# **FY 2002 Performance Report**



# National Fire Plan

US Department of Agriculture US Department of the Interior













# **FY 2002 Performance Report**

National Fire Plan

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# **FY 2002 Performance Report**

## National Fire Plan

During the second year of National Fire Plan implementation, the Nation endured the second largest fire season in a half-century. An early widespread drought – unparalleled since the Dust Bowl of the 1930s – affected 45% of the country. On June 21, 2002, the national level of preparedness rose to the highest level possible five weeks earlier than ever before, and remained at that level for a record-setting 62 days. Wildland fires burned 7.2 million acres, or nearly double the 10-year average. Colorado, Arizona, and Oregon recorded their largest timber fires in the last century. Six states – Colorado, Utah, Arizona, Nevada, North Carolina, and Virginia – suffered their worst drought levels on record.

Despite challenging conditions, and with assistance from Congress and the American public, significant progress was made to protect communities, reduce fire risk, stabilize or rehabilitate burned lands, and restore healthy fireadapted ecosystems in the nation's forests and rangelands. Firefighters were successful in suppressing more than 99% of all wildland fires (federal, state, and local jurisdictions) during initial attack. Of the more than 73,000 fires reported, only 610 escaped to become large fires over 300 acres.

In the midst of this heightened activity, the five federal wildland fire management agencies successfully accomplished the following:

- Treated 2.26 million acres of hazardous fuels on federal land – 167,673 more acres than FY 2001.
- Treated 1.02 million acres of wildland fuels on federal lands through wildland fire use.
- Treated 458,456 acres through insect and disease suppression projects; treated 6,039 acres for invasive plant control through grants to states; and carried out an extensive forest health monitoring program through the Forest Health Protection Program.
- Began preparatory work for treating an additional 3 million acres in FY 2003.
- Treated 1.3 million severely burned acres through rehabilitation.
- Hired, maintained, and trained a wildland firefighting workforce of 16,928 personnel. Of those, 15,152 were frontline firefighters.
- Supported a fleet of 2,226 engines, 152 helicopters, and 181 dozers.
- Initiated 141 facilities maintenance and construction projects.
- Assisted 5,349 rural and volunteer fire departments

#### **Busiest Day of the 2002 Fire Season**

On July 31, 2002, 148 new fires started. Thirty-one large fires were burning across the United States. Resources assigned included:

- 28,000 people
- 1,205 engines
- 30 air tankers
- 188 helicopters

Additional resources that day included:

• One Army battalion of 600 people

A few weeks later, there were:

- 50 fireline and aviation managers from New Zealand and Australia
- More than 900 firefighters and management personnel from Canada

through grant funds providing technical assistance, training, supplies, equipment, and public education support.

- Funded 11,400 mitigation and education campaigns and nearly 400 community plans, 2,686 hazardous mitigation projects, and trained 13,000 firefighters through the State Fire Assistance Program.
- Conducted 19 Firewise workshops for more than 1,800 people, from 600 communities, in 47 states.
- Completed 1,070 projects including bio-energy feasibility studies, wood product utilization and market feasibility studies and community economic development planning through the Economic Action Program.
- Signed an agreement with Australia and New Zealand for mutual aid for firefighting.

## Background

In 2000, at the request of the President, the Secretaries of the Department of Agriculture and the Department of

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

#### Federal Wildland Fire Management Agencies

#### **US Department of Agriculture**

Forest Service

#### US Department of the Interior

- · Bureau of Indian Affairs
- Bureau of Land Management
- Fish and Wildlife Service
- National Park Service

and the Environment: A Report to the President in Response to the Wildfires of 2000, is known as the "National Fire Plan."

In 2001, the Secretaries of Agriculture and the Interior joined 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 National Fire Plan. It was the first national long-term comprehensive strategy for wildland fire management.

The National Fire Plan 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 National Fire Plan during its second year.

## **Second-Year Progress**

The year 2002 was especially significant in advancing collaborative efforts – federally and locally. Three historic events occurred that will affect wildland fire management for years to come.

- In April, the Wildland Fire Leadership Council was created to coordinate and implement the National Fire Plan and the Federal Wildland Fire Policy among federal agencies, states, counties, and tribes.
- On May 23, the Secretaries of Agriculture and the Interior, along with 17 western governors, signed the 10-Year Comprehensive Strategy Implementation Plan - A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment. The plan set the

#### **Action Plans**

The Departments of Agriculture and the Interior developed action plans for 20 of the 22 tasks in the 10-Year Comprehensive Stragegy Implementation Plan. The National Association of State Foresters took an active role, developing two action plans and participating in many others. Significant progress was made on the plans as collaborative partners worked together. Progress will continue into 2003 and bevond.

performance requirements for delivery of the 10-Year Comprehensive Strategy that recognizes the need to invest in long-term solutions to address the buildup of excessive and hazardous fuels. The goals of the implementation plan are to collaboratively promote community assistance, reduce hazardous fuels, and maintain and restore fire-adapted ecosystems.

 On August 22, President Bush announced the Healthy Forests Initiative to restore forest and

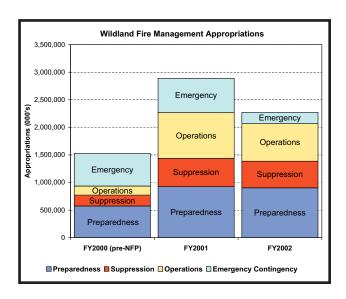


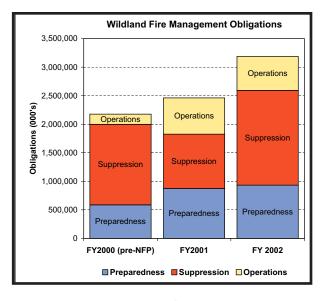
rangeland health and prevent catastrophic wildfires on public lands. The *Healthy Forests Initiative* will further efforts to restore forest health through active land management efforts such as thinning of small trees and brush, and, where appropriate, prescribed burns.

### Commitment

Reducing the risks and consequences of severe wildland fires continues to be a high priority for the Administration and Congress. Bipartisan Congressional support has provided the agencies with the necessary funding critical to National Fire Plan implementation.

In August 2002, the Administration introduced the *Healthy Forests Initiative* to expedite attainment of National Fire Plan goals. The initiative will implement core components of the National Fire Plan's *10-Year Comprehensive Strategy Implementation Plan*, enhancing and furthering the work and collaboration agreed to in this historic document. It directs the agencies to improve regulatory processes to ensure more timely decisions, greater efficiency, and better results in reducing the risks of catastrophic wildland fires by restoring rangeland and forest health.

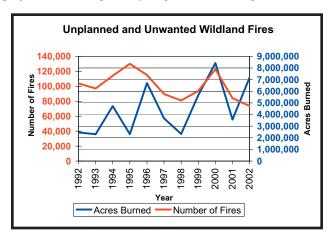




# **Emergency Fire Suppression Fund Transfers**

Due to the length and severity of the 2002 fire season, suppression costs equaled \$1.66 billion, more than twice the 10-year average. These costs depleted the \$321 million of suppression funds available in the Forest Service. A provision in the Forest Service appropriation language states that funds available to the agency may be transferred to the Wildland Fire Management Appropriation for firefighting efforts, once all previously appropriated suppression funds have been used. To protect the public and natural resources, the Forest Service borrowed almost \$1 billion from other Forest Service programs to pay for the costs of fire suppression.

To avoid or minimize programmatic impacts, the Department of the Interior transferred funds from unobligated balances of the construction and land acquisition accounts of the Bureau of Land Management, Fish and Wildlife Service, and National Park Service, and the construction account of the Bureau of Indian Affairs. The creditor agencies managed their land acquisition and construction accounts to avoid or minimize disruptions to projects; for example, they targeted the funding reductions



to projects still in the planning phase so that construction projects that had already commenced proceeded to completion.

The 2003 Omnibus Appropriations Act included \$189 million in 2002 energy supplemental funding to partially repay these Interior construction and land acquisition accounts.

# **Accomplishments**

## **Firefighting**

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

Initial attack activities were highly successful in 2002, with 99% of all unwanted fires stopped while they were small. Of the more than 73,000 wildland fires reported, only 610 escaped initial attack efforts to become large project fires.

#### 1. Workforce Development

In FY 2002, with National Fire Plan funding, the Departments of Agriculture and the Interior continued the success of FY 2001 by retaining and recruiting a wildland firefighting workforce of 16,928, of whom 15,152 were frontline firefighters.

In addition, the Forest Service contracted firefighting resources through a new national contract for engines and firefighters. This contract created 1,324 private sector jobs. This number will continue to grow as units expand the use of this contracting process which is available for use by all wildland firefighting agencies.

To enhance recruitment and retention efforts, an Interagency Human Resources Advisory Group was formed in 2001. In 2002, five subcommittees were formed (Automation; Staffing–Recruitment and Relocation; Classification; Outreach; and Training and Development) and completed the following tasks:

- Initiated a Wyoming automated firefighter recruitment pilot effort for all bureaus.
- Completed standardized firefighter position descriptions at grade levels GS-05 and below.
- Developed detailed workforce staffing plans for the 2003 fire season and beyond.
- Created collaborative recruitment and retention initiatives.
- Initiated an outreach recruitment strategy to increase applicant numbers and diversity.

## **Accomplishments - Firefighting (cont.)**

#### 2. Training

In addition to recruitment and retention of a highly qualified firefighting workforce, the agencies are pursuing an aggressive program of firefighter training and employee development. In 2002, with support from National Fire Plan funding, the agencies accomplished the following:

- The five federal wildland fire management agencies, with support from the Department of Labor, operated the Wildland Firefighting Apprenticeship Academy in California. Each year, this academy provides comprehensive training to approximately 500 journeyman level employees. The training focuses on safe firefighting tactics, organization skills, communication skills, and effective supervision.
- The agencies also entered into an agreement with the University of Arizona to create a training center that will replace the existing National Advanced Resource Technology Training Center. The advanced training center will target senior level incident command personnel and senior agency administrators.
- Two interagency training centers, devoted to fuel management, are supported through the National Fire Plan: the Prescribed Fire Training Center in Tallahassee, Florida, and the Fire Use Training Academy in Albuquerque, New Mexico. Each center specializes in a particular aspect of fire use, fuel management program implementation, and fuel management project planning. These centers have increased the ability to plan, implement, and treat hazardous fuels. In FY 2002, 130 trainees were graduated in Tallahassee, and 82 in Albuquerque.
- The federal wildland fire management agencies recently released a virtual reality fire suppression simulation system designed to develop and test the decision-making acuity of field managers.
   The tool was evaluated and judged a success by an interagency group of fire managers and administrators. The goal is to provide this tool to the general firefighting workforce.
- A new website was developed www.fireleadership.gov to 1) provide information on the new National Wildfire Coordinating Group Development Program, and 2) provide a resource for self-directed leadership development. The website includes a leadership curriculum map with descriptions of existing courses and development status of planned courses and an on-line set of reference and assessment tools for use by individuals who lead or aspire to lead wildland firefighters.
- A Wildland Fire Lessons Learned Center was developed similar to and modeled after a Department of Defense program. A website provides a forum for firefighters at all levels to share successes and best practices evolving out of challenges experienced on actual incidents. They also can make suggestions

- to improve the wildland fire training curriculum, and bring forward unresolved issues for broader review and input. The center maintains a database and produces newsletters and reports highlighting significant events and detailing specific lessons learned.
- The Fish and Wildlife Service developed a fire management mentoring program to foster increased experience and training opportunities for new employees seeking a career focus in fire management.

#### 3. Equipment

In FY 2002, the increased number of aircraft and equipment improved the effectiveness of firefighting during initial attack and large fire suppression. The National Fire Plan supported 2,226 engines, 152 helicopters, 74 air tankers, 181 dozers, 104 water/foam tenders, and 122 tractor plows needed for firefighting. Due to procurement timeframes, delivery of specialized equipment ordered in FY 2001 was realized in FY 2002.

The Forest Service and the Department of the Interior maintained a fleet of exclusive use contract aircraft as well as Call When Needed aircraft. The Forest Service contracted for 44 large retardant air tankers, six of which are fully funded by the Bureau of Land Management, and two of which are partially funded by both the Bureau of Land Management and the Forest Service; six large helicopters, 29 medium helicopters, and 62 light helicopters

located on National Forests. The Department of the Interior contracted for eight medium helicopters, 46 light helicopters, and 29 single engine air tankers, two of which are funded by the Forest Service. Through rental agreements and Call When Needed contracts, both departments have access to roughly 3,700 additional aircraft, both fixed and rotor wing.



Through the Federal Excess Property Program, the Forest Service loaned 62 twin-engine airplanes, 86 single-engine airplanes, and 114 helicopters to state wildfire agencies to increase their firefighting capabilities on state and private jurisdictions. These aircraft also are available to help firefighting on federal land through cooperative agreements. The states provide all of the flight personnel, maintenance, and repair to the aircraft.

## **Accomplishments - Rehabilitation**



#### 4. Facilities, Construction, and Maintenance

In FY 2002, the agencies accomplished work on 141 facilities totaling \$24.3 million in expenditures. Projects ranged from crew quarters and offices to equipment facilities, fire stations, air tanker bases, helibases, water systems, and lookouts. The construction of fire facilities presents challenges due to the two to three-year time period needed for planning, design, and construction. Facilities are a critical investment if agencies are to increase firefighter retention and facilitate workforce diversity, especially in remote areas with limited opportunities for temporary housing.

The Forest Service finished all previously awarded national air tanker base contracts using FY 2002 National Fire Plan fire facilities funding. This included expending \$1.15 million to cover existing contract obligations at Missoula, Montana; Porterville, California; Helena, Montana; and Chester, California. New air tanker base contracts are currently deferred until the FY 2003 budget is final.

The Department of the Interior used \$17.5 million to construct or repair 95 facilities in 19 states. Interior also needed to reprogram \$9.1 million from the fire facilities program to help pay for suppression operations in 2002. The reprogramming of facilities funds slowed the project completion schedule.

## Rehabilitation

Post-fire rehabilitation work is broadly defined as efforts to improve lands that are unlikely to recover naturally from the effects of wildfires. The work is often implemented over the course of several years following wildfire. Activities include 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.

#### 1. Project Accomplishments

In FY 2002, 902 rehabilitation projects were accomplished in 20 states using National Fire Plan funding. Many of these projects were initiated in FY 2001. These projects treated 1.3 million severely burned acres through

invasive plant control, seeding, planting, and watershed improvements on federal lands. In addition, more than 2,330 miles of trail reconstruction, roadwork, riparian enhancement, fencing, and boundary line location were accomplished.

In FY 2002, an additional 130 burned area emergency rehabilitation (or emergency stabilization) projects were completed with over \$70 million of emergency suppression funding on National Forest lands. Emergency stabilization includes stabilizing slopes with log structures, straw wattles, and straw mulch, installing larger culverts to handle increased water flows, and reseeding burned areas. These activities occurred on 136,000 acres along with treatments on 2,526 miles of roads, trails and streams. Additionally, 366 road structures were installed to prevent road damage and erosion and sedimentation in adjacent streams.

Examples of projects supporting rehabilitation include the following:

- The Remote Sensing Applications Center operated by the Forest Service and located in Salt Lake City, Utah, provided 106 satellite images for 70 emergency stabilization projects covering 2,650,000 acres.
- The Geospatial Service and Technical Center in Salt Lake City developed and tested a web-based application that provides maps and information for use on emergency stabilization projects to assist in determining appropriate protection measures for burned areas. The technical center constructed 112 digital orthophoto quadrangles that provide terrain attributes for emergency stabilization assessments.
- The Regional Seed Warehouse in Boise, Idaho, managed by the Bureau of Land Management, delivered 650,000 pounds of native seed to 10 states for emergency stabilization projects.
- In addition to traditional commercial tree species, Forest Service nurseries expanded production by growing nearly 300 species of native shrubs, grasses, sedges, and forbs in support of rehabilitation efforts. Forest Service nurseries continue to work cooperatively with researchers, universities, and state and private growers to share information on proper techniques for growing these species.

#### 2. Monitoring

The agencies continued to evaluate the effectiveness of commonly used emergency rehabilitation treatments to ensure that treatments chosen by land managers are reducing erosion and sediment delivery, and protecting downstream values at risk subsequent to severe wildfire. This is a partnership between research and land managers to establish, maintain, and monitor selected sites throughout the west. Results will be used to provide a more scientific basis for guidelines that will improve the effectiveness and efficiency of wildfire rehabilitation

## **Accomplishments - Hazardous Fuels Reduction**

#### **Common Terminology Developed**

A significant programmatic accomplishment in FY 2002 for both the Forest Service and Department of the Interior was the development of common terminology for the rehabilitation program. Additionally the Wildland Fire Leadership Council approved interagency policy for emergency stabilization treatments ensuring consistency in the timing and funding of treatments and monitoring. The following terminology was established and adopted.

Emergency Stabilization	Rehabilitation	Restoration
Actions within one year of a wildland fire to immediately stabilize and prevent unacceptable degradation to natural and cultural resources, to minimize threats to life or property resulting from the effects of a fire, or to repair/replace/construct physical improvements necessary to prevent degradation of land or resources.	Post-fire efforts (≤ three years) to repair or improve lands unlikely to recover to a management approved condition from wildland fire damage, or to repair or replace minor facilities damaged by fire.	The continuation of rehabilitation beyond the initial three years of rehabilitation funding or the repair or replacement of major facilities damaged by the fire. Restoration is funded using appropriated or supplemental funding from other than the wildland fire appropriations.

practices. Already preliminary results are being provided to emergency stabilization and rehabilitation specialists through regularly scheduled trainings and workshops. Final findings will include evaluation of effectiveness, efficiency, and guidelines for use of contour-felled logs and mulches to reduce runoff and erosion.

Additional monitoring occurred on the majority of the emergency stabilization projects. In this post-treatment monitoring, success of treatments relative to noxious weed control, seeding success, and the installation of structural treatments were reviewed. This monitoring was approved as part of the overall emergency stabilization plan.

#### 3. Collaboration and Coordination

Under a cost-share agreement between American Forests and the Forest Service, 802 acres of National Forest land affected by wildfires in 2002 were planted with approximately 400,000 Douglas-fir, Ponderosa pine, Sugar pine, Incense cedar and Jeffrey pine seedlings. Projects were completed in Idaho, California, Oregon, and New Mexico. American Forests contributed \$200,000 to this Wildfire ReLeaf partnership.

The Secretaries of Agriculture and the Interior developed a joint interagency strategy to supply native plant materials for emergency stabilization and longer-term rehabilitation. The three key elements of the strategy are: 1) support for federal, state, and tribal production, development and research facilities, 2) private-public partnerships, and 3) education and outreach. The native plant material development program provided \$12 million in FY 2002 to secure a reliable source of native vegetation for rehabilitation projects.

In June of 2002, the Hayman Recovery Assistance Center (HayRAC) was established in Castle Rock, Colorado, to aid victims of the Hayman Fire with their recovery needs. This recovery assistance center provides representatives from state, federal, and non-profit agencies who can provide information on financial, logistical, human services, and

fire rehabilitation techniques to citizens and businesses directly impacted by the Hayman Fire. The center served as a central source of information during and after the fire, providing a mechanism to coordinate interagency restoration and recovery efforts with the community, collaborating on short and long-term restoration needs, and coordinating and facilitating volunteer programs to support community and forest restoration efforts. In 2002, HayRAC coordinated 55 volunteer projects, with more than 3,000 volunteers, for about 22,000 volunteer hours, and responded to about 1,600 phone calls for fire recovery assistance. Community members from the Bitterroot Valley in Montana assisted the HayRAC in getting established by transferring experiences and lessons learned from the fires of 2000.

## **Hazardous Fuels Reduction**

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, this has resulted in wildland firefighters spending more time and effort protecting structures.

In response to the risks posed by heavy fuel loads, the National Fire Plan established an expanded, intensive, long-term program of hazardous fuel reduction on federal and adjacent lands. This program emphasizes cooperation and collaboration among federal and non-federal agencies and organizations 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 fuel reduction program strives

to reduce the risk to human well-being and important landscapes like municipal watersheds, as well as improve forest and rangeland health.

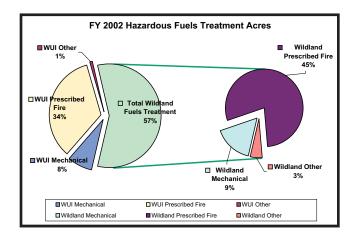
#### 1. Fuel Treatments

Fuel treatments are designed to mitigate the risk of unwanted wildland fire to people, communities, and natural resources. Fuel treatments accomplish these goals by manipulating vegetation and/or removing/modifying wildland fuels to: reduce the potential 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 were accomplished using prescribed fire, mechanical thinning, herbicides, grazing, or combinations of these and other methods. In addition to specific preplanned fuel treatment projects, current fire policy encourages the use of wildland fire to accomplish specific land management objectives that include hazardous fuel treatment in wildlands.

In spite of a very challenging fire season, the federal wildland fire management agencies treated 2.26 million acres of hazardous fuels on federal and adjacent lands through planned treatments. This is 167,673 more acres than in FY 2001. The total acreage also includes 385,871 mechanical treatment acres, 1.78 million prescribed fire acres, and 82,588 acres of other treatments. Of the total, 973,687 acres were treated in the wildland urban interface, a 25% increase over the FY 2001 wildland urban interface acres.

An additional 1.02 million acres of wildland fuels were treated on federal lands through wildland fire use. Wildland fire use is the management of naturally ignited wildland fires to accomplish specific resource management objectives and ecosystem maintenance and restoration.

The combination of prescribed fuel treatments and wildland fire use resulted in 3.28 million acres being treated to mitigate hazardous conditions and restore forest and rangeland health.





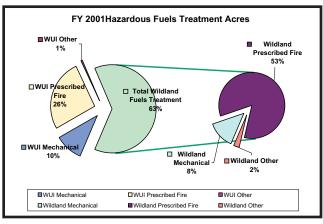
#### Goats Reduce Wildland Fire Risk - No Kidding!

Federal wildland fire management agencies are using innovative methods to reduce hazardous fuels. In May 2002, the Bureau of Land Management contracted with Western Weedeaters to provide 650 goats to eat through 40 acres of regrowth spread along three miles of fuel break near Igo, California. Not only did they eat fine fuels (grass, dead pine needles and leaves), larger re-sprouting vegetation (manzanita, small trees, and blackberry brushes), poison oak, and non-native noxious weeds, they also consumed the lower limbs of larger trees reducing ladder fuels and mimicking the effects of fire pruning.

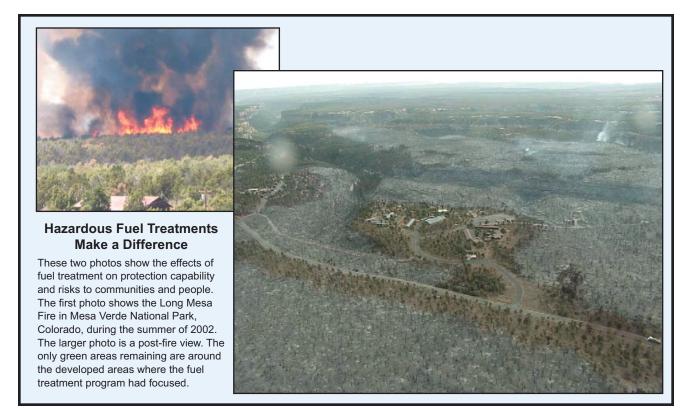
#### 2. Collaboration and Coordination

Program success requires continuing interagency coordination and collaboration with states, tribes, and local partners. To that end multiple collaborative efforts were accomplished or are underway. In 2002, the agencies:

- Developed and implemented a joint Forest Service and Department of the Interior memorandum defining the collaborative process for fuels project development and selection.
- Chartered a joint Forest Service and Department of the Interior National Fuels Coordination Committee. The committee consists of senior fuels management specialists who provide leadership, guidance, and consistency in development and implementation of an effective, interagency fuels management program to address risks from severe fires in wildland urban interface communities and to restore healthy



## Accomplishments - Hazardous Fuels Reduction (cont.)



ecological systems in other wildland areas.
 Established a Fire Learning Network with The Nature Conservancy that selected 40 landscapes to concentrate efforts and demonstrate ecosystem restoration. In May, the first Fire Learning Network workshop was attended by more than 90 fire managers and scientists, whose work resulted in peer-reviewed ecological models, descriptions of fire regimes, and documentation of fuel treatment activity to-date.

