



Appendices

Appendix A: Hazardous Fuels Treatment FY 2003

Appendix B: Hazardous Fuels Treatment FY 2004 to Date

Appendix C: Department of the Interior and Agriculture Fire Resources