#### 3. Planning

Out-year project planning was an important aspect of the FY 2002 program of work to prepare for fuels reduction treatments in FY 2003 and beyond. Treatments must address high-priority needs, include local citizen-driven solutions, and be completed consistent with land use plans and environmental goals. With the added 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.

In FY 2002, the Forest Service and the Department of the Interior developed a Draft Interagency Cohesive Fuels Strategy. The draft provides interim guidance for the agencies to effectively target fuels treatments to highest priority areas. The draft strategy points the way to picking the optimal areas to treat and treatment methods to use, and does so in ways that address multiple concerns voiced by various segments of society. Early and frequent collaboration with stakeholders and applying lessons

learned from each project are key components of the strategy.

Fire Management Plans (FMP) are strategic plans that define a program to manage wildland and prescribed fires and implement non-fire fuel treatments based on an area's approved land management plan. In FY 2002, an interagency template was adopted to improve FMP consistency across agency boundaries and to facilitate developing multi-agency and landscape scale FMPs. Also in FY 2002, the federal wildland fire management agencies committed to updating or completing FMPs on all administrative units with burnable vegetation by FY 2004. All agencies are on schedule for meeting the FY 2004 deadline.

The LANDFIRE project was established to develop a comprehensive package of GIS based spatial data layers, models, and tools to support analyses for prioritization and planning of fuels treatments at both the national and local level. The spatial datasets for LANDFIRE will be maintained at a 30-meter pixel size. Work was initiated on pilot areas in Utah and Montana. These areas were selected based on ecological diversity, extensive plot data, and both previous and ongoing field work. Special care was taken to include both forested and non-forested ecosystems.

As part of the *Healthy Forests Initiative*, the President directed the Chairman of the Council on Environmental Quality and the Secretaries of the Departments of Agriculture and the Interior to "improve regulatory processes to ensure more timely decisions, greater efficiency, and better results in reducing the risk of catastrophic wildfires." This effort includes examining

## **Accomplishments - Hazardous Fuels Reduction (cont.)**

fuels treatments to determine the appropriate level of environmental analysis required by the National Environmental Policy Act (NEPA) and streamlining the preparation of environmental assessments for such treatments when NEPA requires them.

#### 4. Biomass Utilization

Biomass thinning and utilization of hazardous fuels are increasing on federal lands. Consistent with the National Fire Plan, the President's *Healthy Forests Initiative*, and the National Energy Policy, land management agencies are pursuing strategies to expand forest and fiber markets. Forest and woodland management and restoration treatments are producing timber and special forest products and wood fiber for energy production.

Examples of biomass utilization projects supporting the fuel treatment program include:

- With special funding from its management of lands and resources accounts, the Bureau of Land Management began formulating a biomass utilization strategy in September 2002, in support of the National Energy Policy, to utilize hazardous fuel by-products generated from National Fire Plan fuel treatment activities.
- The Warm Springs Forest Products Industries, acting on behalf of the Confederated Tribes of Warm Springs, with Bureau of Indian Affairs support, developed a proposal to expand the tribes' existing biomass energy plant to a capacity of 10 megawatts. This will enable the tribes to expand beyond using only mill waste as fuel to including small trees and forest residues from forest restoration and hazardous fuel reduction treatments.
- The Small Diameter Utilization Program is a collaborative effort between Forest Service Forest Management, State and Private Forestry (Cooperative Forestry, Forest Products Lab, Fire and Aviation Management, Research and Forest Health Protection), states, universities, and non-government organizations, to support vegetation management/ fuels reduction efforts on National Forest System lands. The goal is to help solve operational problems and assure appropriate information use through direct field assistance, sharing the most current information, connecting subject area experts with practitioners, and preparing information for field professionals. Program support areas include presale and contracting, logging systems, technology transfer, forest products and manufacturing, biomass, and marketing.

#### 5. Forest Health Protection

In addition to those acres at high risk from wildland fire, 70 million acres of forestlands are at high risk to insect and pathogen-caused mortality. Of these, 9.5 million acres are at risk to insect and disease mortality on National Forest System Lands. The National Fire Plan has enhanced efforts to implement insect and disease prevention and suppression treatments.

This year, National Fire Plan funds were used to treat 458,456 acres. In addition to these treatments, nearly one

million more acres were treated with other program funds.

A total of 89,000 acres were scheduled for treatment of invasive weeds; however, due to the 2002 fire season and the states' fiscal cycles, only 6,039 acres were treated. The remaining acres will be treated in early spring of 2003.



In addition to prevention and

suppression projects for insects, diseases, and invasive plants, Forest Health Protection allocated \$652,765 for forest health monitoring projects. These funds supported nine evaluation monitoring research projects that targeted National Fire Plan issues including fire risk, invasive species, and fire effects to determine cause, extent and severity of detected problems. Funds also were used to support aerial surveys of insect and disease mortality and assessments of burned areas.

Examples of forest health projects supporting the fuel hazard reduction program include:

- On the Lassen National Forest in California, a goshawk management area had significant white fir and pine mortality resulting from a beetle infestation. National Fire Plan funds were used to thin the stand to maintain old growth trees, reduce ladder fuels, and increase growth rate to restore and protect habitat for the Northern goshawk.
- Forest Health Protection technical specialists implemented a thinning project to protect healthy Douglas-fir trees and maintain an acceptable forest-cover in highly valued recreation areas in western Montana and northern Idaho on National Forest lands, and state and private lands. The same techniques were used to assist private landowners to protect Douglas-fir on their property through costshare program funding.
- Sudden Oak Death (SOD), a recently discovered disease in the United States, has killed tens of thousands of oak and tanoak trees in coastal California. It was first discovered in Oregon in July 2001. National Fire Plan funds were used to eradicate SOD on 40 acres. A strong cooperative

## **Accomplishments - Community Assistance**

effort of Oregon Department of Forestry, Forest Service, Oregon Department of Agriculture, and Oregon State University resulted in detecting and limiting the SOD pathogen to a nine-square mile regulated area in Curry County, rather than to the whole county or state.

## **Community Assistance**

Wildland urban interface areas exist wherever homes and businesses are built among trees, brush, and other combustible vegetation. There are wildland urban interface communities throughout the United States in both rural locations and in urban areas. Fires move from forest, brush or grassland into communities or from communities into adjacent wildland. 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 community vulnerability to risks associated with wildland fire.

Communities need assistance in many ways. Assistance was delivered through support for educating citizens, community protection planning, training and equipping fire fighters, purchasing equipment or treating vegetation and landscapes around communities. In FY 2002, thousands of communities were assisted with a wide range of activities. A large proportion of federal assistance was delivered through grant programs administered by state foresters. Community assistance efforts in FY 2002 emphasized working together at all levels of government and encouraging active participation from citizens and landowners.

# 1. State Fire Assistance Program (Forest Service)

The State Fire Assistance (SFA) program, authorized by the Cooperative Forestry Assistance Act of 1978, provides technical and financial assistance to states for meeting all aspects of wildland fire management. The National Fire Plan expanded SFA efforts and provided a renewed focus on the wildland urban interface problems in virtually every state. Special emphasis was placed on hazard mitigation. The following four key elements guide delivery of hazard mitigation funds:

- Fire prevention and mitigation
- Information dissemination and education
- Fuel mitigation treatments
- Homeowner and community hazard mitigation projects

In FY 2002, SFA grants exceeding \$51 million were awarded to states to address protection needs on private and state lands. All funds are matched dollar-for-dollar from state and other sources including donated labor from citizens and businesses at the local level. Many cases

#### **Volunteers Help Create Awareness**

The first line of defense against wildland fires this summer was more than airborne fire retardant or smokejumpers. It included hundreds of specially trained volunteers of the Student Conservation Association Fire Education Corps

(SCA). Made up of college-age volunteers, the corps' purpose is to create awareness and educate local communities about defensible space and



wildland fire dangers. With National Fire Plan support from the five federal wildland fire management agencies, they conducted workshops, evaluated homes and recommended steps to reduce risks from wildland fire, and organized, facilitated, and participated in fuels reduction projects.

were reported where matching contributions exceeded four times the required amount. Grants funded an estimated 11,400 mitigation and education campaigns and nearly 400 community plans. Also funded were 2,686 hazard mitigation projects and training for approximately 13,000 firefighters.

#### 2. The Firewise Communities Program

The Firewise Communities Program, funded by the National Fire Protection Association, the Departments of Agriculture and the Interior and many other state, federal, and non-profit 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 second year of national level workshops since the National Fire Plan was initiated. Nineteen workshops have been offered to date. They have attracted more than 1800 people, from 600 communities and more than 47 states. Workshop attendees represent a spectrum of community leaders, including land developers, builders, tribal leaders, elected officials, community planners, landscapers, real estate brokers, insurance agents, college professors and homeowners as well as fire and emergencyservice officials. To help capture this target audience, project organizers have enlisted the endorsement of national stakeholder groups, such as the American Planning Association, the National Association of Home Builders, the Insurance Services Office, the Institute for Business & Home Safety, and the American Red Cross. Currently, there are more than 30 national sponsors. As a spin-off from the national workshops, state and local one-day workshops were offered around the country. About 60 such workshops were conducted, reaching 4,500 community leaders in more than 1,000 communities.

## Accomplishments - Community Assistance (cont.)



Additionally, the cooperating agencies established the Firewise Communities/USA recognition program in 2002. This program 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. Eleven communities in eight states received Firewise Communities/USA recognition in FY 2002.

# 3. Rural (DOI) and Volunteer (Forest Service) Fire Assistance Programs

#### Rural Fire Assistance (DOI)

Congress appropriated \$10 million in FY 2002 for the Rural Fire Assistance program of the Department of the Interior. Grants were awarded to 1,568 rural fire departments providing technical assistance, training, supplies, equipment, and public education support, thus enhancing firefighter safety and strengthening wildland fire protection capabilities. The Rural Fire Department (RFD) funds are matched on a 90/10 split. RFDs must contribute a minimum of 10% in dollars or in-kind services.

Interior grants and cooperative agreements in support of the National Fire Plan, other than the awards cited above, exceeded \$70 million in FY 2002. The money came from funds appropriated for preparedness and fuels reduction work, and was awarded primarily to states and local governments, and to small local and non-profit entities. The awards were used to assist communities in their preparedness and hazardous fuels reduction activities and for training and monitoring associated with these activities on adjacent non-federal land where activities benefit resources on federal land.

#### Volunteer Fire Assistance (Forest Service)

Approximately \$10.4 million in grants were awarded to states through the Volunteer Fire Assistance (VFA) program in FY 2002. These funds were passed to 3,781 volunteer fire departments serving 5,900 small communities to help them organize, train, and equip firefighters. Special

emphasis was placed on the needs of departments with wildland and dual wildland/structure protection responsibilities common in the interface. Grants funded training for 16,830 firefighters and purchased more than \$2.7 million worth of personal protective equipment. Funds also were used to purchase new and used firefighting tools and apparatus, and to upgrade equipment loaned to the states and communities through the Federal Excess Personal Property Program. The state or the local recipient matches all VFA grant funds dollar-for-dollar.

# 4. Economic Action Programs (Forest Service)

The Economic Action Program (EAP) helps rural communities and organizations seek market-based, natural resource opportunities for businesses and services forming the basis for long-term sustainable forests and communities. The National Fire Plan has taken advantage of more than a decade of community relationship-building developed through the Forest Service EAP. EAP managers worked directly with communities to develop strategies, address social, environmental, and economic changes, and identify needs and values as defined by the communities themselves.

As a result of National Fire Plan funding, communities and organizations completed 1,070 projects in FY 2002. The capacity of communities and organizations to manage change is reflected in the 467 projects implemented using a strategic plan. To include wildfire issues as an active part of future local action, more than 222 of these new and/or existing plans were updated.

Funds allocated across the nation addressed a full range of financial and technical assistance programs including fuel reduction and utilization projects; bio-energy feasibility studies, wood product utilization and market feasibility studies; support to modify or develop long-range fuels hazard reduction; and community economic development planning that expands and diversifies the use of forest products.

In FY 2002, the Forest Products Laboratory Technology Marketing Unit obtained \$2 million to encourage the use of small diameter material and low-valued trees. The Forest Products Lab, as well as other technology transfer centers, plays an important role in providing accurate information for community projects.

The Technology Marketing Unit (Madison, WI) assists communities through technology transfer. Technical assistance varies from answering questions over the phone to onsite visits, working side-by-side with small businesses.

Examples of communities that have been provided and continue to receive technical assistance include:

 Enterprise, Oregon – Expanded markets for posts & poles as structural building elements by evaluating potential new markets and developing engineering

## **Accomplishments - Research**

designs for several buildings constructed of small-diameter roundwood.

- Cascade, Idaho Helped community leaders examine options when their local sawmill closed, by arranging a technical visit to a small community in California that had gone through a similar situation but had developed a small manufacturing facility that had created 25-30 jobs.
- St. Paul, Kansas Conducted "train-the-trainer" lumber recovery study workshops for state utilization and marketing specialists. These efforts improve the ability of sawmills and other wood-using firms to provide sustainable employment and improve utilization of small-diameter softwoods and underutilized hardwoods.
- Victor and Darby, Montana Evaluated use of forest residues as an alternative heat source for schools.
   The Forest Service contracted with specialists to develop engineering and economic alternatives, including equipment design and cost.
- Mountainair, New Mexico Helped develop a juniper wood/plastic composite market for a variety of weather resistant outdoor signs. Provided technical and marketing assistance to help expand business markets, thus creating more jobs.
- Watertown, Wisconsin Partnered with Wisconsin
  Department of Natural Resources to provide
  technical assistance on sawmill improvements to a
  local lumberyard. Technical assistance documented
  the community's need for modernization, and helped
  them acquire financing. Benefits include reduced
  manufacturing costs, improved efficiency, and more
  jobs.

### Research

Three different organizations provide research for federal wildland fire management, including the Joint Fire Science Program, Forest Service Research and Development, and the US Geological Survey. These three organizations often leverage and complement each other to accomplish research projects. Leaders of the major fire research programs formed an interagency council – Fire Research Coordination Council – to guide fire science and technology transfer efforts.

In FY 2002, funding for 63 Forest Service research teams that started the previous year was continued under the National Fire Plan. Due to the long-term nature of research, many teams have multi-year projects. Fifteen additional teams were funded with \$5 million of hazardous fuels funds.

#### 1. Research Supporting Firefighting Capacity

Firefighting organizations must make quick and effective decisions as they battle wildfires – all in the face of great uncertainty, complexity, and changing conditions. Researchers are developing tools for better prediction

of local fire weather, fire behavior and smoke dispersal. Better prediction means cost-savings in decisions about how to use firefighting resources and ensure greater safety of firefighters and the public. Twenty-six Forest Service research teams, two Joint Fire Science Program projects, and the interagency GeoMAC project were funded in FY 2002 in support of firefighting and public information and safety.

Examples of National Fire Plan research projects supporting firefighting capacity include:

Scientists in the Forest Service Northeast Research Station are developing an improved fire danger rating system that will enable more cost-effective response to potential fires. This research is a partnership with the New Jersey Forest Fire Service that is providing logistics support, fire history, and fire management treatment mapping as well as conducting yearly prescribed burns for data collection.

The Forest Service's Pacific Southwest Research Station (PSW) is flying the FireMapper thermal-imaging radiometer and mapping cameras aboard the PSW Airborne Sciences Aircraft. The FireMapper accurately maps surface temperatures of fires and provides this intelligence more rapidly and cost-effectively to the Incident Command Team.

A computerized system called the "Ventilation Climate Information System" was recently completed by researchers supported by the Joint Fire Science Program to help analyze smoke and other pollutants produced by prescribed and wildland fires. The system accurately predicts inversions that result in reduced visibility on highways and impact human health. The system is valuable to health officials, air quality agencies, aerial fire suppression managers, law enforcement agencies, and fire planners.

GeoMAC is an internet based mapping tool that allows the public and wildland fire coordination centers to access online maps of current wildland fire locations. GeoMAC provides users with a way to view the location of the fire perimeter, nearby communities, roads, streams topography and other graphical information as well as local weather and other text information about the status of the fire. Fire perimeter data are updated several times a day from field observations, GPS data, IR imagery, aircraft and satellites. The GeoMAC website allows users to manipulate map information, zoom in and out to display fire information at various scales and detail, and print hard copy maps. GeoMAC was developed jointly by the US Geological Survey, Forest Service, Bureau of Land Management, Bureau of Indian Affairs, National Park Service, Fish and Wildlife Service, and National Oceanic and Atmospheric Administration. It is operated and housed by the US Geological Survey Rocky Mountain Mapping Center in Lakewood, Colorado. This website received more than 50 million hits during the 2002 fire season.

#### 2. Research Supporting Rehabilitation

In FY 2002, 12 Forest Service research teams were continued and 18 Joint Fire Science Program projects also were funded in support of rehabilitation. Minimizing erosion and flooding damage and optimizing recovery of native vegetation in burned areas are topics being investigated. Tools, technologies, and knowledge from this research will assist land managers in applying burned area emergency rehabilitation and in monitoring restoration effectiveness. Researchers are also investigating postfire weed and pathogen invasions to find new ways to minimize their spread.

Examples of research projects supporting rehabilitation include:

- Researchers at the Forest Service Shrub Sciences
   Laboratory in Provo, Utah, and their cooperators
   are identifying ways to increase the successful
   establishment of plants seeded as part of burned
   area rehabilitation efforts. They also are working on
   biological control to minimize the establishment of
   exotic invasive weeds, such as cheatgrass, through
   the use of a naturally occurring smut fungus.
- The Forest Service Rocky Mountain Research Station is establishing reference locations to determine the effectiveness of emergency stabilization.
- The Forest Service Pacific Southwest Research Station is evaluating soil quality monitoring techniques for guiding rehabilitation.

# 3. Research Supporting Hazardous Fuels Reduction

In FY 2002, the National Fire Plan funded 29 Forest Service research teams and 37 Joint Fire Science Program projects in support of hazardous fuels reduction. This research will help managers set priorities and balance complex tradeoffs between long-term benefits of fuel reduction and possible shorter-term consequences of treatments. New research is underway to assess risks, anticipate treatment impacts, and develop new systems for harvesting forest undergrowth and small diameter trees.

Examples of research supporting hazardous fuels include:

- Colorado State University researchers, funded by the Joint Fire Science Program, completed a study that validated the effectiveness in mitigating fire severity, crown fire, and resistance to suppression efforts in certain ecosystems.
- Researchers at the Forest Products Lab in Madison, Wisconsin, are working with cooperators to develop structural wood products to utilize small diameter crooked trees.
- Cooperators at Wyoming Sawmill in Sheridan, Wyoming, developed a product called LamHeader that uses economy grade stud material for manufacturing a laminated engineered "I" shaped header product with engineered performance.

- The Baker City Municipal Watershed within the Wallowa/Whitman National Forest in Oregon was selected as a National Pilot Demonstration Site for fuel treatment options. The data collected from this field-based effort will be used to improve and modify the predictive capability of fuel consumption, fire effects, and smoke dispersion models.
- The Forest Products Laboratory demonstrated a
  wood-fiber filtration system that shows promise for
  cleaning contaminates from flowing waters on the
  Wayne National Forest. These filters clean acidic
  heavy metals found in the drainage from former
  mine sites. These filters can be made from juniper or
  other underutilized wood species.

# 4. Research Supporting Community Assistance

Eleven Forest Service research teams and one Joint Fire Science Program project were funded in FY 2002. Researchers are talking with community residents and sharing information on steps residents can take to make their homes fire safe, and developing alternative Firewise landscapes. Scientists also are asking people about their perceptions of fire and fuel management treatments. This information can guide more effective communication with the public.

Examples of research supporting community assistance include:

- The Fire Sciences Laboratory in Missoula,
   Montana, is studying factors contributing to home
   ignitions. A new video released in 2002, titled
   Wildfire: Preventing Home Ignitions, identifies steps
   homeowners can take to reduce the chances of fire
   damage or destruction.
- The Joint Fire Science Program is supporting a
  national study of public perceptions of wildland fire,
  fuels treatments, and related issues on public lands.
  Nearly 2,000 citizens were asked for their views. In
  addition, six regional surveys (in Arizona, Colorado,
  Florida, Georgia, Oregon and Utah) are gathering
  information on local and regional perceptions.
  This research will help managers and community
  leaders target fire safety messages and justify fuel
  treatments.

## Contracting

In FY 2002, the Forest Service and Department of the Interior awarded contracts for more than \$329 million. This total includes \$70 million for hazardous fuels treatments, emergency stabilization and rehabilitation.

Examples of contracting efforts supporting the National Fire Plan include:

• The Forest Service and the Department of the Interior established aggressive contracting goals for the next three years. The DOI goal is to contract for 50%

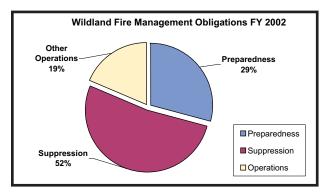
## **Accomplishments - Accountability**

of all approved project funding for fuels treatment and emergency stabilization and rehabilitation work by FY 2004. The Forest Service established a goal of 50% of approved project funding for mechanical fuels treatments and 20% of approved project funding for prescribed fire fuels treatments by FY 2005.

- A joint action plan was developed between the Forest Service and DOI to enhance procurement and meet the National Fire Plan contracting goals. It includes the following:
  - Milestones to increase the availability and use of local small businesses in the performance of National Fire Plan work.
  - > Establishment of a joint Department of the Interior and Forest Service Strategy Team to address procurement and assistance issues for timely accomplishment of contracts and agreements.
  - > Coordination among the five federal fire management agencies on a geographical basis to reduce contract award time and increase the vendor pool.
- Use of the National Fire Plan Operational Reporting System (NFPORS) by both the Department of the Interior and the Forest Service to plan collaborative contracts and report to Congress and the public.
- A review of National Fire Plan contracting and assistance in the five federal fire management agencies was completed. The resulting report included identification of obstacles with recommendations to overcome them.
- Under P.L. 93-638, the Bureau of Indian Affairs awarded funds to tribes for hazardous fuel treatments and rehabilitation.

## **Accountability**

Oversight, coordination, program development, and monitoring are critical to successful implementation of the National Fire Plan. Congress provided guidance on accountability as well as additional funding. In response, agency staffs developed a range of joint accountability measures including budget and financial systems, reports, and oversight reviews for assessing and evaluating program accomplishments.



#### 1. Actions to Promote Accountability

Transparent, well-articulated, consistent policies and procedures provide for better oversight and review, and lead to greater accountability. To this end, the partners and stakeholders of the National Fire Plan worked cooperatively on many efforts during FY 2002, including the following:

#### Leadership and Organization

- The Wildland Fire Leadership Council was created to coordinate and implement the National Fire Plan and the Federal Wildland Fire Policy among federal agencies, states, counties, and tribes.
- The Wildland Fire Leadership Council approved a standard fire management plan template for Forest Service and Department of the Interior application.
   Fire Management Plans tier from land management plans and provide direction for the full range of fire management activities on public lands. Department of the Interior and Forest Service units will update all these plans by the end of 2004 to reflect current policy.
- The 10-Year Comprehensive Strategy Implementation Plan A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment, was signed by the Secretaries of Agriculture and the Interior, along with 17 western governors. The plan sets uniform performance requirements for delivery of the 10-Year Comprehensive Strategy for both federal and state partners.
- The Departments of Agriculture and the Interior developed action plans for 20 of the 22 tasks in the Implementation Plan. The National Association of State Foresters took an active role developing two action plans and participating in many others. Significant progress was made on the plans as collaborative partners worked together. Progress will continue into 2003 and beyond.
- The Forest Service selected a new permanent National Fire Plan Coordinator and approved a new staff organization that reports to the Chief of the Forest Service.
- Both the Forest Service and the DOI have added new performance elements to agency administrators' annual evaluation plans.

#### Reporting

- The Secretaries of Agriculture and the Interior reported jointly to Congress with specific plans and recommendations to supply native plant materials for emergency stabilization and longer-term rehabilitation efforts. The report is titled *The Interagency Program to Supply and Manage Native Plant Materials for Restoration and Rehabilitation on Federal Lands April 2002*.
- The Forest Service and Department of the Interior

#### Wildland Fire Leadership Council

The Wildland Fire
Leadership Council
was developed to
support implementation
and coordination of the
National Fire Plan and
Federal Wildland Fire
Policy. The Council
meets quarterly and
is currently chaired
by the Chief of the



Forest Service. Members include representatives from the Departments of Agriculture and the Interior, the five federal fire management agencies, Federal Emergency Management Agency, National Association of State Foresters, National Governors Association, National Association of Counties, and the Intertribal Timber Council. The leadership council provides leadership for seamless management of the Federal Wildland Fire Program.

developed a common data collection and reporting system for reporting accomplishments called the National Fire Plan Operations and Reporting System (NFPORS). This will allow real-time tracking of common categories and activities across all jurisdictions for emergency stabilization and rehabilitation, hazardous fuels treatment projects, and community assistance.

 An interagency fire-coding system is being developed that will allow for improved fire suppression cost tracking.

#### Performance Measures

 Common interagency performance measures were developed for baseline data collection in FY 2003 and for FY 2004 program measurement. These measures are outcome-oriented and are integrated with the departments' and agencies' Government Performance and Results Act strategic and annual performance plans and the FY 2004 budget justifications.

#### Conferences/Sharing Ideas

 The Departments of Agriculture and the Interior hosted two national collaboration conferences to share National Fire Plan successes and knowledge.

#### 2. Program Evaluation & Oversight

The five federal wildland fire management agencies conducted a review of the progress in contracting for hazardous fuels and rehabilitation work. The review team identified areas of improvement to remove barriers, improve accountability, and better use contracting services. Specific targets for contracting are evolving through work on a 10-Year Comprehensive Strategy Implementation Plan task.

# **Looking Ahead**

The second year of implementing the National Fire Plan resulted in significant collaborative efforts that crossed many boundaries. The Departments of Agriculture and the Interior are committed to success. Federal, tribal, state, county, and local entities, as well as private citizens, are engaged in the process. As the 10-Year Comprehensive Strategy Implementation Plan is implemented, engagement at all levels is evident, and demonstrates the vision and enthusiasm of stakeholders and partners for continued success.

Communication is critical in this expanding partnership. To ensure engagement and commitment, briefings will continue to provide up-to-date information to Congress, the Administration, employees, and other governmental entities. Dialogue with non-governmental entities and stakeholders from the local to the national level will continue and will be enhanced to ensure an open line for information, discussion, and continued engagement between all partners for support of National Fire Plan objectives.

Accountability is equally crucial. Testing the success of National Fire Plan goals requires field monitoring of the National Fire Plan supported projects. The Departments of Agriculture and the Interior are committed to utilizing field monitoring to ensure accountability.

The National Fire Plan will continue to present unique opportunities and challenges beyond the second year of implementation. The agencies will build on second-year benchmarks and continue to implement integrated wildland fire management policies and procedures. Increased emphasis on contracting for fuels hazard reduction is expected. Increased cooperation between the Forest Service and the Department of the Interior will ensure consistent and integrated fire management policies across the agencies.

#### Next steps for 2003:

- Sign the Fire Department Assistance Programs
  Memorandum of Understanding to provide a general
  framework of cooperation for the management
  and delivery of assistance programs to rural and
  volunteer fire departments among federal wildland
  fire management agencies, National Association of
  State Foresters, and Federal Emergency Management
  Agency US Fire Administration.
- Sign a National Fuels Treatment Memorandum of Understanding among the Forest Service, Department of the Interior, National Association of State Foresters, and National Association of Counties for the development of a nationwide framework for a collaborative fuels treatment selection process.
- Sign the Interagency Cohesive Fuels Strategy for the five federal fire management agencies. The strategy

## **Summary**

- will provide a cohesive and unified statement of the purpose, methods and results of the federal fuels treatment program through a long-term program to restore fire-adapted ecosystems using mechanical treatment and reintroduction of fire.
- Accomplish actions, tasks and goals of the 10-Year Comprehensive Strategy Implementation Plan, working closely with stakeholders and partners, and update tasks as needed.
- Conduct briefings and provide National Fire Plan information to the Administration, Congress, stakeholders, employees, and others. Focus on integration of the National Fire Plan goals into agency priorities.
- Be accountable for FY 2003 National Fire Plan goals through field monitoring of National Fire Plan supported projects. Report accomplishments on the basis of common interagency performance measures.
- Improve communications with nongovernmental organizations and stakeholders to ensure collaboration on National Fire Plan projects and actions undertaken by federal agencies.
- The Administration will submit legislation to Congress to implement key aspects of the *Healthy Forests Initiative*. The intent of this bipartisan legislation is to significantly advance forest health efforts that prevent damage caused by catastrophic wildland fires.

# Summary

The federal fire management agencies made great strides during the second year of the National Fire Plan implementation. Funding helped to protect the lives of firefighters and the public, protect communities and natural resources, and reverse the trend of deteriorating health of our forest and rangeland ecosystems. The agencies made progress in developing effective and consistent fire management policies. National Fire Plan resources increased initial attack capability, which helped keep fires small and reduced wildland fire threats to communities at risk. Public awareness is growing, the agencies are committed to an integrated approach, and Congress and the Administration are supportive. These factors will assure a strong foundation for stewardship of the Nation's resources for many years to come.

## **Success Stories**

The year 2002 was a very active and productive year. The many National Fire Plan partners at the federal, state, local, and tribal levels worked diligently, in a collaborative spirit, to ensure success of the programs supported by the National Fire Plan. There are many success stories for each of the key points of the National Fire Plan, too many to include in this document. Following are vignettes of National Fire Plan achievements across the nation.

## **Firefighting**

- The Interagency Air Operations Center funded by the National Fire Plan opened in June 2002, in Cedar City, Utah. This new facility was a cooperative effort between the Bureau of Land Management Cedar City District Office, Zion National Park, Dixie National Forest, and Utah Division of Forestry, Fire and State Lands. The center houses an air tanker base, a fixed-wing base, an eight-person helicopter module, and a dispatch center to coordinate air activity.
- The National Fire Plan provided preparedness funds to the Modoc National Forest in California to increase firefighting capabilities. The Forest added an engine crew, hotshot crew, watertender, lookout and fire management officer, and upgraded three engines and a prevention unit to larger equipment. The Modoc Interregional Hotshot Crew, funded



for 130 days, spent 104 days on wildland fire assignments, and then dedicated the remaining 26 days to training and forest project work. The crew responded to 11 large fires in California and Colorado, provided instructors for forest-level



fire courses and supported the National Wildland Firefighter Apprenticeship program by providing four details for Region 5 and 6 apprentices. Fifteen additional engine personnel, including two from the National Park Service, completed wildland fire assignments with the crew.

- Two new fire warehouses in the Bitterroot National Forest, Montana, were made possible with National Fire Plan funding. The Stevensville fire warehouse, completed January 2002, houses two engines, and is equipped with a kitchen, storage, office space, two restrooms with showers, fitness room, mechanics area, and a "ready room," with lockers for gear. The Darby warehouse provides accommodations for the Bitterroot Hotshots, with employee offices, training/conference room, "ready room," two restrooms, and storage area.
- The new Indiana Interagency Coordination Center (IICC) located in the Hoosier National Forest in Indiana opened August 2002, with shared staffing and space for firefighters, training, and equipment. The Forest Service, National Park
- Service, Fish and Wildlife Service, and Indiana Department of Natural Resources worked with National Fire Plan funding to build the new center. Serving as the focal point for resource mobilization, the center also coordinates all fire training statewide. The center is streamlining emergency response for the state of Indiana, at state and national levels, as IICC processes resource orders mobilizing Type 2 interagency hand crews, wildland engines, and overhead orders.
- Through a grant from the National Fire Plan, the North Carolina Division of Forest Resources Fire Danger Working Group has nine of 12 scheduled new Remote Automated Weather Station towers up and operational. These weather stations track weather variables so information can be conveyed almost immediately to people in the field or on the fireline.



### Rehabilitation

■ The Shoshone-Bannock Tribes' Indian Summer Program staff and their families spent two days helping restore riparian areas on the Yankee Fork Ranger District of the Salmon-Challis National Forest in Idaho. These areas were severely burned during the fires of 2000. Part of the Indian Summer Program is restoration of areas traditionally used by the tribes. Their goal is to "Help Mother Earth in her struggle to maintain it for use by all." Damage to the woody riparian vegetation in the north and south forks of Rankin Creek jeopardized the stability of the stream channel and the associated water quality. A group of 35 volunteers helped plant approximately 1,000 mountain alder plants along the creek, critical habitat for Snake River Chinook salmon and steelhead trout.





■ The Bureau of Indian Affairs' Emergency Stabilization and Rehabilitation (ESR) program had 41 active projects in 2002. Twenty of those projects were new from the 2002 fire season. The Bureau of Indian Affairs proactively established regional/local ESR teams that facilitated regions and tribes with ESR plan preparation. Department of the Interior national ESR teams were used on three of the largest

incidents, most notably the Rodeo-Chediski incident. An ESR plan was prepared, and the White Mountain Apache Tribe and Bureau of Indian

Affairs are implementing the plan. The tribe is also working with other federal agencies in rehabilitating their lands.

■ Colorado Cares – The Governor of Colorado declared August 3, 2002, a statewide "Colorado Cares Volunteer Day." More than 1,200 people accomplished 300 acres of scarification and seeding on the Hayman Fire emergency stabilization project.



### **Hazardous Fuels Reduction**

■ The Blue Ridge Urban Interface project was designed to reduce the risk of fire around 10 subdivisions of more than 1,000 homes near Clint's Well, Arizona. In February, 3,000 acres were prescribed burned. In May, the Springer Fire rapidly moved into a portion of the project that had been treated. The fire activity decreased significantly, and was no

longer burning through the tops of the trees. Although some spotting continued to occur, the lessened fire activity allowed suppression resources to get around the head of the fire and contain the fire safely, about one mile from Clear Creek Pines.

■ Local firefighters from Northway, Alaska, helped implement a successful 475-acre broadcast prescribed burn north of the village on Tetlin National Wildlife Refuge land. The Northway Village Council, through an assistance





**Fuel Break Helps Nevada Community** 

Sixty-five Northern Nevada homes now have a fighting chance against potential wildland fires on nearby public lands. The Bureau of Land Management created a 2.1-mile long, 100-foot-wide fuel break between the houses and the wildlands.

agreement awarded by the Fish and Wildlife Service, completed 60 acres of thinning, piling and burning to reduce hazardous fuels around the village and school. Tetlin Wildlife Refuge fire staff taught a three-day chainsaw safety and operation course in Northway in June. Instructors also participated from the Bureau of Land Management Alaska Fire Service and the State of Alaska Tok Area Forestry.

■ The Rodeo-Chediski fire devastated more than 276,000 acres on the White Mountain Apache Reservation in June-July 2002. In areas where thinning and prescribed fire treatments were completed, the fire went from a crown fire to a ground fire within and adjacent to management treatment areas. The treated areas redirected the fire and thus saved approximately

## **Success Stories (cont.)**



287 MMBF of commercial timber and .2MM cords of woodland species. Areas that were treated sustained less damage than those with no treatments. Without these treatments, tree mortality would have been significantly higher.

■ Working with narrow burn time windows this spring in Montana, Bureau of Land Management's Central Fire Zone accomplished five planned prescribed burns, thanks to cooperation between interagency neighbors. Personnel and equipment came from five Bureau of Land Management offices, three ranger districts of the Lewis and Clark National Forest, Charles M. Russell National Wildlife Refuge, Fort Belknap Indian Community, Rocky Boy Reservation, Crow Reservation, and Yellowstone National Park.

■ The Forest Service, Idaho Department of Lands, and local homeowners coordinated the construction of a defensible space fuelbreak around the community of Dixie, Idaho. The wildland urban interface treatments were completed on

federal as well as private land, and funded through the National Fire Plan and the State Fire Assistance Program.

■ Sequoia and Kings Canyon National Parks completed two mechanical projects in and around private communities in the wildland urban interface. Nestled in heavily wooded mixed conifer forest completely surrounded by national parklands, Wilsonia and Silver City are perfect examples of wildland urban interface communities. Each project had a key to success: for Wilsonia it was a local partnership with the Tulare County FireSafe Council, and for Silver City it was the use of a private contractor.



Locals, Feds, and Others Reduce Fire Risk in Whiskeytown NRA

The Whiskeytown National Recreation Area continues to benefit from increased funding through the National Fire Plan. Fire managers worked with many local, state, private, and other federal agencies to reduce hazard fuels throughout the park. This was accomplished through shaded fuelbreak construction, mechanical treatment, pile burning, and prescribed fire. Fuel accomplishment acres include treatment of 615 acres and prescribed fire at 720 acres.

## **Community Assistance**

- Two volunteer fire departments teamed up with the Williams Ranger District of the Kaibab National Forest, to assist residents of Parks and Sherwood Forest Estates in the removal of woody materials from their private property. The two communities deposited forest debris at Moonset Pit, a Kaibab National Forest cinder pit located near their communities.
- National Fire Plan funding provided a new fire engine for Pine Lake near Kingman, Arizona. The engine has a compressed air foam system that triples the effectiveness of water from its 1,000-gallon tank, and can foam down a house creating an effective barrier from fire. This type of firefighting engine, a first for the Pine Lake Fire Department, doubles the firefighting effectiveness allowing for better community fire protection. The pump and tank package were obtained with funds from Bureau of Land Management rural fire grants and the Pine Lake Fire Department.



■ Seven Nevada Rural Fire Districts (10-Mile, Rye Patch, McDermitt,
Tecoma, Austin, Eureka, and McGill) received grant money to purchase surplus fire engines from the Bureau of Land
Management. These surplus engines replaced antiquated engines that broke down often and were unreliable. This transfer
of surplus fire engines is part of the ongoing effort to enhance the fire protection capabilities of rural fire districts under the
National Fire Plan.

#### **Grants Assist Homeowners**

Kootenai County, Idaho, developed a program to increase awareness of wildfire risks in the wildland urban interface areas of the county and to help homeowners learn how to protect their homes by creating a survivable space. Grant money totaling \$1.9 million was provided by the National Fire Plan, Bureau of Land Management, Forest Service, Idaho Department of Lands, Idaho Bureau of Disaster Services, Kootenai County Disaster Services, and Idaho Department of Commerce.





- In Alabama, Jefferson and Shelby counties promoted and conducted fire and prevention programs in areas with potential wildland urban interface problems. Twenty thousand dollars were provided to finalize the Jefferson-Shelby Wildland Interface Extended Outreach Project.
- Local fire experts in the Washington state counties of Clark, Cowlitz, and Skamania are conducting free Firewise workshops to encourage landowners to take action to reduce wildland fire risk to their homes. In the communities of Amboy, Cathlamet, Yacolt, La Center, and others, the Washington Department of Natural Resources is using National Fire Plan funds to create private and public partnerships to reduce fire risk of some of southwest Washington's most at-risk

homes. Grant-funded crews cleared brush, trimmed trees, and widened driveways for fire engines. In return, homeowners agreed to keep the brush trimmed for at least the next 10 years.

- The Bureau of Indian Affairs sponsored a Firewise workshop for tribal leaders in Albuquerque, New Mexico, in September. More than 100 attended the session. Tribal and Bureau of Indian Affairs leaders made presentations on home losses in wildland urban interface areas and success stories on reservations in other parts of Indian Country.
- The Haworth Volunteer Fire Department in Oklahoma received \$18,000 from the Bureau of Indian Affairs Rural Fire Assistance program to help purchase a new wildland fire engine.

The Haworth VFD provides wildland fire protection of tribal lands in Oklahoma.



# **Summary of FY 2002 Goals and Accomplishments**

FY 2002 FY 2002						
Activity	Goal	Accomplishment				
	Firefighting	7.000mp.no				
Workforce	18,458	16,928				
Facilities	112	141				
	Rehabilitation					
Forest Service	421 projects	648 projects				
Forest Service	734,995 acres	570,837 acres				
DOI		384 projects				
	1.6 million acres	766,973 acres				
Total	2.3 million acres	1.3 million acres**				
Forest Company W/LIL 8 Non W/LIL	Hazardous Fuel					
Forest Service: WUI & Non-WUI DOI: WUI & Non-WUI	1,351,968 1,058,678	1,198,518 1,058,964				
Total	2,410,646	2,257,482				
Total	Wildland Urban Interface					
Forest Service	800,622	764,367				
DOI	230,493	209,320				
Total	1,031,115	973,687				
Non-Wildland Urban Interface Treatment (acres)						
Forest Service	551,346	434,151				
DOI	828,185	849,644				
Total	1,379,531	1,283,795				
Wildland Fire Use (acres)						
Forest Service	Cannot be planned	59,385				
DOI	Cannot be planned	965,441				
Total		1,024,826				
	Forest Health					
Forest Service		458,456 acres				
	Research (multi-ye	ear)				
Forest Service R&D	n/a	78 teams				
Joint Fire Science Program	Competitive proposals	59 projects				
	<b>Community Assista</b>	ance				
State Fire Assistance (FS)	State administered	<ul> <li>4,188 fire training personnel</li> <li>13,000 volunteers trained</li> <li>396 mitigation plans</li> <li>2,686 mitigation projects</li> <li>11,400 education sessions</li> <li>19,000 assists to communities</li> </ul>				
Volunteer Fire Assistance (FS)	State administered • 6,600 communities	<ul><li>3,781 fire dept grants</li><li>5,900 communities assisted</li><li>16,830 firefighters trained</li></ul>				
Economic Action Program (FS)	Competitive grants	1,070 projects				
Rural Fire Assistance (DOI)	1,085 rural/volunteer fire departments	1,568 rural/volunteer fire departments				
	Contracting					
Forest Service		\$243,684,174				
Department of the Interior		\$85,867,957				
Total		\$329,552,131				

<sup>\*\*</sup> Does not include all acres monitored

FY2000 - FY 2002 Wildland Fire Management Appropriations Department of the Interior and Forest Service

		FY 2000			FY 2001			FY 2002	
Program	IOG	USDA/FS	TOTAL	DOI	USDA/FS	TOTAL	DOI	USDA/FS	TOTAL
PREPAREDNESS	\$165,849 A	\$408,768 B	\$574,617	\$314,712 A	\$611,143 B	\$925,855	\$280,807 A	\$622,618	\$903,425
OPERATIONS									
SUPPRESSION	\$58,068	\$139,188	\$197,256	\$191,109	\$319,324	\$510,433	\$161,424 F	\$321,321 <sup>G</sup>	\$482,745
HAZARDOUS FUEL REDUCTION	\$47,040	\$70,000	\$117,040	\$194,971	\$205,158	\$400,129	\$186,190	\$209,010	\$395,200
EMERGENCY STABILIZATION & REHABILITATION	\$20,000	80	\$20,000	\$66,769 <sup>C</sup>	\$141,688	\$208,457	\$40,000 C.H	\$62,668	\$102,668
FIRE FACILITIES BACKLOG		0\$	0\$		\$43,903	\$43,903	-	\$20,376	\$20,376
RESEARCH & DEVELOPMENT		0\$	0\$		\$15,965	\$15,965		\$27,265 <sup>K</sup>	\$27,265
JOINT FIRE SCIENCE								\$8,000	\$8,000
STATE FIRE ASSISTANCE	-	\$23,929 <sup>D</sup>	\$23,929	-	\$77,828 <sup>D</sup>	\$77,828		\$81,693 D.L	\$81,693
VOLUNTEER FIRE ASSISTANCE / RURAL FIRE ASSISTANCE	Ş	\$3.240 E	63 240	\$0.078	\$13.751 E	\$73.770	\$10,000	\$13.315 E	\$73.315
FOREST HEALTH MANAGEMENT	3 1	0\$	0\$		\$11,974	\$11,974		\$11,974	\$11,974
ECONOMIC ACTION PROGRAM	1	0\$	80	1	\$12,472	\$12,472	1	\$12,472	\$12,472
COM & PRIV LAND ASSISTANCE	-	0\$	0\$	1	\$34,923	\$34,923	1	0\$	80
SUBTOTAL, OPERATIONS	\$125,108	\$236,357	\$361,465	\$462,827	\$876,486	\$1,339,313	\$397,614	\$768,094	\$1,165,708
TOTAL NON-EMERGENCY	\$290,957	\$645,125	\$936,082	8777,539	\$1,487,629	\$2,265,168	\$678,421	\$1,390,712	\$2,069,133
EMERGENCY CONTINGENCY	\$200,000	\$390,000	\$590,000	\$199,560	\$425,063	\$624,623		\$200,000 N	\$200,000
Agency Totals	\$490,957 M	\$1,035,125	\$1,526,082	8977,099	\$1,912,692	\$2,889,791	\$678,421 M	\$1,590,712	\$2,269,133

<sup>&</sup>lt;sup>A</sup> Includes funding for Joint Fire Sciences and Fire Facilities

<sup>&</sup>lt;sup>B</sup> Includes funding for Joint Fire Sciences

<sup>&</sup>lt;sup>C</sup> Includes funding for Burned Area Rehabilitation

 $<sup>^{\</sup>mathrm{D}}$  Includes funding appropriated in Title II, State and Private Forestry, State Fire Assistance

<sup>&</sup>lt;sup>E</sup> Includes funding appropriated in Title II, State and Private Forestry, Volunteer Fire Assistance

<sup>&</sup>lt;sup>F</sup> Includes \$34 million in DOI FY 2002 Emergency Contingency

<sup>&</sup>lt;sup>G</sup> Includes \$66 million in USDA/FS FY 2002 Emergency Contingency

includes \$50 million in DOLYATS F1 2002 Emergency Continger Hincludes \$20 million in DOL FY 2002 Emergency Contingency

<sup>&</sup>lt;sup>1</sup> Includes \$59 million in USDA/FS FY 2002 Emergency Contingency

<sup>&</sup>lt;sup>1</sup>Includes \$10 million in USDA/FS FY 2002 Emergency Contingency

 $<sup>^{\</sup>rm K}$  Includes \$5 million in USDA/FS FY 2002 Emergency Contingency

<sup>&</sup>lt;sup>L</sup> Includes \$6 million in USDA/FS FY 2002 Emergency Contingency

 $<sup>^{\</sup>rm M}$  FY2000 and FY2002 amounts do not include amounts transferred from other appropriations for emergency fire suppression.

<sup>&</sup>lt;sup>N</sup>\$200 million to repay FY 2001 suppression costs, remaining balance distributed to designated programs

# FY 2002 National Fire Plan Obligation Summary Department of the Interior and Forest Service

State or Territory	BIA	BLM	FWS	NPS	DOI Total	FS	DOI/FS Total
AK	\$525	\$38,443	\$2,109	\$1,671	\$42,748	\$15,275	\$58,023
AL	\$20	\$0	\$169	\$68	\$257	\$6,824	\$7,081
Am. Somoa	\$0	\$0	\$0	\$0	\$0	\$124	\$124
AR	\$3,010	\$0	\$80	\$795	\$3,885	\$15,170	\$19,055
AZ	\$56,932	\$17,138	\$1,484	\$14,391	\$89,945	\$120,654	\$210,599
CA	\$10,309	\$41,958	\$4,695	\$23,080	\$80,042	\$533,569	\$613,611
со	\$578	\$29,357	\$2,959	\$15,703	\$48,597	\$170,957	\$219,554
СТ	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CW NM*	\$0	\$0	\$0	\$0	\$0	\$204	\$204
DC	\$0	\$0	\$0	\$42	\$42	\$0	\$42
DE	\$0	\$0	\$664	\$0	\$664	\$216	\$880
Eastern States	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FL	\$511	\$0	\$4,759	\$2,776	\$8,046	\$11,538	\$19.584
GA	\$0	\$0	\$9,524	\$4.156	\$13,680	\$30.954	\$44,634
Guam	\$0	\$0	\$0	\$0	\$0	\$190	\$190
HI	\$0	\$0	\$319	\$3,063	\$3,382	\$997	\$4,379
IA	\$12	\$0	\$300	\$207	\$519	\$149	\$667
ID I	\$17,045	\$48.195	\$600	\$11,001	\$76,841	\$138,496	\$215,337
IL IL	\$17,043	\$40,193	\$305	\$11,001	\$305	\$1,771	\$2,076
IN I	\$0 \$0	\$0 \$0	\$434	\$950	\$305 \$1,384	\$1,771 \$1.063	\$2,076 \$2,447
KS	\$61	\$0 \$0	\$611	\$36	\$1,304 \$708	\$736	\$2,447 \$1,444
						· ·	
KY LA	\$0 \$0	\$0 \$0	\$0 \$1.615	\$663 \$0	\$663 \$1,615	\$12,461 \$4.630	\$13,124 \$6,245
			, ,		\$1,615	, ,	1 - 7 -
MA	\$0	\$0	\$90	\$1,136	\$1,226	\$209	\$1,435
MD	\$0	\$0	\$640	\$277	\$917	\$0	\$917
ME	\$6	\$0	\$618	\$347	\$971	\$477	\$1,449
MI	\$111	\$0	\$155	\$184	\$450	\$5,574	\$6,024
MN	\$3,218	\$0	\$3,499	\$509	\$7,226	\$16,114	\$23,340
MO	\$0	\$0	\$153	\$618	\$771	\$5,676	\$6,447
MS	\$194	\$0	\$1,776	\$813	\$2,783	\$9,717	\$12,500
MT	\$24,044	\$22,311	\$825	\$807	\$47,987	\$112,815	\$160,802
NC	\$181	\$0	\$2,068	\$474	\$2,723	\$22,479	\$25,202
ND	\$1,602	\$0	\$2,667	\$407	\$4,676	\$2,219	\$6,895
NE	\$460	\$0	\$1,010	\$1,377	\$2,847	\$2,786	\$5,633
NH	\$0	\$0	\$15	\$0	\$15	\$634	\$649
NJ	\$0	\$0	\$255	\$20	\$275	\$275	\$550
NM	\$35,113	\$12,958	\$3,922	\$10,574	\$62,567	\$111,456	\$174,023
NV	\$898	\$63,213	\$1,042	\$2,052	\$67,205	\$23,551	\$90,756
NY	\$47	\$0	\$78	\$121	\$246	\$692	\$938
ОН	\$0	\$0	\$7	\$7	\$14	\$1,572	\$1,586
OK	\$4,597	\$0	\$775	\$268	\$5,640	\$1,131	\$6,771
OR	\$23,075	\$70,666	\$5,903	\$10,685	\$110,329	\$361,815	\$472,144
Other Pacific	\$0	\$0	\$0	\$0	\$0	\$328	\$328
PA	\$0	\$0	\$12	\$267	\$279	\$6,822	\$7,101
PR	\$0	\$0	\$0	\$0	\$0	\$132	\$132
RI	\$0	\$0	\$4	\$0	\$4	\$64	\$68
SC	\$0	\$0	\$794	\$90			\$2,833
SD	\$15,220	\$0	\$638	\$2,016	\$17,874	\$19,779	\$37,653
TN	\$1,283	\$0	\$22	\$1,818	\$3,123	\$9,588	\$12,711
TX	\$6	\$0	\$5,217	\$2,108	\$7,331	\$5,662	\$12,992
UT	\$849	\$37,398	\$37	\$9,182	\$47,466	\$74,112	\$121,578
VA	\$0	\$1,231	\$1,633	\$2,132	\$4,996	\$14,094	\$19,090
VI	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VT	\$0	\$0	\$6	\$9	\$15	\$675	\$690
WA	\$6,903	\$1,301	\$9,207	\$2,102	\$19,513	\$47,056	\$66,569
WI	\$753	\$0	\$878	\$3	\$1,634	\$8,685	\$10,319
wv	\$0	\$0	\$11	\$386	\$397	\$791	\$1,188
WY	\$1,595	\$13,061	\$42	\$4,714	\$19,412	\$40,873	\$60,285
		,		, ,	, .=	, .,	, ,
Regional Prog Mgmt	\$0	\$0	\$0	\$0	\$0	\$10,717	\$10,717
Headquarters**	\$4,522	\$125,684	\$2,651	\$0	\$132,857	\$253,284	\$386,141
Agency Totals	\$213,680	\$522,914	\$77,277	\$134,105	\$947,976	\$2,239,782	\$3,187,758
g:	+= 10,000	+,-14	Ţ.,, <b>=</b> .,	+ .0 -, .00	+5-11,570	Ţ_, <b>_</b> 00,.02	Ţ-,101,100

<sup>\*</sup> Commonwealth of the Northern Marianas

Funds obligated to a unit located in two or more states are shown as obligated in the state that contains the administrative office. Funds obligated by the Regional offices and funds obligated for Regionwide programs are shown as obligated in the state in which the Regional Office is located.

<sup>\*\*</sup>This includes centralized Program Mgmt, centrally funded National projects, & unplanned field obligations

## Appendix C - Bureau of Indian Affairs Obligations

### FY 2002 Bureau of Indian Affairs National Fire Plan Obligations

(dollars in thousands)

State	Preparedness	Fire Suppression Operations <sup>'/2</sup>	Hazardous Fuels Reduction non-WUI	Hazardous Fuels Reduction WUI	Emergency Stabilization and Rehabilitation	Rural Fire Assistance	Total Obligations
AK	\$242	\$0	\$102	\$182	\$0	\$0	\$525
AL	\$0	\$0	\$0	\$0	\$0	\$20	\$20
AR	\$3,010	\$0	\$0	\$0	\$0	\$0	\$3,010
AZ	\$8,299	\$27,453	\$2,710	\$3,414	\$15,034	\$23	\$56,932
CA	\$1,856	\$3,808	\$1,737	\$2,090	\$667	\$150	\$10,309
со	\$0	\$0	\$128	\$108	\$333	\$10	\$578
DC	\$0	\$0	\$0	\$0	\$0	\$0	\$0
DE	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ES	\$0	\$0	\$0	\$0	\$0	\$0	\$0
FL	\$458	\$0	\$15	\$38	\$0	\$0	\$511
GA	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HI	\$0	\$0	\$0	\$0	\$0	\$0	\$0
IA	\$0	\$0	\$0	\$0	\$0	\$12	\$12
ID	\$9,683	\$6,279	\$282	\$602	\$13	\$187	\$17,045
IL	\$0	\$0	\$0	\$0	\$0	\$0	\$0
IN	\$0	\$0	\$0	\$0	\$0	\$0	\$0
KS	\$17	\$0	\$31	\$0	\$0	\$13	\$61
KY	\$0	\$0	\$0	\$0	\$0	\$0	\$0
LA	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MA	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MD	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ME	\$0	\$0	\$0	\$0	\$0	\$6	\$6
MI	\$46	\$0	\$0	\$34	\$0	\$31	\$111
MN	\$705	\$1,265	\$584	\$537	\$0	\$126	\$3,218
MO	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MS	\$53	\$0	\$141	\$0	\$0	\$0	\$194
MT	\$4,437	\$16,845	\$952	\$1,682	\$56	\$72	\$24,044
NC	\$166	\$0 \$0	\$15 \$57	\$0 \$10	\$0 \$0	\$0 *61	\$181
ND NE	\$1,474 \$140	\$0	\$284	\$10 \$7	\$0 \$0	\$61 \$29	\$1,602 \$460
NH	\$140	\$0	\$204	\$0	\$0	\$0	\$400
NJ	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0
NM	\$9,562	\$21,989	\$1,139	\$1,766	\$646	\$10	\$35,113
NV	\$648	\$0	\$1,139	\$1,700	\$248	\$10	\$898
NY	\$31	\$0	\$0	\$0	\$0	\$16	\$47
ОН	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ок	\$1,371	\$1,755	\$510	\$696	\$0	\$265	\$4,597
OR	\$3,623	\$17,110	\$1,049	\$1,287	\$6	\$0	\$23,075
PA	\$0	\$0	\$0	\$0	\$0	\$0	\$0
sc	\$0	\$0	\$0	\$0	\$0	\$0	\$0
SD	\$2,528	\$11,592	\$322	\$653	\$0	\$125	\$15,220
TN	\$196	\$665	\$10	\$413	\$0	\$0	\$1,283
TX	\$0	\$0	\$0	\$6	\$0	\$0	\$6
UT	\$601	\$0	\$0	\$88	\$160	\$0	\$849
VA	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VT	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WA	\$3,052	\$0	\$637	\$1,159	\$1,987	\$69	\$6,903
WI	\$529	\$0	\$5	\$139	\$0	\$80	\$753
WV	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WY	\$522	\$0	\$110	\$0	\$963	\$0	\$1,595
Headquarters ' <sup>/1</sup>	\$4,522	\$0	\$0	\$0	\$0	\$0	\$4,522
BIA Total	\$57,771	\$108,761	\$10,819	\$14,913	\$20,113	\$1,305	\$213,681

<sup>/1</sup> Headquarters [National Interagency Fire Center, Boise, ID] is reflected in the State of Idaho. Only amount given directly to the Office of Self-Governance are reflected here

<sup>/2</sup> Funding for Suppression is not distributed to field. Obligations occur at the Regional Level and the above figures reflect obligations at the Regional level.

# Appendix D - Bureau of Land Management Obligations

### FY 2002 Bureau of Land Management National Fire Plan Obligations

(dollars in thousands)

State	Preparedness	Fire Suppression Operations	Hazardous Fuels Reduction non- WUI	Hazardous Fuels Reduction WUI	Emergency Stabilization and Rehabilitation	Rural Fire Assistance	Total Obligations
AK	\$17,993	\$19,784	\$202	\$408	\$26	\$30	\$38,443
AR							\$0
AZ	\$4,382	\$9,017	\$1,523	\$1,704	\$97	\$415	\$17,138
CA	\$11,925	\$19,989	\$1,046	\$8,004	\$666	\$328	\$41,958
СО	\$6,428	\$13,878	\$1,575	\$3,870	\$3,116	\$490	\$29,357
DC							\$0
DE							\$0
ES	\$541	\$506	\$217				\$1,264
FL							\$0
GA							\$0
HI							\$0
IA							\$0
ID	\$14,547	\$14,793	\$3,829	\$11,763	\$2,372	\$891	\$48,195
IL							\$0
IN							\$0
KS							\$0
KY							\$0
LA							\$0
MA							\$0
MD							\$0
ME							\$0
мі							\$0
MN							\$0
мо							\$0
MS							\$0
MT	\$6,902	\$8,513	\$1,434	\$3,725	\$1,067	\$670	\$22,311
NC	, , , , ,	, , , ,	. , .	, , ,	, ,,,,	,	\$0
ND							\$0
NE							\$0
NH							\$0
NJ							\$0
NM	\$3,357	\$4,991	\$2,542	\$1,483	\$200	\$385	\$12,958
NV	\$16,415	\$22,333	\$1,734	\$4,403	\$17,469	\$859	\$63,213
NY	,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. , .	, , , , ,	, , , , , , , , , , , , , , , , , , , ,	,	\$0
ОН							\$0
ок							\$0
OR/WA*	\$12,839	\$27,651	\$9,271	\$15,896	\$5,460	\$850	\$71,967
PA	, ,	. ,	,	, ,,,,,,	, , , ==		\$0
sc							\$0
SD							\$0
TN							\$0
TX							\$0
UT	\$10,823	\$18,616	\$2,120	\$2,640	\$2,490	\$709	\$37,398
VA	\$505	\$506	\$217	\$3	<del>+=,100</del>	Ţ. 00	\$1,231
VT	<del>+-30</del>	+-30	<del>+</del> =	70			\$0
WA							\$0
WI							\$0
wv							\$0
WY	\$3,876	\$6,191	\$1,109	\$1,082	\$430	\$373	\$13,061
Headquarters	\$67,010	\$37,898	\$7,763	\$8,786	\$2,963	+3.0	\$124,420
BLM Total	\$177,543	\$204,666	\$34,582	\$63,767	\$36,356	\$6,000	\$522,914

<sup>\*</sup>OR/WA program costs are allocated to BLM State Office in Oregon

# Appendix E - Fish and Wildlife Service Obligations

## FY 2002 Fish and Wildlife Service National Fire Plan Obligations

(dollars in thousands)

State	Preparedness	Fire Suppression		Hazardous Fuels Reduction	Emergency Stabilization and	Rural Fire Assistance	Total
		Operations	non-WUI	WUI	Rehabilitation		
AK	\$1,081	\$134	\$317	\$553		\$24	\$2,109
AL			\$22	\$147			\$169
AR		\$31	\$49				\$80
AZ	\$614	\$346	\$356	\$134	\$14	\$20	\$1,484
CA	\$1,872	\$523	\$758	\$1,376	\$131	\$35	\$4,695
CO (RO)	\$1,159	\$367					\$1,526
со	\$94	\$96	\$551	\$677		\$15	\$1,433
СТ	\$0	\$0			\$0		\$0
DC							\$0
DE	\$0	\$46	\$31	\$561	\$0	\$26	\$664
ES	Φ0.000	4000	04.457	#000	<b>#</b> 40	0.10	\$0
FL	\$2,689	\$622	\$1,157	\$260	\$18	\$13	\$4,759
GA	\$3,083	\$5,243	\$730	\$408	Φ0	\$60	\$9,524
HI	\$18	\$18 \$72	6400	\$268	\$0	\$15	\$319 \$300
IA ID	\$81 \$115	\$72 \$46	\$129 \$107	\$16 \$120	\$178	\$2 \$15	\$300 \$600
IL	\$115 \$201	\$46 \$30	\$107 \$23	\$139 \$12	\$1/8	\$15 \$39	\$600 \$305
IN IN	\$98	\$30	\$23 \$103	\$12 \$176		\$23	\$434
KS	\$330	\$116	\$103 \$148	\$176		\$17	\$611
KY	φ330	\$110	\$140			Φ17	\$011
LA	\$439	\$242	\$784	\$150			\$1,615
MA	\$0	\$0	Ψ104	\$90	\$0		\$90
MD	\$348	\$65	\$159	\$68	\$0		\$640
ME	\$133	\$177	\$159	\$108	\$0	\$41	\$618
MI	\$1	\$74	\$64	\$10	ΨΟ	\$6	\$155
MN	\$1,306	\$471	\$1,047	\$588		\$87	\$3,499
MO	\$11	\$101	\$18	7222		\$23	\$153
MS	\$809	\$411	\$409	\$147		*=-	\$1,776
MT	\$432	\$154	\$83	\$0	\$42	\$114	\$825
NC	\$677	\$704	\$481	\$127		\$79	\$2,068
ND	\$809	\$503	\$1,198	\$67		\$90	\$2,667
NE	\$385	\$395	\$208	\$0	\$1	\$21	\$1,010
NH	\$5	\$10			\$0		\$15
NJ	\$33	\$90	\$74	\$32	\$0	\$26	\$255
NM	\$1,909	\$336	\$1,119	\$519	\$19	\$20	\$3,922
NV	\$374	\$154	\$171	\$26	\$302	\$15	\$1,042
NY	\$26	\$23	\$21		\$0	\$8	\$78
ОН			\$3			\$4	\$7
ок	\$382	\$107	\$252	\$5		\$29	\$775
OR	\$2,158	\$835	\$1,327	\$1,548		\$35	\$5,903
PA	\$0	\$0	\$7		\$0	\$5	\$12
RI	\$0	\$4	***	25-	\$0	<b>A</b>	\$4
SC	\$255	\$116	\$344	\$27		\$52	\$794
SD	\$206	\$103	\$259	\$43		\$27	\$638
TN	<u></u>	\$14 \$1.062	£4.470	6447	<b>604</b>	\$8	\$22
TX UT	\$2,455 \$25	\$1,062 \$0	\$1,170 \$6	\$417	\$31	\$82 \$6	\$5,217 \$37
VA	\$25 \$1,165	\$0 \$164	\$6 \$108	\$163	\$0	\$33	
VA VT	\$1,165	\$164	\$108 \$5	\$103	\$0 \$0	\$33 \$1	\$1,633 \$6
WA	\$1,968	\$855	\$672	\$1,180	\$4,497	\$35	\$9,207
WI	\$239	\$107	\$336	\$1,180	Ψ <del>4,49</del> 1	\$57	\$878
wv	\$0	\$107	\$6	Ψ139	\$0	\$5	\$11
WY	\$18	\$12	\$1		ΨU	\$11	\$42
HQ	\$1,555	\$232	\$667	\$197	\$0	\$0	\$2,651
FWS Total	\$29,558	\$15,245	\$15,639	\$10,378	\$5,233	\$1,224	\$77,277

## Appendix F - National Park Service Obligations

### FY 2002 National Park Service National Fire Plan Obligations

(dollars in thousands)

State	Preparedness	Fire Suppression Operations	Hazardous Fuels Reduction non-WUI	Hazardous Fuels Reduction WUI	Emergency Stabilization and Rehabilitation	Rural Fire Assistance	Total Obligations
AK	\$1,035	\$208	\$385			\$43	\$1,671
AL		\$7	\$32			\$29	\$68
AR	\$302	\$36	\$351	\$64		\$42	\$795
AZ	\$1,039	\$12,170	\$1,048	\$66	\$42	\$26	\$14,391
CA	\$7,513	\$6,196	\$5,104	\$4,267			\$23,080
co	\$3,861	\$8,113	\$1,024	\$1,286	\$1,365	\$54	\$15,703
DC	\$1	\$41					\$42
DE							\$0
ES							\$0
FL	\$1,564	\$290	\$895		\$16	\$11	\$2,776
GA	\$1,015	\$1,000	\$412	\$1,729			\$4,156
HI	\$352	\$2,126	\$234	\$219	\$132		\$3,063
IA (TATA)	\$2		\$13	\$185		\$7	\$207
ID (FMPC)	\$8,272	\$1,350	\$783	\$566	\$30		\$11,001
IL IN	\$649	\$149	\$137			\$15	\$0 \$950
KS	\$1	\$149				\$15 \$4	·
KY	\$69	\$309	\$31 \$236			\$49	\$36 \$663
LA	\$09	\$309	\$230			349	\$003
MA	\$692	\$1	\$266	\$134		\$43	\$1,136
MD	\$174	\$14	\$200	\$67		\$22	\$277
ME	\$163	\$2	\$28	\$114		\$40	\$347
MI	\$34	\$3	\$43	\$94		\$10	\$184
MN	\$273	\$45	\$157	Ψ,,		\$34	\$509
MO	\$304	\$19	\$252	\$14		\$29	\$618
MS	\$442	\$7	\$281	·		\$83	\$813
MT	\$294	\$279	\$181	\$17	\$12	\$24	\$807
NC	\$95	\$223	\$67			\$89	\$474
ND	\$148	\$19	\$218			\$22	\$407
NE	\$837	\$19	\$383	\$87		\$51	\$1,377
NH							\$0
NJ						\$20	\$20
NM	\$805	\$9,158	\$424	\$101	\$17	\$69	\$10,574
NV	\$471	\$877	\$629	\$10	\$65		\$2,052
NY	\$58	\$30	\$6	\$27			\$121
ОН	\$4	**		****		\$3	\$7
ок	\$2	\$8	\$27	\$182		\$49	\$268
OR	\$182	\$9,983	\$487	020		\$33	\$10,685
PA CC	\$183	\$25		\$39		\$20	\$267
SC	6770	\$43	Ø50.4	670		\$47	\$90
SD TN	\$779 \$339	\$637 \$737	\$504 \$532	\$59 \$47	\$91	\$37 \$72	\$2,016 \$1,818
TX	\$339 \$992	\$737 \$271	\$532 \$532	\$47 \$259	291	\$72 \$54	\$1,818
UT	\$1,585	\$6,398	\$675	\$409	\$35	\$80	\$9,182
VA	\$355	\$1,583	\$92	\$409	\$23	\$37	\$2,132
VT	φυυυ	ψ1,505	ψ92	ψ+2	Ψ23	\$9	\$2,132
WA	\$606	\$553	\$80	\$690	\$37	\$136	\$2,102
wi	\$3	4555	\$00	\$370	437	<b>\$150</b>	\$3
wv	\$174	\$65	\$6	\$101		\$40	\$386
WY	\$867	\$3,100	\$724	7-91		\$23	\$4,714
NPS Total	\$36,536	\$66,094	\$17,279	\$10,875	\$1,865	\$1,456	\$134,105

Fire Protection Assistance\* - Through National Office (Idaho)

\*Prior year(s) assistance to states collected through Forest Service

Total NPS Obligation/Expenditures

(\$81)
\$134.024

Alaska/Idaho/California/Colorado/Georgia/Maryland/Massachusettes/Nebraska contain National and Regional Offices. Some expenditures are charged to these office accounts, but expended in various states

## **Appendix G - Forest Service Obligations**

FY2002 Forest Service National Fire Plan Obligations

# FY 2002 Preparedness Resources Department of the Interior and Forest Service

Agencies	Frontline Firefighters	Support Personnel**	Engines	Helicopters***	Water/Foam Tenders	Dozers	Tractor/ Plows	Boats	Type I or Hotshot Grews	Smoke- jumpers	Airtankers	Other Aircraft***
BIA	1,184	125	297	13	18	34	0	1	11	0	5	0
BLM	2,734	761	381	30	32	16	0	1	12	153	28	30
FWS	328	248	303	3	25	26	32	2	0	0	0	0
NPS	426	219	250	9	14	0	0	0	2	1	0	0
FS	10,480	423	995	97	15	105	90	8	65	277	41	62
Total	15,152	1,776	2,226	152	104	181	122	12	90	431	74	92

<sup>\*\*</sup>Support Personnel number includes personnel other than frontline firefighters whose annual salaries are paid 50%+ by fire funds.

<sup>\*\*\*</sup>Other aircraft numbers include smokejumper aircraft, air attack aircraft, aerial supervision aircraft, lead planes, etc.

<sup>\*\*\*\*</sup>Helicopter number includes shared resources not fully funded by a single agency

## Appendix I - Facilities

# FY 2002 Fire Facilities-Deferred Maintenance and Construction Department of the Interior and Forest Service

State	Agonov	Project Description	Number	Cost
	Agency		Number	
Alaska	BLM	AFS Seismic Retrofit		\$33,613
Alaska	BLM	AFS Maintenance Shop		\$1,299,609
Alaska	BLM	Alaska Radio Towers		\$145,717
Alaska Alaska	BLM BLM	Ft. Wainwright Storage Facility		\$100,364 \$103,486
Alaska	FS	Ft. Wainwright Air Tanker Base  KLWC Water System and Roof Construction		\$20,000
AK Total	_	NEW Water System and Noor Construction	6	
		0.50	- 6	
Arizona	BIA	Office, Warehouse, Capitalized Equipment Storage		\$5,000
Arizona	BLM	Kingman SEAT (Helibase & Air Base)		\$4,581
Arizona Arizona	BLM BLM	Nixon Fire Station Pakoon Fire Station		\$4,400 \$20,811
Arizona	BLM	St. George Helibase & Office		\$20,611
Arizona	BLM	Wickenburg Fire Station		\$9,030
AZ Total		Wickenburg Fire Station	6	
		Olasha Engina Paya	- 0	\$172,953
California	BLM	Olacha Engine Bays		\$172,953
California California	BLM BLM	Carrizo Fire Station Poleline Fire Station		\$8,071
California	BLM	Susanville Dispatch Center		\$335,812
California	BLM	Salt Wells Engine Bays		\$162,414
California	BLM	Topaz Fire Station		\$6,955
California	FS	Placerville Tree Seedling Greenhouse Construction		\$178,000
California	FS	Funding Remaining Work on FY 01 Projects		\$485,000
California	FS	Support for national air tanker base and fire facilities program mgrs		\$425,000
California	NPS	Mojave NP, HITW Fire Station		\$77,797
California	NPS	Sequoia/Kings Canyon NP, Grant Grove Engine Barn		\$27,243
California	NPS	Seguoia/Kings Canyon NP, Helispot Improvements		\$43,000
CA Total		Coquatarrange carryon rat ; Honopet improvements	12	
Colorado	BLM	Dolores Fire Station	12	\$156,000
Colorado	BLM	Craig Engine Storage		\$2,840
Colorado	BLM	Craig Fire Resurface		\$5,309
Colorado	BLM	Grand Junction Air Center		\$15,200
Colorado	BLM	Montrose Fire Office		\$34,387
Colorado	FS	Monument Hotshot Quarters Planning and Design Work		\$100,000
Colorado	FS	Construction of Monument Hotshot Quarters		\$911,000
Colorado	FS	Region-wide Fire Facility Planning and Design work (regional \$161,000 for CO, WY, KS, NB, SD)		\$161,000
Colorado	FS	Pay Remaining FY 01 Contract Administration Costs (regional \$142,000 for CO, WY, KS, NB, SD)		\$142,000
Colorado	NPS	Dinosaur NM, Roundtop Lookout		\$242,015
CO Total			10	\$1,769,751
Florida	FS	Lake City Air Tanker Base Planning and Design		\$60,000
Florida	NPS	Gulf Islands NS, Fire Cache		\$1,016
FL Total			2	\$61,016
Georgia	NPS	Chickamauga & Chattanooga NRA, Fire Cache	İ	\$7,050
GA Total			1	\$7,050
Idaho	BLM	National Interagency Fire Center Ramp		\$1,658,018
Idaho	BLM	Bennett Mountain Lookout		\$57,486
Idaho	BLM	Atomic City Fire Station		\$29,629
Idaho	BLM	Burley Fire Station		\$169,702
Idaho	BLM	Carey Fire Station		\$23,555
Idaho	BLM	Hailey Fire Station		\$850,000
Idaho	BLM	Idaho Falls Fire Station 2		\$68,864
Idaho	BLM	Malad Fire Station		\$472,195
Idaho	BLM	Rogerson Fire Station		\$569,748
Idaho	BLM	Knotch Butte Lookout		\$6,348
Idaho	BLM	Pocatello Air Tanker Base		\$376,796
Idaho	BLM	Pocatello #6 Fire Facility		\$8,036
Idaho	FS	Replace Kelley Forks Water System		\$23,000
Idaho	FS	Lucky Peak Helibase Construction		\$10,000
Idaho	FS	Price Valley Helibase Construction		\$153,500
Idaho	FS	Renovate Grangeville Fire Equipment Warehouse		\$17,000
ID TOTAL			16	\$4,493,877
Indiana	FS	Hoosier Radio Towers Construction		\$88,000
Indiana	FS	Fire Planning and Design (regional \$320,000 for MT, ID, SD, ND)		\$0
IN TOTAL			2	\$88,000
Kansas	FS	Region-wide Fire Facility Planning and Design work (regional \$161,000 for CO, WY, KS, NB, SD)		\$0
		<del>  • • • • • • • • • • • • • • • • • • •</del>		
Kansas	FS	Pay Remaining FY 01 Contract Administration Costs (regional \$142,000 for CO, WY, KS, NB, SD)	1 -	\$0
KS TOTAL	1100	Di O II E I NDA K I I E' O I	2	
Kentucky	NPS	Big South Fork NRA, Kentucky Fire Cache		\$68,976
KY TOTAL			1	
Maine	FWS	Moosehorn National Wildlife Refuge		\$11,000
ME TOTAL			1	\$11,000

## FY 2002 Fire Facilities-Deferred Maintenance and Construction Department of the Interior and Forest Service

State	Agency	Project Description	Number	Cost
Michigan	FS	Repair 5 Forest Radio Towers		\$83,000
Michigan	FS	Watersmeet Bunkhouse		\$15,000
Michigan	NPS	Sleeping Bear Dunes NL, S. Manitou Fire Cache		\$30,000
MI TOTAL			3	\$128,000
Minnesota	FS	Float Plane Base Repair		\$34,000
Minnesota	NPS	Voyageurs NP, Fire Cache		\$42,000
MN TOTAL			2	\$76,000
Missouri	FS	Replace Floyd Tower		\$59,000
Missouri	FS	SO Dispatch Center		\$51,000
MO TOTAL			2	\$110,000
Montana	BLM	Bridger Fire Station		\$30,521
Montana	BLM	Ekalaka		\$40,902
Montana	BLM	Lewistown Warehouse		\$118,816
Montana	BLM	Miles City Fire Ops Building		\$26,943
Montana	BLM	Zortman Fire Station		\$43,763
Montana	FS	Remodel Plains Bunkhouse		\$20,000
Montana	FS	Construct Kootenai Helibase		\$225,000
Montana	FS	Construct Shenango Helibase		\$155,000
Montana	FS	Northern Rockies Coordination Center Project Modification		\$150,000
Montana	FS	MTDC Warehouse Interagency Engine Center Project Modification	+ -	\$150,000
Montana	FS	Fire Planning and Design (regional\$320,000 for MT, ID, SD, ND)	+ -	\$320,000
Montana	NPS	Glacier NP, St. Mary's Engine Storage Building		\$10,757 \$20,000
Montana Montana	NPS NPS	Glacier NP, Apgar Lookout Rehab Glacier NP, Porcupine Lookout Rehab	+	\$20,000 \$2.423
Montana Montana	NPS NPS	Glacier NP, Porcupine Lookout Renab		\$2,423 \$38,000
MT TOTAL	INFO	Glaciei NF, Loneman Lookout	15	\$1,352,125
WIT TOTAL			15	
Nebraska	FS	Region-wide Fire Facility Planning and Design work (regional \$161,000 for CO, WY, KS, NB, SD)		\$0
Nebraska	FS	Pay Remaining FY 01 Contract Administration Costs (regional \$142,000 CO, WY, KS, NB, SD)		\$0
NE TOTAL			2	\$0
Nevada	BLM	Battle Mountain Airtanker Base		\$20,104
Nevada	BLM	Carlin Fire Station		\$79,160
Nevada	BLM	Eureka Station		\$154,496
Nevada	BLM	Logandale Fire Station		\$828,219
Nevada	BLM	Las Vegas Fire Station		\$130,000
Nevada	BLM	Midas Fire Station		\$85,040
Nevada	BLM	Palomino Fire Station		\$13,362
Nevada	BLM	Oliver Ranch Fire Station		\$850,170
Nevada	BLM	Pahrump Fire Station		\$670,178
Nevada	BLM	Wells Station		\$4,861
Nevada NV TOTAL	FS	Supervisors Office/Fire Office Improvements	4.4	\$15,000
			11	\$2,850,590
New Mexico	BIA	Acoma Lookout Facility/Com.		\$56,000
New Mexico	BIA	Lookout Towers		\$110,000
New Mexico	BIA	Office		\$251,680
New Mexico	BIA	Warehouse for Capitalized Equipment	+ -	\$500,000 \$3,500
New Mexico	BLM FS	Las Cruces Engine Storage Facility	+	\$2,500 \$208,000
New Mexico New Mexico	FS NPS	Almagado Air Tanker Base Upgrade Bandelier NM, Fire Tower Rehab	+	\$4,211
NM TOTAL	141 0	Buildonor Hin, File Tower Herida	7	\$1,132,391
North Dakota	FS	Fire Planning and Design (regional \$320,000 for MT, ID, SD, ND)	+ 1	\$0
North Dakota	FWS	Des Lacs National Wildlife Refuge	+ -	\$50,000
ND TOTAL		2 55 2455	2	\$50,000
Oregon	BLM	Burns Helibase & Office	-	\$2,673
Oregon	BLM	Dayville Fire Station	+ -	\$2,673 \$79,458
Oregon	BLM	Grass Valley Fire Station	+ -	\$133,981
Oregon	BLM	Jordan Valley Engine Storage	+ 1	\$41,537
Oregon	BLM	Juntura Engine Storage Facility		\$41,452
Oregon	BLM	Lakeview Helibase and Office		\$23,731
Oregon	BLM	Vale Engine Storage Facility		\$263,243
Oregon	BLM	Vale Dispatch Center		\$124,084
Oregon	BLM	Wagontire Lookout		\$40,622
Oregon	FS	Klamath Falls Dispatch Center Fueling and Maintenance Pad Construction		\$806,000
Oregon	FS	Jay Herbert Nursery		\$410,000
Oregon	FS	Redmond Air Tanker Base		\$326,000
Oregon	FS	Funding Remaining Work on FY 01 Projects		\$396,000
OR TOTAL		Turiding Nericularing Work of FF of Frojects		\$2,688,781

## Appendix I - Facilities (cont.)

# FY 2002 Fire Facilities-Deferred Maintenance and Construction Department of the Interior and Forest Service

State	Agency	Project Description	Number	Cost
South Dakota	NPS	Badlands NP, Fire Cache		\$246,796
South Dakota	FS	Fire Planning and Design (regional \$320,000 for MT, ID, SD, ND)		\$0
South Dakota	FS	Region-wide Fire Facility Planning and Design work (regional \$161,000 for CO, WY, KS, NB, SD)		\$0
South Dakota	FS	Pay Remaining FY 01 Contract Administration Costs (regional \$142,000 for CO, WY, KS, NB, SD)		\$0
SD TOTAL			4	\$246,796
Texas	NPS	Lake Meredith NRA, Fire Cache and Office	i i	\$196,260
TX TOTAL			1	\$196,260
Utah	BLM	Cedar City Air Tanker Base		\$1,039,115
Utah	BLM	Cedar City Interagency Fire Facility		\$310,000
Utah	BLM	Vernon Fire Station (Fillmore GS)		\$531,439
Utah	BLM	Little Sahara Guard Station		\$22,619
Utah	BLM	Muskrat engine Storage Facility		\$130,787
Utah	BLM	Vernal Fire Station		\$761,785
Utah	FS	Color Cntry Interagency Fire Center Construction		\$62,000
Utah	NPS	Zion NP, Fire Operations Facilities		\$806,039
UT TOTAL			8	\$3,663,784
Virginia	FWS	Great Dismal Swamp Guard Station		\$494,650
Virginia	FS	Augusta Springs		\$344,000
VA TOTAL			2	\$838,650
Washington	FWS	Little Pend Orielle Cache		\$415,650
Washington	NPS	North Cascades NP, Marblemount Fire Cache/Office		\$58,547
WA TOTAL			2	\$474,197
Wyoming	BLM	Rock Springs Fire Station		\$5,000
Wyoming	BLM	Cody Dispatch Center		\$130,430
Wyoming	FS	Modules for Burgess Junction Modular Bunkhouse		\$178,000
Wyoming	FS	Moose Bunkhouse Construction		\$30,400
Wyoming	FS	Region-wide Fire Facility Planning and Design work (regional \$161,000 for CO, WY, KS, NB, SD)		\$0
Wyoming	FS	Pay Remaining FY 01 Contract Administration Costs (regional \$142,000 for CO, WY, KS, NB, SD)		\$0
Wyoming	NPS	Grand Teton NP. Fire Dorm		\$268
Wyoming	NPS	Yellowstone NP, Crew Dorm		\$16,793
WY TOTAL			8	\$360,891
Agency Totals	BIA		5	\$922,680
	BLM		66	\$13,695,297
	FWS		4	\$971,300
	NPS		20	\$1,939,191
	Total DOI		95	\$17,528,468
	FS		46	\$6,810,900 <b>\$24,339,368</b>
Grand Total for DOI and FS 141				

## FY 2002 Emergency Stabilization Rehabilitation Department of the Interior and Forest Service

State	Agency	# of Projects	Acres	Funds Obligated
Arizona	BIA	6	186,757	\$15,217,048
	BLM	1	340	\$97,454
	FS	7	25,610	\$392,000
	FWS	1	3	\$13,909
	NPS	1	1,189	\$41,563
Total A	Z	16	213,899	\$15,761,974
California	BIA	8	1,333	\$706,392
	BLM	19	7,073	\$582,888
	FS	15	1,835	\$1,546,000
	FWS	1	914	\$131,145
	NPS			
Total C	A	43	11,155	\$2,966,425
Colorado	BIA	5	9,809	\$371,558
	BLM	16	559	\$2,820,570
	FS	41	14,423	\$214,000
	FWS			
	NPS	5	26,508	\$1,365,128
Total CO	D	67	51,299	\$4,771,256
Florida	BIA			
	BLM			
	FS			
	FWS	1	137	\$17,813
	NPS	1	108	
Total FI	L	2	245	\$33,741
Hawaii	BIA			
	BLM			
	FS			
	FWS			
	NPS	1	1,000	\$131,865
Total H	II	1	1,000	\$131,865
Idaho	BIA	1	27	\$12,948
	BLM	85	117,446	
	FS	98	149,839	
	FWS	2	1,098	
	NPS	1	2,500	\$29,783
Total II	D	187	270,910	\$11,197,849
Michigan	BIA			
_	BLM			
	FS	3	2	\$119,000
	FWS			
	NPS			
Total M	II .	3	2	\$119,000

### FY 2002 Emergency Stabilization Rehabilitation Department of the Interior and Forest Service

State	Agency	# of Projects	Acres	Funds Obligated
Montana	BIA	3	204	\$134,194
	BLM	2	1,238	\$329,169
	FS	194	193,906	\$14,647,000
	FWS	1	525	\$42,192
	NPS	1	572	\$12,570
Total MT		201	196,445	\$15,165,125
Nebraska	BIA			
	BLM			
	FS			
	FWS	1	178	\$1,070
	NPS			
Total NE		1	178	\$1,070
Nevada	BIA	2	6,500	\$372,207
	BLM	103	224,306	\$17,277,486
	FS	11	6,156	\$344,000
	FWS	2	5,798	\$302,157
	NPS	1	170	\$65,260
Total NV	7	119	242,930	\$18,361,110
New Mexico	BIA	6	2,911	\$838,418
	BLM			\$0
	FS	14	5,080	\$1,821,000
	FWS	1	638	\$18,328
	NPS	1	842	\$17,100
Total NM		22	9,471	\$2,694,846
North Dakota	BIA			
	BLM			
	FS	1	601	\$211,000
	FWS			
	NPS			
Total ND		1	601	\$211,000
Oregon	BIA	1	0	\$5,586
	BLM	48	66,691	\$4,953,036
	FS	37	3,882	\$1,847,000
	FWS			
	NPS			
Total OR		86	70,573	\$6,805,622
South Dakota	BIA			
	BLM	1	812	\$737,946
	FS	34	11,573	\$2,571,000
	FWS			
	NPS			
Total SD		35	12,385	\$3,308,946
Tennessee	BIA			
	BLM			
	FS			
	FWS			
	NPS	2	9,780	\$90,609
Total TN		2	9,780	\$90,609

### FY 2002 Emergency Stabilization Rehabilitation Department of the Interior and Forest Service

State	Agency	# of Projects	Acres	Funds Obligated
Texas	BIA			
	BLM			
	FS			
	FWS	3	46	\$31,400
	NPS			
Total TX		3	46	\$31,400
Utah	BIA	2	2,827	\$163,336
	BLM	27	23,353	\$2,361,874
	FS	24	1,450	\$1,611,000
	FWS			
	NPS	1	900	\$34,642
Total UT		54	28,530	\$4,170,852
Virginia	BIA			
	BLM			
	FS			
	FWS			
	NPS	1	520	\$23,140
Total VA		1	520	\$23,140
Washington	BIA	5	5,109	\$2,045,147
	BLM	2	317	\$26,735
	FS	18	20,150	\$1,684,000
	FWS	4	50,652	\$4,496,959
	NPS	1	793	\$37,120
Total WA		30	77,021	\$8,289,961
Wyoming	BIA	2	600	\$1,010,236
	BLM	5	3,890	\$430,188
	FS	21	330	\$138,000
	FWS			
	NPS			
Total WY		28	4,820	\$1,578,424
Agency Totals	BIA	41	216,077	\$20,877,070
	BLM ***	309	446,025	\$31,969,417
	FWS	17	59,989	
	NPS	17	44,882	\$1,864,708
	Native Seed *	1	<u>,                                      </u>	\$4,387,000
	Total DOI	384	766,973	
	FS Total RR**	518	434,837	\$35,770,000
	FS Emergency	0.10	10-1,001	ψου, πο, σου
	Stabilization *	130	136,000	\$70,000,000
	Total FS	648	570,837	\$105,770,000
Grand Total f	or DOI and FS	1,032	1,337,810	

<sup>\*</sup> These items are distributed among the States but centrally funded

<sup>\*\*</sup> FS RR - Rehabilitation and Restoration

<sup>\*\*\*</sup> BLM ESRR project cost total does not include centrally funded interagency native seed project

FY 2002 Summary of Completed Hazardous Fuel Treatment Projects and Project Obligations
Department of the Interior and Forest Service

			Mildlond II	Wilding Light and the second	hy, Aproch			Other Description Transfer of the Asset Tolera	Tolor	(ocas A vid) share			
State	Agency	Mechanical	Windally O	Other		WUI Obligations	Mechanical	Prescribed Fire	Other	HF Total Acres	HF Obligations	Total Acres for WUI and Other HF	Total Obligations
						(\$000\$)					(\$000\$)		(\$000\$)
AK	BIA					\$181			316	316	\$102	316	\$283
	BLM	20	72		95	\$409	•	-		_	\$202	93	\$611
	FS	224	10	,	234	\$6,574	•	17		17	\$32	251	\$6,606
	FWS	92	525		601	\$553	29	1,085		1,114	\$317	1,715	\$870
1 / Y X	┰	, 000	- 203		- 000	\$ 22	,	1 700	. 070				4300
AN IOTAI	+	078	/09		97/	41,717	67	1,103	3.10	1,448	9,1	2,3/5	\$6,735
AL	BIA					0\$					80		\$0
	BLM		. !			0\$				. :	0\$		20
	FS	92	42,354		42,446	\$633		22,242		22,242	\$283	64,688	\$916
	FWS					\$147		686		68	\$22	68	\$169
	-	-				0\$		863		863	20\$	863	\$0
AL Total	_	95	42,354		42,446	\$780	•	23,194	,	23,194	\$305	65,640	\$1,085
AR	BIA					\$0					0\$		\$0
	BLM	-	- 26 400		- 26 476	64 200	,	- 40 440		- 40 190	0400	. 04 660	\$0
	2 2	47	204,60		02,420	41,382	02	19,112		19,132	48/8	84,558	\$2,260
	N C			, 8	, ,	D 10	, 0	1,46/		1,46/	244	1,467	649
	_	125		77.	147	C9\$	750	5,753	351	6,354	\$351		\$416
AR Total	$\dashv$	149	65,402	22	65,573	\$1,447	270	26,332	351	26,953	\$1,278		\$2,725
AZ	BIA	6,363		535	9,898	\$3,414	10,324	18,723		29,047			\$6,124
	BLM	1,651	7,285		8,936	\$1,704	9,754	5,520	•	15,274		24,210	\$3,227
	FS	9,076	16,082	1,845	24,003	\$2,898	928	18,261		19,189	\$1,785		\$4,683
	FWS	17	75		95	\$134		7,300		7,300		7,392	\$490
	$\neg$	263	-	•	263	\$66	93	27		120	\$1,048	383	\$1,114
AZ Total	$\neg$	17,370	23,442	2,380	43,192	\$8,216	21,099	49,831	•	70,930			\$15,638
CA	BIA	969	30	136	861	\$2,090	1,777	444	511	2,732	\$1,737		\$3,827
	BLM	2,389		-	3,853	\$8,004	1,039	212		1,251			\$9,050
	FS	12,418	18,916		31,334	\$12,382	24,204	25,639		49,843	\$18,964	81,177	\$31,345
	FWS	1,767			1,767	\$1,376	80	22,302	286	22,668		24,435	\$2,134
	_	086,1	131	OL :	121,2	\$4,267	89L	5,114	061	5,432	\$5,257	66,7	\$9,524
CA Total	$\dashv$	18,649	21,141	146	39,936	\$28,119	27,268	53,711	947	81,926	\$27,762	121,862	\$55,880
8	BIA			242	242	\$108	233	1,000		1,233	\$128	1,475	\$236
	BLM	5,291	2,280		7,571	\$3,870	9,653	2,618		12,271	\$1,575	19,842	\$5,445
	FS	5,358	3,572	,	8,930	\$6,680	4,565	9,918		14,483	\$5,464	23,413	\$12,144
	SW C	- 00				1198	- 0	9 107		9 1	\$551		\$1,228
	$^+$	364	GG -	-	419	\$1,348	7550	427		//9	\$1,024		\$2,372
CO Total	_	11,013	5,907	242	17,162	\$12,683	14,701	13,969		28,670		45,832	\$21,425
cł	BIA					\$0					0\$		\$0
	BLM					0\$					80		\$0
	N C			•	'	9 6					0,9		9
	SW1					000					000		00
CT TO	╅	-		'	'	00			'		000		00
201	+					000					000		00
3	Y a					9					000		00
	FS					0 4					08		0\$
	FWS					0\$					0\$		0\$
	NPS					29\$					80		\$67
DC Total	-					298					80		295
DE	+					\$0					\$0		\$0
	BLM	-				\$0		-			\$0		\$0
	FS	-	1	1		\$0				•	0\$		\$0
	FWS	20		3,600	3,620	\$561		150		150	\$31	3,770	\$592
	-					\$0	-	. !		1	\$0		0\$
DE Total		20		3,600	3,620	\$561		150	-	150	\$31	3,770	\$592

FY 2002 Summary of Completed Hazardous Fuel Treatment Projects and Project Obligations Department of the Interior and Forest Service

	-		Wildland III	Paral Interface (by Acres	(by Acros)			Other Hazard	Trooptmy	Other Hazard Engle Treatments (by Acres)			
State	Agency	Mechanical	Prescribed Fire	Other		WUI Obligations (\$000s)	Mechanical	Prescribed Fire	Other	HF Total Acres	HF Obligations (\$000s)	Total Acres for WUI and Other HF	Total Obligations (\$000s)
						(coop)					(5000)		
7	BIA	,	,	20	20	\$38	625	6,022	1	6,647	\$15	6,667	\$53
	BLM	-				\$0		•				•	\$0
	FS		109,859		109,859	\$2,080		39,063		39,063		148,922	\$2,349
	FWS		138		138	\$260		46,434		46,434	9	46,572	\$1,417
	$\dashv$	22	2,380		2,402	\$0	-	97,603		609'26		100,005	\$927
FL Total	-	22	112,377	20	112,419	\$2,378	625	189,122	-	189,747	\$2,368	302,166	\$4,746
GA	BIA	-	-		-	0\$	-	-	-	-	0\$		\$0
	BLM	-		-		0\$	-	-	-	-	0\$		\$0
	FS	85		-	16,757	\$0	-	410	-	410	\$1,620	17,167	\$1,620
	FWS	100	1,050		1,150	\$408	•	9,715	54,000	63,715	\$730	64,865	\$1,138
	$\neg$	,		22	22	\$1,729	-	•	·	•	\$412	22	\$2,141
GA Total		185	17,722	22	17,929	\$2,137	-	10,125	54,000	64,125	\$2,762	82,054	\$4,899
Ī	BIA	٠				\$0					\$0		\$0
	BLM	-				09					0\$		\$0
	Y S					0\$					0\$		\$0
	FWS	117			117	\$288					\$0	117	\$288
	-	200			200	\$219	1,659	202	<u>'</u>	1,861	\$234	2,061	\$453
HI Total	_	317		<u>'</u>	317	\$507	1,659			1,861	\$234	2,178	\$741
⋖	BIA	•				0\$					90		\$0
	BLM					0\$					\$0		\$0
	FS		,		, 4	80		- 000		. 000	80		\$0
	NA C	- 0	04		40	QLA QLA		2,820		5,820	871¢	2,866	\$145
:	SAN	250			250	\$371	10			80	\$24	330	\$395
IA Total	_	250			290	\$387	10	968'9	-	906'9	\$153	6,196	\$540
Ω	BIA	99		313	374	\$602	23			23	\$282	397	\$884
	BLM	28,569	783		29,352	\$11,763	25,750			39,584	\$3,671	98,936	\$15,434
	FS	4,590			20,412	\$3,319	1,147	17,049		18,196	\$3,338	38,608	\$6,657
	FWS	496		200	969	\$139	62	1,303		1,365	\$107	2,061	\$246
!	_					0\$					0\$		0.0
ID Total	-	33,711	16,610	513	50,834	\$15,823	26,982	32,186		59,168	\$7,398	110,002	\$23,221
_	BIA					0\$					\$0		\$0
	BLM					0\$					90	. !	\$0
	FS	,	442		442	\$36		55		55	80	497	\$36
	OML	0			0	71 6		900		000		1/0	000
TO+OT II	+	۱ ,			747	φ.Α		711		711		1 168	\$0
	_	2	744		104	0						001,	- 6
	A I I					00					00	•	000
	E SE		386		386	8.44					0	386	\$44
	FWS	87	5.578		5.665	\$176		7.029		7.029	\$103	12.694	\$279
	NPS		20		20	\$	09	727		787	\$274	807	\$274
IN Total	-	87	5,984		6,071	\$220	09	7,756		7,816		13,887	\$597
KS	BIA					\$0		180		180	\$31	180	\$31
	BLM					\$0					\$0		\$0
	FS	202	645	-	820	\$0	25	-	-	25	\$0	875	\$0
	FWS	•	•	•		\$0	•	9,342		9,342	\$148	9,342	\$148
	NPS	'				\$0		7,127		7,127		7,127	\$58
KS Total	$\neg$	205	645	'	820	\$0	25	16,649	•	16,674	\$2	17,524	\$237
Κ	BIA					\$0	•	•			\$0	•	\$0
	ВГМ					\$0					\$0		\$0
	FS		3,697		3,697	\$214		5,494		5,494	\$123	9,191	\$336
	FWS	-				0,5		, ,		- 420		. 6	80
LYV Total	_		2 607		2 607	\$24.7	ı	130		130	\$236	130	\$236
10110	ā		3,097		3,097	47176		5,024		9,024		176,8	7/00

FY 2002 Summary of Completed Hazardous Fuel Treatment Projects and Project Obligations

Department of the Interior and Forest Service

State				201		,								
Agency   Machanical   Prescribed Fire   Other   Acres   WUI Total   WUI Tota				Wildland Url	oan Interface	(by Acres)			Other Hazard	uels Ireatm	Other Hazard Fuels Treatments (by Acres)			
BIA	State	Agency	Mechanical	Prescribed Fire	Other	WUI Total Acres	WUI Obligations (\$000s)	Mechanical	Prescribed Fire	Other	HF Total Acres	HF Obligations (\$000s)	Total Acres for WUI and Other HF	Total Obligations (\$000s)
BLM		BIA					0\$					0\$		\$0
FS		BLM					0\$					80		8
FWS		FS	-	29,185	-	29,185	\$185		29,199	-	59,199		88,384	\$1,166
NPS		FWS	174	-	-	174	\$150	16	29,194	-	29,210		29,384	\$934
MATORI   174		NPS	-	-	-	-	0\$	•	-	-				\$0
BIA	LA Total		174	29,185		29,359	\$335	16	88,393		88,409	\$1,765	117,768	\$2,100
BLM		BIA					\$0		•			\$		\$0
FS		BLM					\$0					\$0		80
MA Total   N°S   13   -		FS					\$0					80		\$0
MA Total         NPS         13		FWS					06\$					\$0		890
MA Total         III		NPS	13			13	\$22		-			\$217	13	\$239
BLM	MA Total		13			13	\$112					\$217		\$329
BLM		BIA					\$0	-				\$0		80
FS		BLM					\$0					\$0		80
NPS		FS					\$0					90		9
MD Total   NPS		FWS	10	586		596	\$68	35	10.907	9	11.002		11.598	\$227
MD Total         HD Total         10         586         -         596           BA         -		NPS					\$0							9
BIA	MD Total		10	586		506	898	35	10 907	9	11 002	\$150	11 598	\$227
FS		BIA	2	2		8	8	3	20,01	3	200,11	9	200,11	9
FS		2 a					9					9		9
FWS   23		E E	107			. 33	9					9		9
ME Total   N°S   2		FWS	10			22	\$108	. 37	421	.   .	- 777	41.50	504	7903
ME Total         NFS         5         2         6           BLM         - <t< td=""><th></th><td>C C C</td><td>2</td><td></td><td></td><td>4 0</td><td>9 6</td><td>8 0</td><td>171</td><td></td><td>F</td><td>900</td><td>8</td><td>1079</td></t<>		C C C	2			4 0	9 6	8 0	171		F	900	8	1079
MR Total   BIA		S L	7			7	4-14 0004	2 5	. 707		2 2	970	0,1	\$14Z
BLM	ME lotal		35			09	\$222	69	421		480	\$18/	540	\$409
BLM		BIA			1		\$34			1		\$0		\$34
FS   664   847   1,511     NPS   300   -		BLM	-			-	\$0		-			\$0		\$0
FWS   10     -   10   10   10   10   10		FS	664			4)	\$393	52			52	96\$	1,563	\$489
MITOtal   NPS   300       1,821   1,821   1,821   1,821   1,821   1,821   1,821   1,821   1,821   1,821   1,821   1,821   1,821   1,821   1,821   1,821   1,822   1,823   1,822   1,823   1,823   1,823   1,823   1,823   1,823   1,823   1,823   1,823   1,823   1,823   1,823   1,823   1,823   1,834   1,823   1,823   1,823   1,823   1,823   1,823   1,823   1,834   1,344   1,334   1,334   1,334   1,344   1,344   1,334   1,34		FWS	10			10	\$10					\$64	10	\$74
MI Total         974         847         - 1,821           BLM         749         446         - 1,195           BLM         - 1,085         - 6,537         - 6,613           FWS         1,070         5,443         - 6,513           FWS         - 1,085         - 7         - 6,513           MN Total         S,904         10,441         - 7         - 7           BLM         - 7         - 7         - 7         - 7           FWS         - 7         - 7         - 7         - 7           NPS         - 7         - 7         - 7         - 7           NPS         - 7         - 7         - 7         - 7           NPS         - 7         - 7         - 7         - 7           BLM         - 7         - 7         - 7         - 7           FS         - 7         - 7         - 7         - 7           BLA         - 7         - 7         - 7         - 7           FS         - 7         - 7         - 7         - 7           FWS         - 7         - 7         - 7         - 7           FS         - 7         - 7         - 7         - 7		NPS	300			300	\$94	40	-		40	\$43	340	\$137
BIA   749   446   - 1,195     ES   1,085   4,552   - 5,637     FWS   1,070   5,443   - 1   3,345     NPS   - 2,904   10,441   - 1   3,345     BIA   - 2,904   10,441   - 1   3,345     FS   150   5,445   - 5,585     FS   150   5,445   - 5,585     NPS   - 1   150   5,445   - 1   5,585     BIA   - 1   150   5,445   - 1   5,585     BIA   - 1   150   5,445   - 1   5,585     BIA   - 1   1,070   1,070   1,070     BIA   - 1   1,070   1,070   1,070     WS   - 1   1,070   1,070   1,070     BIA   120   2,16,502   - 2,16,602     BLM   3,146   1,82   - 3,328     FWS   - 1   1,070   1,088     FWS   - 1   1,088     FWS   - 1   - 1     FWS   - 1   - 1			974		-	1,821	\$531	92	•	-	92		1,913	\$734
BLM	7	BIA	749		•	1,195	\$537	176	13,274	1	13,450	₩.	14,645	\$1,121
FS   1,086   4,552     5,637     FWS     6,513     NN Total   BIA       BLM		BLM	-		-	-	\$0	-	-	-	•	\$0		\$0
FWS   1,070   5,443     6,513     NPS       BIA         BLM         BLM         FS   150   5,445     5,595     FWS         MO Total   BIA         FS         FWS         FWS     .		FS	1,085		,	5,637	\$4,417	727	3,780		4,507	\$222	10,144	\$4,639
NPS		FWS	1,070			6,513	\$588		32,929		32,929	9		\$1,667
MN Total   2,904   10,441     13,345     BLM		NPS					\$0		119		119			\$157
BIA	MN Total		2,904			13,345	\$5,542	903	50,102		51,005	\$	64,350	\$7,584
BLM   -   -   -   -   -   -   -   -   -		BIA	-				\$0							\$0
FS   150   5,445     5,585     NPS             MO Total   BIA           BLM             BLM           FS           FW           FW         FW     .		BLM		٠			\$0							\$0
FWS		FS	150	5,445	-	5,595	\$1,160	240	4,291	-	4,531		,	\$1,329
MOTotal   NPS       -   -   -		FWS		•	1		\$0		1,658		1,658		1,658	\$18
MO Total         150         5,445         -         5,595           BIA         -         -         -         -           BLM         -         -         -         -           FWS         -         -         -         -           FWS         -         -         -         -           NPS         120         247         -         -           BIA         120         216,502         -         216,652           BLM         3,146         1,637         1,638           BLM         3,146         1,637         1,638           FWS         -         -         -           FWS         -         -         -           NPS         -         -         -		NPS	-		-	-	\$14		1,461	-	1,471	\$252	1,471	\$266
BIA			150		-	5,595	\$1,174	250	7,410	-	7,660	\$439	13,255	\$1,613
BLM		BIA	1		1	1	\$0			1		\$141	•	\$141
FS		BLM	-	•	-	-	\$0	•		•	•			\$0
NFS		FS	•	212,457		212,457	\$2,288		1,869		1,869		214,326	\$3,073
MS Total         120         247         -         367           MS Total         120         216,502         -         216,622           BLA         41         60         1,537         1,638           BLM         3,146         182         -         3,328           FS         5,754         5,134         -         10,888           FWS         -         -         -         -           NPS         36         10         -         46		FWS		3,798	1	3,798	\$156	•	9,473		9,473	\$409	13,271	\$565
MS Total         120         216,502         -         216,622           BIA         41         60         1,537         1,638           BLM         3,146         -         2,328           FS         5,754         5,134         -         10,888           FWS         -         -         -         -           NPS         36         10         -         46		NPS	120	247	-	367	\$0	15	674	•	689			\$281
BIA	MS Total		120	216,502	-	216,622	\$2,444	15	12,016	-	12,031	S	2	\$4,060
BLM         3,146         182         -         3,328           FS         5,754         5,134         -         10,888           FWS         -         -         -         -           NPS         36         10         -         46		BIA	14		1,537	1,638	\$1,682	961	2,617	-	3,578		5,216	\$2,634
FS 5,754 5,134 - 10,888 FWS		BLM	3,146		-	3,328	\$3,725	510	2,823	-	3,333	\$1,414	6,661	\$5,139
NPS 36 10 - 46		FS	5,754		'	10,888	\$4,842	5,799	9,958	'	15,757		26,645	\$6,850
NPS 36 10 - 46		FWS					\$0				978		978	\$83
		NPS	36			46	\$17		865		865	\$168	911	\$185
5,386 1,537	MT Total		8,977		1,537	15,900	\$10,266	7,270			24,511		40,411	\$14,891

FY 2002 Summary of Completed Hazardous Fuel Treatment Projects and Project Obligations Department of the Interior and Forest Service

				Wildland Url	Wildland Urban Interface (by Acres)	(by Acres)			Other Hazard Fuels Treatments (by Acres)	uels Treatme	ents (by Acres)			
1 3		1000	Mode	11 11 11 11 11 11 11 11 11 11 11 11 11	3		WUI Obligations	, in the second	1	3		HF Obligations	Total Acres for	Total Obligations
State		Agency	Меспапісаі	Prescribed Fire			(\$000\$)	Mecnanical	Prescribed Fire		HF I otal Acres	(\$000\$)	Wolaila Otter II	(\$000\$)
NC		BIA					80					\$15		\$15
		BLM					\$0							80
		FS	23	13,995		14,018	\$462		250		250	\$541	14,268	\$1,003
		FWS	8		24	108	\$127		17,757		17,757		17,865	\$608
		NPS					\$0	48			48		48	29\$
z	NC Total		107	13,995		14,126	\$589	48	18,007		18,055	\$1,104	32,181	\$1,693
ND	+	BIA		135	805	940	\$10		-			\$57	940	29\$
		BLM					\$0					0\$	•	\$0
		FS		09		09	\$0		3,541		3,541	\$215	3,601	\$215
		FWS	902	3.989		4.695	\$67		16,014		16,014	\$1.248	20,709	\$1,315
		NPS	240			240	\$0		2.409		2.409	\$218	2.649	\$218
z	ND Total		946	4.184	805	5.935	\$77		21,964		21,964	\$1,738	27,899	\$1,815
E N	+	BIA					9\$		2,626		2,626		2.626	\$290
!		BLM					0\$		- 1		- 1,012		-	80
		FS	006			006	\$367		360		360	\$225	1,260	\$592
		FWS		30		30	\$0	-	8.768		8.769	\$208	8,799	\$208
		NPS					\$87		629		629	\$408	629	\$495
	NE Total		006	30		930	\$460	1	12,433		12,434	\$	13,364	\$1,585
Ŧ	-	BIA					0\$							\$
		BLM					\$0					80		\$0
		FS		122		122	\$18					\$1		\$19
		FWS					\$0		42		42	0\$	42	\$0
		NPS					\$0	-		,		\$0		\$0
z	NH Total			122		122	\$18		42		42	\$1	164	\$19
ΓN		BIA	-	-	-	-	\$0	-	-	-		\$0		\$0
		BLM	-	-			0\$	-	-	-	•	0\$	•	\$0
		FS					\$0	•	•		•	\$0	•	\$0
		FWS	15	25	140	180	\$32	35	80		115	\$74		\$106
	$\dashv$	NPS		-			0\$	-		'		\$0		\$0
	NJ Total		15	25	140	180	\$32	35	80	•	115	\$74		\$106
ΣZ		BIA	1,435		3,876	5,326	\$1,766	1,645	480	6,000	8,125	\$1,139		\$2,905
		BLM	2,076			3,055	\$1,483	34,887	11,996	,	46,883			\$4,033
		FS	2,217	8,703		10,920	\$8,825	5,496	13,513		19,009	\$4,087		\$12,912
		FWS	202		9	595	\$519	1,141	4,949		6,090	\$1,119		\$1,638
	T-1-1-	SAN	226	- 00	- 00	226	\$101	10 120	520	, 00	530	\$424	156	\$525
2	+	A I C	001'0		3,001	20, 122	\$12,034	43,179	01,430	0000	00,00	09,019		\$22,013
		2 2	1 871			1871	\$4 403	7 409	6.837		14 246		16 117	\$6.104
		FS	1771	206		383	\$221		-		1			\$325
		FWS	32			32	\$26		5,993		5,993	\$171		\$197
		NPS					\$10		210		210			\$639
2	NV Total		2,080	206	-	2,286	\$4,663	7,409	13,040	-	20,449		22,735	\$7,268
ΝΥ		BIA					0\$		•			0\$		\$0
		BLM			•		\$0	•	•		•	\$0		\$0
		FS		128		128	\$0	•	•		•	\$0	128	\$0
		FWS					\$0		325		325	\$21		\$21
	$\dashv$	NPS	12		-	12	\$27	-	150	-	150	\$6		\$33
	NY Total		12	128	•	140	\$27		475	•	475	\$27	615	\$54
동		BIA			'		\$0	•	•	'	•	\$0		\$0
		BLM		-			\$0		-			80		\$0
		FS					\$43					80		\$43
		FWS					09					89		89
ľ	1	S S					Q# 6					OF G		\$ <del>\$</del>
اد	H lotal				-	-	040			-		0.0		940

FY 2002 Summary of Completed Hazardous Fuel Treatment Projects and Project Obligations

Department of the Interior and Forest Service

				Wildland Urban Interface (by Acres)	by Acres)			Other Hazard F	uels Treatm	Other Hazard Fuels Treatments (by Acres)			
State	Agency	Mechanical	Prescribed Fire	Other	WUI Total Acres	WUI Obligations (\$000s)	Mechanical	Prescribed Fire	Other	HF Total Acres	HF Obligations (\$000s)	Total Acres for WUI and Other HF	Total Obligations (\$000s)
OK	BIA	-		137	137	969\$	3,133	7,251		10,384	\$510	10,521	\$1,206
	BLM		, !			\$0		1			\$0		\$0
	FS		8,1/8		8,1/8	\$ <del>\$</del>	. .	6,170		6,170	¥	14,348	\$0
	NPS	242	3 .		242	\$182		480	,	480	\$27	722	\$209
OK Total		242	9,058	137	9,437	\$883	3,133	18,063		21,196		30,633	\$1,672
OR	BIA	498	-	469	296	\$1,287	320	4,121		4,441	\$1,049	5,408	\$2,336
	BLM	26,564	19,750		46,314	\$15,896	11,643	34,558		46,201	\$8,953		\$24,849
	FS	1,290	25,890		27,180	\$5,508	14,913	25,442		40,355	\$7,942		\$13,449
	FWS	12,549	45		12,594	\$1,548	185	905'9		6,691	\$1,327		\$2,875
	NPS					0\$		5,489		5,489	\$554	5,489	\$554
OR Total		40,901	45,685	469	87,055	\$24,239	27,061	76,116		103,177	\$19,825	190,232	\$44,063
РА	BIA		1			09 6	1	1			08		\$0
	FS					\$77		150		150	\$27		\$104
	FWS					\$0		86		86	\$7	86	\$7
	NPS	501			501	\$152	203	175		378			\$201
PA Total		501			501	\$229		423		626	\$83	1,127	\$312
R	BIA	-				\$0					\$0		\$0
	BLM					\$0					\$0		\$0
	FS			1	1	80					0\$		\$0
	FWS					0,5					80		80
letoT IQ	O LA					00					000	•	000
SC	RIA					Ç.					O\$		0\$
	BLM					\$0					80		\$0
	FS	-	28,069	1	28,069	\$0		16,255		16,255	0\$	44,324	\$0
	FWS	13		1	13	\$27	•	16,192	-	16,192		16,205	\$371
	NPS	66	1,640	•	1,739	\$0	•	-	-	•	\$0		\$0
SC Total		112	29,709		29,821	\$27		32,447		32,447	\$344	)	\$371
SD	BIA	40		1,878	1,918	\$652	1,127	1,182	4,127	6,436	\$322	8,354	\$974
	BLM	- 240	- 60	1	1000	\$0	- 740	- 2710		- 0000	80		\$0\$
	5 N/V	0,519	3,000		327	\$7,000 \$73	217	5,170		5,009	4250		\$2,269
	NPS	,	-		- 1	\$59	118	7,020		7,138	\$504	7.138	\$563
SD Total		6,363	3,926	1,878	12,167	\$2,278	1,958	16,990	4,127	23,075			\$4,128
NL	BIA					\$413			,	1			\$423
	BLM	•				\$0							\$0
	FS	-	6,777		6,777	\$2		3,276		3,276		10,053	\$248
	FWS	- 47			- 1	\$0	ı	1 521		- 1		1 553	\$0
TN Total	2	41	6.777		6.794	\$462	0 10	4.807		4.812		11.606	\$1.259
X	BIA				'	9\$				1	0\$		\$6
	BLM					\$					0\$		\$0
	FS	270	45		45,620	\$544		5,330	-	5,330	\$256	20,950	\$800
	FWS	447	1,937		2,384	\$417	066	51,692		52,682	\$1,170	990'55	\$1,587
	NPS	1,817		33	1,850	\$259	222	1,304	-	1,861		3,711	\$791
TX Total		2,534	47,287	33	49,854	\$1,226	1,547	58,326	-	59,873	\$1,9	109,727	\$3,184
5	BIA	-				\$88	200	4,400		4,900			\$88
	BLM	11,655		1	12,440	\$2,640	3,992	2,593		6,585		19,025	\$4,776
	FS	1,415	5		7,201	\$3,446		46,660		46,660	\$1,233		\$4,679
	NDN	455	957		1 412	\$409	-	925		792			\$1 084
leto T TII	NP.O	455	7 528		1,412	\$409 \$6 583	700	54 170		792	θ	2,204	\$1,084
01 1018		0,00,01	1,020,1	- '	J 050,12	00°,0¢	3, 132	04,170		200,000		014,00	CCO,UI &

FY 2002 Summary of Completed Hazardous Fuel Treatment Projects and Project Obligations Department of the Interior and Forest Service

Other         Across         Mul Total (gate)         Mechanical (gate)         Prescribed Fine         Other Tatach (Line Freedings)         HF Total Across         HF Obligations (gate)           0thor         Across         \$50         -         1.16         -         1.80         5.80           -         3.54         \$50         -         1.65         -         1.65         5.80           -         3.56         \$242         -         1.68         -         -         5.80           -         3.56         \$242         -         1.68         -         -         -         5.80           -         3.56         \$247         -					July Landle 1994	and and	(b A c.c.)			1 Land 10 10 10 10 10 10 10 10 10 10 10 10 10	Tue and	And the Action			
Part					Wildiana Ur	Dan Interrace	(by Acres)			Other Hazard F	ueis i reatm	ents (by Acres)			
BLA     PAS     PAS     PAS     PAS   PA		State	Agency	Mechanical	Prescribed Fire	Other	WUI Total Acres	WUI Obligations (\$000s)	Mechanical	Prescribed Fire	Other	HF Total Acres	HF Obligations (\$000s)	Total Acres for WUI and Other HF	Total Obligations (\$000s)
PMA   PMS    \$		BIA			1		\$0					0\$		\$	
Fig. 10.2   Fig.			BLM					\$0					\$0		\$0
Phys			FS	•	3,347		3,347	\$92		1,116		1,116	0,	4,463	\$123
VT Total         INS         1 15         1 15         3.29			FWS	7			7	\$163		186		186	\$108		\$271
Main			NPS	1	15		15	\$42	1	333		333	\$92		\$134
BIA		VA Total	┢	2	3,362		3,369	\$297		1,635		1,635	<del>0,</del>	5,004	\$528
Fig.	5		⊢					\$0			-			•	\$0
FVS			BLM				-	80					0\$		0\$
VV Total         N°S         -         SQ         -         20         20         SG           VV Total         N°S         -         -         SQ         -         20         -         SG           VV Total         N°S         -         -         -         SG         SG         -         -         -         SG           BLM         1165         - <th></th> <th></th> <th>FS</th> <th>30</th> <th></th> <th></th> <th>30</th> <th>\$41</th> <th>7</th> <th></th> <th>1</th> <th>7</th> <th>\$2</th> <th></th> <th>\$44</th>			FS	30			30	\$41	7		1	7	\$2		\$44
VT Total         INPS			FWS		,			0\$		32	ı	32	\$5		\$5
VT Total         A         30         5         40         544         7         22         .         98         57           BLA         156         2         9         9         156         156         156         2         20         2<			NPS					0\$		,			0\$		0\$
BIAA   198   2.0   2.00   2.		VT Total	1	30			30	\$41	7	32		39		69	\$49
PHM	W		BIA	32		938	973	\$1,159	168	1,924	-	2,092		3,065	\$1,796
FS			BLM	195			195	\$0	100			100			90
WA TOTAI         FP/S         2,116         1,140         -         3,258         51,180         2,407         1,164         -         3,561         8572           WA TOTAI         NFS         3,588         5,588         10,064         5,170         5,29         -			FS	818			4.886	\$1.675	2.362	6.180		8.542		13	\$2.094
WATORI         NPS         392         360          560         560          560          560          560          560          560          560          560          560          560          560          560           560             580  -			FWS	2 118			3.258	\$1 180	2 407	1 154		3.561			\$1.852
WA Total         BIA         1,5568         5,568         10,064         \$4,704         5,037         9,258			NPS	392			752	069\$	į.			5	880		\$770
BIA		WA Total		3 558		038	10.064	\$4 70V	E 037	0 258		11 205	4		\$6 E42
FS   HM   -1.	5		ŏ.	0,000			10,001	4130	30,0	0,200		50			210,00
Fig. 107   Fig. 108    •			1			7	9	8	2		8	9 6		-	
FVS			DE IM	- 407	. 00		100	O G				- 547	4004		000
FWS			2	/01	07		CC	200		740		740			0076
WITCH         INFS         1.76         3.69         -			ZWZ SWZ	1,057	7¥2		1,398	8139	750	4,120	1	4,370			\$525
WI Total         H M Total         1,176         369         -         1,545         \$331         280         4,687         -         4,967         \$568           BIA         - </th <th></th> <th></th> <th>┪</th> <th></th> <th></th> <th>-</th> <th>-</th> <th>O<b>∲</b></th> <th></th> <th></th> <th>-</th> <th></th> <th>0\$</th> <th></th> <th>0¢</th>			┪			-	-	O <b>∲</b>			-		0\$		0¢
BIA		WI Total	_	1,176		-	1,545	\$331	280	4,687	-	4,967	\$598		\$929
FS	<b>%</b>		BIA	-	-	-	-	0\$	-	-	-	-	0\$	•	0\$
FS   FS   FS   FS   FS   FS   FS   FS			BLM					\$0					\$0		\$0
WV Total         INS         . <th< th=""><th></th><th></th><th>FS</th><th>-</th><th></th><th></th><th>-</th><th>\$25</th><th></th><th>96</th><th>-</th><th>95</th><th></th><th></th><th>\$25</th></th<>			FS	-			-	\$25		96	-	95			\$25
WV Total         INS         -         -         -         \$0         1         -         -         \$0         -         \$0         -         \$0         -         \$0         -         \$0         -         \$0         -         \$0         -         \$0         -         \$0         -         \$0         -         \$0         -         \$1         \$0         -         \$1         \$0         -         \$1         \$0         -         \$1         \$0         -         \$1         \$1         \$0         -         \$1         \$1         \$0         -         \$1 <t< th=""><th></th><th></th><th>FWS</th><th>-</th><th>-</th><th>-</th><th>-</th><th>0\$</th><th></th><th>28</th><th>-</th><th>87</th><th>9\$</th><th></th><th>9\$</th></t<>			FWS	-	-	-	-	0\$		28	-	87	9\$		9\$
WV Total         BIA         -         -         -         \$25         1         182         -         183         \$12           BIA         -         -         -         -         -         -         -         -         \$10           BLM         188         -<			NPS					\$0	-				9\$	1	9\$
BIA		WV Total						\$25	_	182		183	\$12	183	\$37
Harror   188	≽		BIA		,			0\$			1	i	\$110		\$110
FS   1,005   5,400     6,405   \$1,070   4.492     4,492     4,535   \$540   8,540       FWS                 .			BLM	188			1,268	\$1,082	13,155	3,928		17,083			\$2,182
FWS         -         -         \$0         -         \$0         -         \$1         \$1           NPS         42         1,410         -         1,452         \$101         -         \$105         -         2,196         -         2,226         \$7,89           Total         1         1,235         7,890         -         9,125         \$2,253         31,042         64,264         10,954         9,246         \$10,886         \$2,450         \$14,91         21,042         64,264         10,954         \$2,489         \$10,210         \$6,287         \$10,816         \$2,489         \$10,210         \$6,287         \$10,886         \$10,210         \$10,924         \$10,934         \$10,810         \$10,810         \$10,828         \$10,810			FS	1,005			6,405	\$1,070	43	4,492	,	4,535		10,940	\$1,610
NPS         42         1,410         -         1,452         \$101         30         2,196         -         2,226         \$738           Total         1         1,235         7,800         -         9,125         \$2,233         13,228         10,616         -         2,226         \$7,89           BM         1,235         7,800         -         9,125         \$2,233         13,228         10,616         -         2,248         \$2,489           FW         12,824         61,836         24,911         17,182         84,280         -         20,281         \$2,687           FWS         21,216         26,329         3,969         51,514         \$10,270         6,287         34,48         402,091         \$16,048           FWS         7,118         7,825         87         16,030         4,230         -         148,481         \$16,226           FWS         7,118         7,825         87         16,030         4,230         4,230         65,801         448,481         \$16,226           FWS         7,118         7,825         87         16,030         4,230         65,801         84,441         \$16,926           FWS         7,11,216			FWS					\$0					\$1		\$1
Total         BIA         1,235         7,890         -         9,125         \$2,253         13,228         10,616         -         23,844         \$2,489           BIA         12,924         641         10,886         24,501         34,561         10,846         26,280         36,280 <th></th> <th></th> <th>NPS</th> <th>45</th> <th>1,410</th> <th>-</th> <th>1,452</th> <th>\$101</th> <th>30</th> <th>2,196</th> <th>-</th> <th>2,226</th> <th></th> <th>3,678</th> <th>\$83</th>			NPS	45	1,410	-	1,452	\$101	30	2,196	-	2,226		3,678	\$83
BIA   12,924   691   10,886   24,501   \$14,911   21,042   64,264   10,954   96,260   \$10,820   \$10,820   BLM   83,615   34,660   .		WY Total		1,235		-	9,125	\$2,253	13,228		-	23,844		32,969	\$4,742
BLM   B3,615   34,660   -	Agency 1	Fotals	BIA	12,924	691	10,886	24,501	\$14,911	21,042	64,264	10,954	96,260		120,761	\$25,731
21,216         26,329         3,969         51,514         \$10,210         5,287         342,458         54,346         402,091         \$15,104           701         7,118         7,825         87         16,530         \$10,559         4,230         143,750         50,11         148,481         \$16,926           101         124,873         69,505         14,942         209,320         \$90,659         148,451         635,392         6,801         840,644         \$68,721           101         13,750         71,216         1,345         764,367         \$13,524         148,445         635,801         434,151         \$58,856           108,302         65,801         1,284         78,724         1,787         313,524         1,008,302         65,801         1,283,795			BLM	83,615			118,275	\$54,979	117,892	84,920	,	202,812	\$25,871	321,087	\$80,850
7,118         7,825         87         15,030         \$10,559         4,230         143,750         501         148,481         \$16,926         \$16,926         \$10,559         148,451         635,392         65,801         849,644         \$16,926         \$68,721         \$68,721           13,06         711,216         1,84845         764,367         873,524         61,241         373,910         -         434,151         \$58,086         \$68,721           176,179         780,721         16,787         973,687         \$164,183         209,692         1,008,302         65,801         1,283,795         \$122,576			FWS	21,216		3,969	51,514	\$10,210	5,287	342,458	54,346	402,091	\$15,104	453,605	\$25,314
OOI         124,873         69,505         14,942         209,320         \$90,659         148,451         635,392         65,801         849,644         \$68,721           51,306         711,216         1,845         764,387         \$73,524         61,241         372,910         -         434,151         \$53,855           176,176         780,721         16,787         973,687         \$164,183         209,692         1,008,302         65,801         1,283,795         \$122,576			NPS	7,118		87	15,030	\$10,559	4,230	143,750	501	148,481	\$16,926	163,511	\$27,485
51,306 711,216 1,845 764,387 \$73,524 61,241 372,910 - 434,151 \$53,855 786,787 \$164,183 209,692 1,008,302 65,801 1,283,795 \$122,576			Total DOI	124,873	69,505	14,942	209,320	\$90,659	148,451	635,392	65,801	849,644	\$68,721		\$159,380
176,179 780,721 16,787 973,687 \$164,183 209,692 1,008,302 65,801 1,283,795 \$122,576			FS	51,306		1,845	764,367	\$73,524	61,241			434,151			\$127,379
	Grand	d Total for DC	OI and FS	176,179		16,787	973,687	\$164,183	209,692		65,801	1,283,795			\$286,759

Forest Service amounts are project totals and do not reflect administration funds

# Appendix L - Wildland Fire Use

### FY 2002 Wildland Fire Use Acre Summary Department of the Interior and Forest Service

	BLM	FS	FWS	NPS	Total
Alaska	612,103		274,833	60,200	947,136
Arizona					0
California		15		3,523	3,538
Colorado	618	22,594			23,212
Florida				22	22
Idaho		10,317			10,317
Montana		15,249		33	15,282
Nevada	7,907				7,907
New Mexico		7,907			7,907
Utah	2,600	193			2,793
Washington					0
Wyoming		3,110		3,602	6,712
Total	623,228	59,385	274,833	67,380	1,024,826

### FY 2002 Forest Service Forest Health Management

	Acres	1				
State	Treated Federal	Forest Health Federal	Acres Treated Coop	Forest Health Coop	Total Acres Treated	Forest Health Management
AK	i edetai	\$0	30	\$45,804	30	\$45,804
AL	1,79		00	\$0	1,791	\$755,274
Am. Somoa	.,	\$0		\$0	0	\$0
AR	4,25			\$0	4,256	\$21,996
AZ	.,=0	\$11,523		\$0	0	\$11,523
CA	1,14		220	\$564,500	1,365	\$1,009,193
CO	2,00		8,000	\$605,000	10,000	\$805,484
CT	=,00	\$0	3,555	\$0	0	\$0
CW NM		\$0		\$0	0	\$0
DC		\$0		\$0	0	\$0
DE		\$0		\$0	0	\$0
FL		\$0		\$0	0	\$0
GA		\$389		\$528,000	0	\$528,389
Guam		\$0		\$0	0	\$0
HI		\$0	5,000	\$0	5,000	\$0
IA		\$0	3,000	\$0	0,000	\$0
ID	10,81		33,409	\$0 \$0	44,226	\$656,279
IL	10,01	\$030,279	33,409	\$0 \$0	0	\$030,279
IN		\$0			0	
		\$0		\$0 \$0	0	\$0 \$0
KS	44			\$0		
KY	11	· · ·		\$0 \$0	115	\$103,432
LA	10	, , , ,		\$0	100	\$6,431
MA		\$0		\$0	0	\$0
MD		\$0		\$0	0	\$0
ME		\$0		\$0	0	\$0
MI		\$0		\$0	0	\$0
MN		\$0		\$0	0	\$0
MO		\$0		\$0	0	\$0
MS	1,46			\$0	1,467	\$426,107
MT	3,49		300	\$2,408,709	3,796	\$2,777,411
NC		\$0		\$0	0	\$0
ND		0 \$0	160	\$0	160	\$0
NE		\$0		\$0	0	\$0
NH		\$0		\$0	0	\$0
NJ		\$0		\$0	0	\$0
NM		\$74		\$136,698	0	\$136,772
NV	2	0 \$4,000		\$0	20	\$4,000
NY		\$0		\$0	0	\$0
OH		\$0		\$0	0	\$0
OK		\$0		\$0	0	\$0
OR	23,88	<u> </u>	40	\$264,000	23,920	\$768,734
Other Pacific		\$0		\$0	0	\$0
PA		\$709,724		\$0	0	\$709,724
PR	167,34			\$21	167,340	\$2,306
RI		\$0		\$0	0	\$0
SC		\$0	150,000	\$0	150,000	\$0
SD		\$0		\$0	0	\$0
TN		\$0		\$0	0	\$0
TX	10			\$0	100	\$2,408
UT	8,51			\$0	8,518	\$397,581
VA		\$0		\$0	0	\$0
VI		\$0		\$0	0	\$0
VT		\$0		\$0	0	\$0
WA	20,25		8,500	\$0	28,752	\$16,132
WI		\$0		\$0	0	\$0
WV		\$0		\$0	0	\$0
WY	5,50	0 \$606,257	2,000	\$0	7,500	\$606,257
National Program		\$0		\$30,000	0	\$30,000
	Total 250,79	7 \$6,440,503	207,659	\$4,582,733	458,456	\$9,821,235

# Appendix N - Rural Fire Assistance (DOI)

#### FY 2002 Department of the Interior Rural Fire Assistance

States		BIA		BLM		NPS		FWS	RFD/VFD Assisted	DOI Award Amounts
	#	Award	#	Award	#	Award	#	Award		
Alabama	1	\$20,000			9	\$29,313			10	\$49,313
Alaska		. ,	3	\$30,237	4	\$42,831	3	\$23,560	10	\$96,628
Arizona	1	\$14,000	37	\$415,000	3	\$26,152	1	\$20,000		
Arkansas		. ,		. ,	14	\$41,940			14	\$41,940
California	17	\$150,000	28	\$328,000			2	\$35,000	47	\$513,000
Colorado	3	\$10,000	89	\$490,000	9	\$54,094	2	\$15,004	103	
Connecticut		. ,		. ,					0	\$0
Delaware							4	\$25,913	4	\$25,913
District of Columbia									0	
Florida					7	\$10,820	3	\$12,500	10	\$23,320
Georgia							12	\$60,000		\$60,000
Guam									0	\$0
Hawaii							3	\$15,000	3	\$15,000
Idaho	6	\$29,575	122	\$891,000			3	\$15,000	131	\$935,575
Illinois							9	\$39,266		\$39,266
Indiana					4	\$15,406	6	\$22,985		\$38,391
Iowa	3	\$11,742			2	\$6,750	1	\$1,500		\$19,992
Kansas	1	\$12,879			1	\$4,154	1	\$16,504	3	\$33,537
Kentucky		. ,			14	\$48,949			14	\$48,949
Louisiana						, ,,,			0	
Maine	1	\$6,477			12	\$40,011	6	\$41,166	19	
Maryland		. ,			4	\$22,089			4	\$22,089
Massachusetts					4	\$42,966			4	
Michigan	8	\$31,000			3	\$10,193	1	\$5,575		
Minnesota	21	\$121,402			10	\$33,865	13	\$87.219		· '
Mississippi		. , .			41	\$83,214		, , ,	41	
Missouri					6	\$28,804	7	\$23,053	13	
Montana	38	\$161,997	52	\$553,550	3	\$24,000	128	\$113.532		<del> </del>
Nebraska	7	\$28,947		, , , , , , , , , , , , , , , , , , , ,	12	\$51,464	5	\$21,005		· · ·
Nevada		. ,	90	\$858,928			1	\$15,000		
New Hampshire				, , .				, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	
New Jersey					5	\$19,791	4	\$26,460	9	
New Mexico	1	\$10,000	38	\$384,770	10	\$69,397	5	\$20,350		
New York	2	\$16,462		, , , ,		, ,	2	\$8,055		
North Carolina		****,***			24	\$88,453	15	\$79,000		
North Dakota	9	\$60,580	11	\$56,450	6	\$21,540	21	\$90,027	47	
Ohio		¥25,225		700,100	1	\$3,240	1	\$3,500		· · · · ·
Oklahoma	36	\$264,973			10	\$49,000	7	\$29,471		
Oregon	4	\$44,675	69	\$704,104	5	\$33,160	4	\$35,000		
Pennsylvania		, , ,		,	6	\$20,160	1	\$4,948		· · · · · ·
Puerto Rico						<b>7</b> =0,100	-	+ 1,1 1 1	0	
Rhode Island									0	
South Carolina					8	\$47,377	8	\$52,000	16	· ·
South Dakota	23	\$99,275	8	\$60.000	8	\$37,102	28	\$27,006		1 7 -
Tennessee		\$55,270		<del>+,00,000</del>	26	\$71,998	1	\$8,000		
Texas					8	\$53,600	24	\$81,531		
Utah			75	\$709,000	9	\$79,891	1	\$6,001		
Vermont				Ţ. 00,000	1	\$9,035	1	\$1,020		· · · · ·
Virgin Islands			+			Ψ0,000		Ψ1,020	0	
Virginia					22	\$36,497	3	\$33,203		
Washington	5	\$68,750	11	\$145,896	12	\$135,580	1	\$35,000		
West Virginia		\$55,750		<b>\$.10,000</b>	17	\$40,001	1	\$5,300		
Wisconsin	19	\$79,900			- ''	ψ-τυ,υυ τ	13	\$57,462		
Wyoming	2	\$21,943	27	\$372,725	3	\$23,052	5	\$10,502		· · · · ·
TOTAL	208	\$1,264,577	660	\$5,999,660	343	\$1,455,889		\$1,222,618		

# Appendix O - Volunteer Fire Assistance (Forest Service)

### **FY 2002 Forest Service Volunteer Fire Assistance**

States	RFD/VFD Assisted	FS Obligation
Alabama	14	\$213,774
Alaska	55	\$283,657
Arizona	26	\$336,719
Arkansas	214	\$214,151
California	216	\$962,000
Colorado	500	\$647,950
Connecticut	0	0
Florida	85	\$280,034
Georgia	21	\$251,407
Hawaii	4	\$200,000
Idaho	37	\$184,400
Illinois	0	\$104,400
Indiana	8	¢20.290
	0	\$29,389
lowa	<u>'</u>	\$36,556
Kansas	93	\$181,000
Kentucky	13	\$230,622
Louisiana	84	\$287,893
Maine	58	\$97,736
Maryland	0	0
Massachusetts	23	\$32,288
Michigan	72	\$100,000
Minnesota	0	0
Mississippi	20	\$210,229
Missouri	20	\$30,953
Montana	48	\$378,716
Nebraska	78	\$143,000
Nevada	45	\$110,463
New Hampshire	0	0
New Jersey	37	\$74,580
New Mexico	12	\$193,300
New York	250	\$346,297
North Carolina	14	\$300,442
North Dakota	250	\$407,900
Ohio	100	
Oklahoma	244	
Oregon	40	\$416,390
Pennsylvania	192	\$226,047
Puerto Rico	0	Ψ220,047
Rhode Island	20	\$13,659
South Carolina	51	\$193,742
South Dakota	22	
	210	\$181,000 \$238,857
Tennessee	28	\$679,815
Texas		
Utah	95	\$209,229
Vermont	0	#200 040
Virginia	268	
Washington	83	,
West Virginia	49	\$54,193
Wisconsin	38	· · · · · · · · · · · · · · · · · · ·
Wyoming	43	
Total	3,781	\$10,419,113

### Appendix P - State Fire Assistance (Forest Service)

#### FY2002 Forest Service State Fire Assistance

States	Funds
Alabama	\$1,573,131
Alaska	\$1,231,000
American Samoa	\$124,150
Arizona	\$1,314,715
Arkansas	\$1,109,045
California	\$1,923,082
Colorado	\$4,624,739
Connecticut	\$0
Commmon. N. Marianna Islands	\$204,000
Delaware	\$0
District of Columbia	\$0
Florida	\$1,867,984
Georgia	\$1,793,546
Guam	\$190,000
Hawaii	\$796,880
Idaho	\$4,017,500
Illinois	\$68,873
Indiana	\$60,000
Iowa	\$111,999
Kansas	\$555,000
Kentucky	\$1,287,035
Louisiana	\$1,590,397
Maine	\$379,425
Maryland	\$0
Massachusetts	\$176,723
Michigan	\$501,477
Minnesota	\$780,809
Mississippi	\$1,622,836
Missouri	\$56,204
Montana	\$1,868,767
Nebraska	\$495,000
Nevada	\$1,827,935
New Hampshire	\$58,679
New Jersey	\$200,263
New Mexico	\$2,183,000
New York	\$345,994
North Carolina	\$1,721,643
North Dakota	\$195,500
Ohio	\$364,984
Oklahoma	\$872,100
Oregon	\$1,044,000
Other Pacific Islands	\$328,150
Pennsylvania	\$217,266
Puerto Rico	\$0
Rhode Island	\$50,400
South Carolina	\$30,400
South Dakota	\$930,000
Tennessee	\$1,450,377
Texas	\$1,430,377 \$1,424,264
Utah	\$1,317,500
Vermont	\$1,317,500
Virgin Islands	\$0 \$0
Virginia Virginia	 \$1,717,470
Washington	\$1,873,395
West Virginia	\$1,673,395
_	
Wisconsin	\$210,000 \$1,200,600
Wyoming Total	\$1,309,600 \$54,737,403
וטומו	\$51,727,402

# Appendix Q - Research Projects/Leads (Forest Service)

### FY 2002 Forest Service Research Teams and Lead Scientists

Unit*	Research Topics	Team Lead Scientist	e-mail address
	RESEARCH ON FIREFIGHTING CAPACITY (26 teams of reseache	rs)	
NCS	National and regional fire weather dynamics: Improved methods for high resolution forecasting of fire weather and smoke transport.	Warren E. Heilman	wheilman@fs.fed.us
NCS	Assessing vulnerability of populations to wildfire in the North Central Region.	Robert G. Haight, David T. Cleland	rhaight@fs.fed.us, dcleland@fs.fed.us
NCS	FIA pilot test of a fuel condition monitoring system.	Dennis May	dmay@fs.fed.us
PNW	A smoke modeling framework for real-time predictions of cumulative smoke impacts ("BlueSky").	Sue A. Ferguson	sferguson@fs.fed.us
PNW	Estimating haze from prescribed and wildland fires.	David V. Sandberg	dsandberg@fs.fed.us
PNW	Seasonal prediction of national fire risks and impacts.	Ronald P. Neilson	rneilson@fs.fed.us
PNW	Fuel moisture mapping and combustion limits.	David V. Sandberg	dsandberg@fs.fed.us
PSW	Risks to fish and wildlife from wildfire and landscape treatments.	Danny C. Lee	dclee@fs.fed.us
PSW	An initial attack model for fire management planning.	Marc Wiitala	mrwiitala@fs.fed.us
PSW	Fire behavior in live fuels.	David R. Weise	dweise@fs.fed.us
PSW	Real-time remote sensing of fire properties.	Philip J. Riggan	priggan@fs.fed.us
PSW	Weather models for area coordination centers.	Francis Fujioka	ffujioka@fs.fed.us
RMS	Improving decisions for fuel treatment options.	J. Greg Jones, Jim Chew	jgjones@fs.fed.us,
RMS	Real-time fire monitoring nationwide.	Wei Min Hao	jchew@fs.fed.us whao@fs.fed.us
RMS	New technology for monitoring smoke characteristics.	Wei Min Hao	whao@fs.fed.us
RMS	Remote sensing, GIS and landscape assessment tools for fire management.	Colin Hardy, Kevin Ryan	
RMS	Fire management strategies for wilderness and other protected areas.	Carol Miller	cmiller04@fs.fed.us
SRS	Prediction of fire weather and smoke impacts in the Southeast.	Gary L. Achtemeier	gachtemeier@fs.fed.us
SRS	Tradeoffs of alternative vegetation management strategies.	Jeffrey P. Prestemon	jprestemon@fs.fed.us
SRS	Establishing a wildland-urban interface research and technology	Pete Roussopoulos,	proussopoulos@fs.fed.us
	transfer unit for the South.	Edward Macie	emacie@fs.fed.us
SRS	Long-range forecasting of fire season severity.	Dale Wade	rxfire@ix.netcom.com
SRS	Southern regional models for predicting smoke movement.	Gary L. Achtemeier	gachtemeier@fs.fed.us
NES	Regional climate and fire danger modeling for the New Jersey Pine Barrens.	John Hom	jhom@fs.fed.us
PSW	Improving monitoring and modeling of smoke contributions to regional haze.		abytnerowicz@fs.fed.us
RMS	Mountains and Southwest.	Karl Zeller	kzeller@fs.fed.us
RMS	A nationwide system to generate a daily emissions inventory of pollutants from fires.	Wei Min Hao	whao@fs.fed.us
	RESEARCH ON REHABILITATION AND RESTORATION (12 teams	of researchers)	
PNW	and postfire disturbance.	Edward J. DePuit	ejdepuit@fs.fed.us
PSW	Effectiveness of postfire emergency rehabilitation treatments in the West.	Jan Beyers	jbeyers@fs.fed.us
RMS	Hydrologic and geomorphic consequences of wildfire and fuels management options in Southwest forest and woodland ecosystems.	Daniel G. Neary	dneary@fs.fed.us
RMS	Native plant materials for restoration of sagebrush steppe and pinyon- juniper communities.	E. Durant McArthur	dmcarthur@fs.fed.us
RMS	Dynamics of weed invasions and fire in the northern Rockies.	George Markin	gmarkin@fs.fed.us
RMS	Effects of wildfire and fire management options on invasive and exotic species and pathogens.	Karen Clancy	kclancy@fs.fed.us
RMS	Factors affecting Great Basin watersheds' susceptibility to invasive plants.	Jeanne C. Chambers	jchambers@fs.fed.us
RMS	Patterns of white pine regeneration after fire.	Anna Schoettle	aschoettle@fs.fed.us
RMS	The role of grassland fire in managing exotic and woody plants.	Deborah Finch	dfinch@fs.fed.us
PNW	Response of native and invasive exotic plants to fire and fuel reduction treatments in the Interior Pacific Northwest.	Catherine Parks	cparks01@fs.fed.us

# Appendix Q - Research Projects/Leads (Forest Service (cont.)

### FY 2002 Forest Service Research Teams and Lead Scientists

Unit*	Research Topics	Team Lead Scientist	e-mail address
RMS	Characterizing risks of wildfire and fuels management in aquatic ecosystems.	Bruce Rieman	brieman@fs.fed.us
SRS	Modeling the effects of wildfire on sediment and nutrient loads in the Southeastern U.S.	James M. Vose	jvose@fs.fed.us
	RESEARCH ON HAZARDOUS FUEL REDUCTION (29 teams of res	searchers)	
FPL	Hazardous fuels reduction through harvesting underutilized trees and forest undergrowth and producing three-dimensional structural products.	John F. Hunt	jfhunt@fs.fed.us
FPL	Utilization of small diameter crooked timber for use in laminated structural boards through development of new sawing, laminating and drying processes.	John F. Hunt	jfhunt@fs.fed.us
NCS	Optimizing fuel reductions in time and space	Tom Crow	tcrow@fs.fed.us
NCS	Managing risk of fire on human and ecological communities in the wildland-urban interface	Eric Gustafson	egustafson@fs.fed.us
NES	Fuels and fire behavior in the Central Hardwoods	Daniel Yaussy	dyaussy@fs.fed.us
PNW	Ground-based support for mapping fuel and fire hazard	David V. Sandberg	dsandberg@fs.fed.us
PNW	Fuel reduction and forest restoration strategies that sustain key habitats in the interior Northwest	John F. Lehmkuhl	jlemkuhl@fs.fed.us
PSW	Effects of fuel reductions on stream ecosystems	Carolyn T. Hunsaker	chunsaker@fs.fed.us
PSW	Alternatives to fire for fuel reduction in California shrublands within coniferous forest	Robert F. Powers	rpowers@c-zone.net
PSW	The effect of prescribed fire on hydrologic and soil processes that affect erosion in semi-arid systems.	Ken Hubbert, Mary O'Dea	khubbert@fs.fed.us modea@fs.fed.us
PSW	Effects of wildfire and fuel treatments on California spotted owl	John J. Keane	jkeane@fs.fed.us pstine@fs.fed.us
RMS	Impacts of exotic weeds on fuel loading and fire regimes	Nancy L. Shaw	nshaw@fs.fed.us
RMS	Impact of fuel management treatments on fire behavior and forest vegetation	Dennis E. Ferguson	deferguson@fs.fed.us
RMS	Impact of fuel management treatments on forest soil erosion and production	William Elliot, Deborah Page-Dumroese	welliot@fs.fed.us ddumroese@fs.fed.us
RMS	Management alternatives for fire dependent ecosystems in Colorado and the Black Hills	Linda A. Joyce	ljoyce@fs.fed.us
RMS	Improved guidelines for fuels management in southwestern ponderosa pine and pinyon-juniper forests in wildland-urban interface areas.	Carl Edminster	cedminster@fs.fed.us
RMS	Restoration techniques in lodgepole pine forest	Ward McCaughey	wmccaughey@fs.fed.us
RMS	Use of remote sensing to examine disturbance effects	John E. Lundquist	jlundquist@fs.fed.us
RMS	Riparian ecosystem dynamics in relation to fire in the Rocky Mountains.	Deborah Finch	dfinch@fs.fed.us
SRS	Wildfire risk in the Eastern U.S.	Steve McNulty	steve_mcnulty@ncsu.edu
SRS	Quantifying the ecological and economic tradeoffs of fire and fire surrogate options—Piedmont and Southern Appalachian Mountains.	Thomas A. Waldrop	twaldrop@fs.fed.us
SRS	Quantifying the tradeoffs of fire and fuels management options—Longleaf and slash pine ecosystems of the Atlantic and Gulf Coastal Plain.	Kenneth W. Outcalt	koutcalt@fs.fed.us
SRS	A system for mechanized fuel reduction at the wildland/urban interface	John Stanturf	jstanturf@fs.fed.us
SRS	Fire and herbicide combinations to reduce fire intensity	Dale Wade	rxfire@ix.netcom.com
FPL	Developing tools to assess economic feasibility of processing wood removed in the course of hazardous fuels reduction	Ken Skog	kskog@fs.fed.us
PNW	Integrated approach for assessing fire risk, disturbance patterns, and conducting analysis of fuel treatment strategies on large landscapes	Jamie Barbour	jbarbour01@fs.fed.us
PSW	Fire and fuels management, landscape dynamics and fish and wildlife resources: Study design for Integrated research on the Plumas and Lassen National Forests	Peter Stine	pstine@fs.fed.us
RMS	Environmental and economic impacts of biomass reduction	William J. Elliot	welliot@fs.fed.us
RMS	Effects of wildland fire and fuel treatments on terrestrial vertebrates in	William Block	wblock@fs.fed.us
	Intermountain forests		

# Appendix Q - Research Projects/Leads (Forest Service) (cont.)

### FY 2002 Forest Service Research Teams and Lead Scientists

Unit*	Research Topics	Team Lead Scientist	e-mail address
	RESEARCH ON COMMUNITY ASSISTANCE (11 teams of researc	hers)	
NCS	Modeling people's responses to landscape treatments	John F. Dwyer	jdwyer@fs.fed.us
NCS	Community partnerships	Pamela J. Jakes	pjakes@fs.fed.us
PSW	Recreation and fire in the wildland-urban interface	Deborah Chavez	dchavez@fs.fed.us
PSW	Firewise residential landscapes	Greg McPherson	egmcpherson@ucdavis.ed u
RMS	Building consensus on fire management	Brian Kent	bkent@fs.fed.us
RMS	Preventing residential fire disasters at the wildland-urban interface	Jack D. Cohen	jcohen@fs.fed.us
SRS	Impact of wildfires on local economies	Jeffrey P. Prestemon	jprestemon@fs.fed.us
SRS	Fire protection in residential expansion areas	Terry Haines	thaines01@fs.fed.us
NCS	Mapping the wildland urban interface and projecting its growth to 2030	John F. Dwyer	jdwyer@fs.fed.us
RMS	Community knowledge, beliefs, attitudes, and practices concerning fire and fuels management in Southwestern ecosystems	Carol Raish	craish@fs.fed.us
SRS	An internet-based encyclopedia of Southern fire science and management knowledge	Deborah Kennard	dkennard@fs.fed.us

FPL	Forest Products Lab
NCS	North Central Research Station
NES	Northeastern Research Station
PNW	Pacific Northwest Research Station
PSW	Pacific Southwest Research Station
RMS	Rocky Mountain Research Station
SRS	Southern Research Station

# Appendix R - JFSP Projects/Leads

### FY 2002 Joint Fire Science Program Projects and Lead Scientists

Unit*	Drainet Title	Load Calantiat	a mail address
PNW	Project Title	Lead Scientist	e-mail address
	Fire and Fire Surrogates	Jim McIver	jmciver@fs.fed.us
RMS	Re-obligate for canopy fuels project additional work	Liz Reinhardt	ereinhardt@fs.fed.us
University of Alaska	Development of a Computer Model for Management of fuels	Scott Rupp/Randi Jandt	srupp@lter.uaf.edu
RMS	Historical wildland fire use: lessons to be learned from 25 years of wilderness fire mgt.	Matt Rollins	rrollins@fs.fed.us
SRS	Economic impacts of biomass removal	Jeffrey Prestemon	jprestemon@fs.fed.us
RMS	Cumulative effects of fuel mgt on landscape scale	Mark Finney	mfinney@fs.fed.us
	fire behavior and effects	•	
RMS	Prescribed fire strategies to restore wildlife habitat in Ponderosa Pine forests	Vicki Saab/Natasha Kotlier	vsaab@fs.fed.us
RMS	Developing statistical wildlife habitat relationships for assessing cumulative effects of fuel treatments	Kevin McKelvey	kmckelvey@fs.fed.us
Duke University	Incorporating spatial heterogeneity into fire restoration plans	Dean Urban	deanu@duke.edu
SRS	Fuel classification for the Southern Appalachian Mts	Tom Waldrop	twaldrop@fs.fed.us
PNW	Use of high-resolution remotely sensed data in estimating crown fire behavior	Steve Reutebuch/ Gerard Schroeder	sreutebuch@fs.fed.us
USGS	Advanced Remote Sensing Technologies for monitoring postburn vegetation.	Ralph Root	ralph_root@usgs.gov
NPS	Fire effects on regional air quality including visibility	Bill Malm	malm@cira.colostate.edu
USFS	Fire and fuels extension to the Forest vegetation simulator	Gary Dixon	gdixon01@fs.fed.us
NIFC	Techniques for creating a national Interagency process for predicting preparedness levels	Gerry Day	gerry_day@or.blm.gov
The Nature Conservancy	Demonstration sites in Northern Arizona	Ed Smith /Linda Wadleigh	ebsmith@flagstaff.az.us
	Described Constructed Atlantic constal also formate	Oliver District	LL
USFWS	Prescribed fires in mid-Atlantic coastal plain forests		Hank_Plattee@usgs.gov
USFWS	Prescribed fire for fuel reduction in northern mixed grass prairie	Robert Murphey	bob_murphy@fws.gov
Prescott College	Weed invasions following fire in Southwestern Colorado	Lisa Floyd-Hanna	lfloyd-hanna@prescott.edu
USFWS	Effects of prescribed grazing and burning treatments in alien grass dominated urban interface	Mick Castillo	mick_Castillo@fws.gov
Yosemite National Park	Identifying reference conditions for prescribed fire mgt Yosemite National Park	Kara Paintner	kara_paintner@nps.gov
San Juan National Forest	Fire and forest structure across vegetation gradients in San Juan NF, CO	Rosalind Wu	rwu@fs.fed.us
Umatilla National Forest	Evaluating the effects of prescribed fire and fuels treatment on water quality & aquatic habitat	Caty Clifton	cclifton@fs.fed.us
RMS	Experimental studies of the role of fire in restoring and maintaining arid grasslands	Carl Edminster	cedminister@fs.fed.us
USFS Pacific Southwest Region	Workshops for fire effects information for the manual of California vegetation	Neil Sugihara /Mike McCoy	nsugihara@fs.fed.us
USDOI	Predicting the invasion and survival of the exotic species Paulownia tomentosa following burning in pine and oak-pine forests	Michael Jenkins	mike_jenkins@nps.gov
Colorado State	Database	Carol Simmons	carols@nrel.colostate.edu
University Remote Sensing Applications Center	Field measurements for the training and validation of burn severity maps	Thomas Bobbe	tbobbe@fs.fed.us
ene	The florester Netural Are-	John Kush/Charles M-M-L	kushish@suburn adu
SRS	The flomaton Natural Area	John Kush/ Charles McMahon	kushjoh@auburn.edu
SRS	Dormant season prescription fires to reduce hazardous fuel loads	Dale Wade	rxfire@ix.netcom.com
SRS	Long-term dormant season burning interval study	Dale Wade	rxfire@ix.netcom.com
SRS	Frequency and season of prescription fires to reduce hazardous fuel loads	Dale Wade	rxfire@ix.netcom.com
Boise National Forest	Impacts of prescribed burning on the survival of Douglas-fir and ponderosa pine in the Boise NF	Robert Progar	rprograr@fs.fed.us

### FY 2002 Joint Fire Science Program Projects and Lead Scientists

Unit*	Project Title	Lead Scientist	e-mail address
Washington State	Mgt of fuel loading in the shrub-steppe	Steven Link	slink@tricity.wsu.edu
University			
USGS	Pre-fire fuel manipulation impacts on Alien plant invasion of wildlands	Jon Keeley	jon_keeley@usgs.gov
Klamath Bird Observatory	Ecological effects of fire suppression, fuels treatment, and wildfire through bird monitoring	John Alexander	jda@klamathbird.org
Utah State University	Using cattle as fuel reduction and seeding agents in annual and perennial grass stands in the great basin	Christopher Call	cacall@cc.usu.edu
RMS	Effects of fire and rehabilitation seeding on sage grouse habitat	Jeannie Chamber	jchambers@fs.fed.us
USFWS	Effects of prescribed fire on the invasion of northern mixed-grass prairie by non-native plant species: implications for restoration of endangered ecosystem	Cory Rubin	Cory_rubin@fws.gov
PSW	Fuel reduction effects on a key sierra food web	Malcolm North	mnorth@fs.fed.us
Oregon State University	Interactions of burn season and ecological condition on ecosystem response to fire in mountain big sagebrush communities	Boone Kauffman	boone.kauffman@ost.edu
Point Reyes National Seashore/ NPS	Quantification of fuel in Baccharis (coyote bush) shrub types: assessing fuel loading using destructive and non-destructive methods	Barbara Moritsch	barbara_moritsch@nps.gov
NES	Integrating prescribed fire into mgt. Of mixed-oak forests of the mid-Atlantic region	Patrick Brose	pbrose@fs.fed.us
PNW	Effects of season and interval of prescribed burns in a ponderosa pine ecosystem	Walter Theis	wthies@fs.fed.us
PSW	Fire regimes of forests in the peninsular and transverse ranges of Southern CA	Carl Skinner	cskinner@fs.fed.us
BLM	Development of a methodology for building a long- term fire history in great basin valley landscapes	Pat Barker	jbarker@nv.blm.gov
Oregon State	Fire knowledge for managing Cascadian whitebark	Michael Murray	michael.murray@orst.edu
University NPS	pine forests  Fuels mgt. And non-native plant species: an evaluation of fire and fire surrogate treatments	Tim Bradley	tim_bradley@nps.gov
PSW	Fire effects on rare flora and fauna in Southern CA	Jan Beyers	jbeyers@fs.fed.us
University of Alaska	Fire in the west: a climate fuels assessment symposium	Tom Swetnam	tswetnam@ltrr.arizona.edu
USGS	Symposium, Fire and Invasive Plant Ecology	Matt Brooks	matt_brooks@usgs.gov
RMS	Evaluating high resolution hyperspectral images	Pete Robichaud	probichaud@fs.fed.us
USFS	Real-time evaluation of effects of fuel-treatments and other previous land management activities on fire behavior during wildfires	Jo Ann Fites-Kaufman	jfites@fs.fed.us
Montana State University	Armells Creek Prescribed fire Demonstration Project	Clayton Marlow	cmarlow@montana.edu
NPS	Managing fuels in Northeastern Barrens	David Crary	David_crary@nps.gov
SRS	An integrated assessment of the historical role and contemporary uses of prescribed fire in southern Appalachian ecosystems	,	jvose@fs.fed.us
PSW	Implications of Fire and Fire Surrogate Treatments on Fisher Habitat in the Sierra Nevada	Richard Truex	rtruex@fs.fed.us
RMS	Fire regimes and successional dynamics of yellow pine stands in the Central Appalachian Mts	Henri Grissino Mayer / Elaine Sutherland	grissino@etk.edu
USGS	Effectiveness of alien and native seed mixes in	Matt Brooks	matt_brooks@usgs.gov

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BLM	Bureau of Land Management	PSW	Pacific Southwest Research Station
FPL	Forest Products Lab	RMS	Rocky Mountain Research Station
NCS	North Central Research Station	SRS	Southern Research Station
NES	Northeastern Research Station	USDOI	U.S. Department of the Interior
NIFC	National Interagency Fire Center	USFS	U.S. Forest Service
NPS	National Park Service	USFWS	U.S. Fish and Wildlife Service
PNW	Pacific Northwest Research Station	USGS	U.S. Geological Survey

FY 2002 National Fire Plan Contracting by Program Department of the Interior and Forest Service

	<u> </u>	0,0000000000000000000000000000000000000	Dobobilitation 9		
Program	Treatment	Facilities &	Restoration	Suppression **	Total
Agency	ક	\$	ss.	\$	\$
BLM	\$13,324,654	\$3,101,920	\$13,881,273	\$6,563,272	\$36,871,119
FWS	\$491,711	\$4,275,920	\$1,640,284	\$3,269,489	\$9,677,404
NPS	\$95,284	\$997,467	0\$	\$1,637,242	\$2,729,993
BIA *	\$14,209,633	\$12,490,637	\$2,257,845	\$7,631,326	\$36,589,441
DOI Total	\$28,121,282	\$20,865,944	\$17,779,402	\$19,101,329	\$85,867,957
FS	\$10,565,330	\$18,061,865	\$13,126,069	\$201,930,910	\$243,684,174
DOI/FS Total	\$38,686,612	\$38,927,809	\$30,905,471	\$221,032,239	\$329,552,131

\* BIA data is primarily P.L. 93-638 awards to tribes.

# FY2002 National Fire Plan Contracting by State Department of the Interior and Forest Service

State Co AK AL AR AZ CA	FWS, NPS ntracts \$559,397 \$33,443 \$17,276 \$30,286 \$3,280,778 \$5,209,898 \$82,530	"Tribal Contracts" \$716,632 \$20,097 \$0 \$4,420,466 \$4,318,930 \$10,000	\$1,276,029 \$53,540 \$17,276 \$4,450,752	Forest Service Total Values \$3,961,408 \$58,345 \$29,424	DOI/FS Total Contract Values \$5,237,437 \$111,885
AK AL AR AZ CA	\$559,397 \$33,443 \$17,276 \$30,286 \$3,280,778 \$5,209,898 \$82,530	\$716,632 \$20,097 \$0 \$4,420,466 \$4,318,930	\$1,276,029 \$53,540 \$17,276 \$4,450,752	\$3,961,408 \$58,345	\$5,237,437 \$111,885
AL AR AZ CA	\$33,443 \$17,276 \$30,286 \$3,280,778 \$5,209,898 \$82,530	\$20,097 \$0 \$4,420,466 \$4,318,930	\$53,540 \$17,276 \$4,450,752	\$58,345	\$111,885
AR AZ CA	\$17,276 \$30,286 \$3,280,778 \$5,209,898 \$82,530	\$0 \$4,420,466 \$4,318,930	\$17,276 \$4,450,752		
AZ CA	\$30,286 \$3,280,778 \$5,209,898 \$82,530	\$4,420,466 \$4,318,930	\$4,450,752	\$29,424	
CA S	\$3,280,778 \$5,209,898 \$82,530	\$4,318,930			\$46,700
	\$5,209,898 \$82,530		<b>AT EGG TGG</b>	\$3,122,070	\$7,572,822
lco l s	\$82,530	\$10,000	\$7,599,708	\$26,980,510	\$34,580,218
		ψ10,000	\$5,219,898	\$18,600,964	\$23,820,862
СТ		\$0	\$82,530	\$0	\$82,530
DE	\$0	\$0	\$0	\$0	\$0
	\$1,007,499	\$147,104	\$1,154,603	\$118,799	\$1,273,402
GA	\$377,207	\$0	\$377,207	\$996,595	\$1,373,802
HI	\$301,500	\$0	\$301,500	\$215,339	\$516,839
IA	\$0	\$19,802	\$19,802	\$0	\$19,802
	\$3,111,731	\$1,007,773	\$4,119,504	\$142,923,859	\$147,043,363
IL	\$32,000	\$0	\$32,000	\$28,810	\$60,810
IN	\$3,336	\$0	\$3,336	\$39,282	\$42,618
KS	\$25,405	\$0	\$25,405	\$3,010	\$28,415
KY	\$5,900	\$0	\$5,900	\$24,924	\$30,824
LA	\$153,151	\$0	\$153,151	\$252,251	\$405,402
MA	\$0	\$23,025	\$23,025	\$0	\$23,025
MD	\$360,713	\$0	\$360,713	\$1,000	\$361,713
ME	\$0	\$439,764	\$439,764	\$0	\$439,764
MI	\$0	\$61,028	\$61,028	\$670,976	\$732,004
MN	\$72,306	\$1,817,554	\$1,889,860	\$75,629	\$1,965,489
MO	\$0	\$0	\$0	\$25,941	\$25,941
MS	\$527,806	\$196,990	\$724,796	\$297,815	\$1,022,611
	\$1,311,680	\$6,542,124	\$7,853,804	\$7,296,595	\$15,150,399
NC	\$260,959	\$0 \$707.040	\$260,959	\$187,065	\$448,024
ND NE	\$122,823	\$727,013	\$849,836	\$0	\$849,836
NH	\$0 \$0	\$150,000	\$150,000 \$0	\$46,195 \$46,746	\$196,195
NJ	\$3,500	\$0 \$0	\$3,500	\$40,740	\$46,746 \$3,500
	\$3,500 \$1,492,382	\$668,098	\$2,160,480	\$3,111,360	\$3,500 \$5,271,840
	\$1,492,362 \$1,814,932	\$291,640	\$2,100,480	\$479,833	\$2,586,405
NY	\$3,095	\$42,914	\$46,009	\$0	\$46,009
ОН	\$1,677	\$0	\$1,677	\$1,489	\$3,166
ОК	\$1,077	\$754,536	\$754,536	\$0	\$754,536
	14,772,073	\$4,703,565	\$19,475,638	\$19,216,733	\$38,692,371
PA	\$392,649	\$0	\$392,649	\$285,359	\$678,008
RI	\$0	\$1,750	\$1,750	\$0	\$1,750
SC	\$116,297	\$0	\$116,297	\$49,686	\$165,983
SD	\$619,426	\$18,000	\$637,426	\$1,069,894	\$1,707,320
TN	\$0	\$0	\$0	\$25,913	\$25,913
TX	\$801,060	\$55,027	\$856,087	\$2,707,543	\$3,563,630
	\$4,692,675	\$0	\$4,692,675	\$1,745,506	\$6,438,181
VA	\$27,491	\$0	\$27,491	\$588,947	\$616,438
VT	\$0	\$0	\$0	\$0	\$0
	\$6,617,169	\$8,662,266	\$15,279,435	\$5,621,117	\$20,900,552
WI	\$225,482	\$660,078	\$885,560	\$0	\$885,560
wv	\$0	\$0	\$0	\$414	\$414
WY	\$810,984	\$113,265	\$924,249	\$2,776,829	\$3,701,078
DOI/FS Total \$4	49,278,516	\$36,589,441	\$85,867,957	\$243,684,174	\$329,552,131