



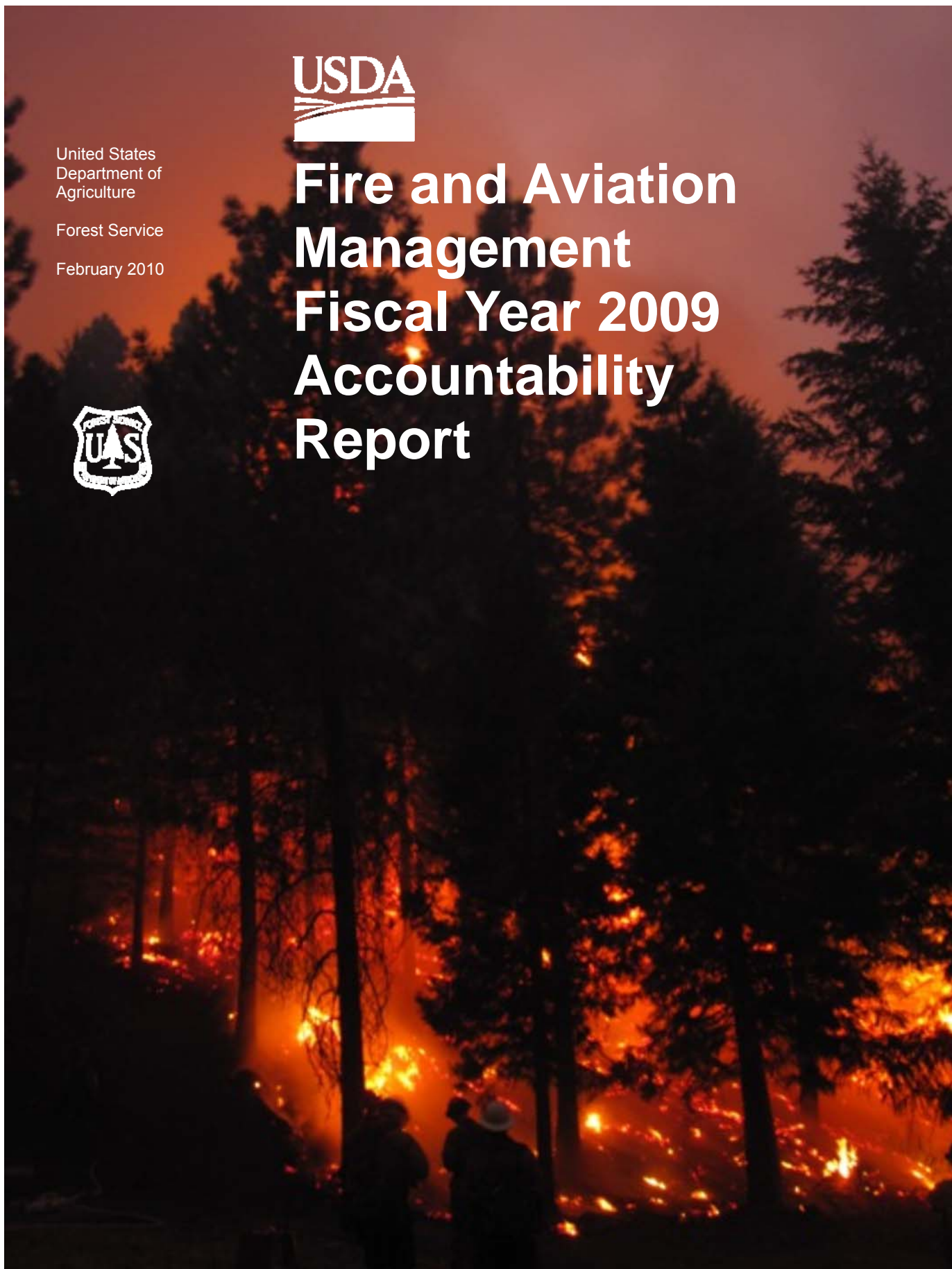
United States  
Department of  
Agriculture

Forest Service

February 2010



# Fire and Aviation Management Fiscal Year 2009 Accountability Report



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# **Fire and Aviation Management Fiscal Year 2009 Accountability Report**

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## From the Director

Another fire season has concluded; and as we look back and reflect on our accomplishments, we do so with mixed emotions. While thankfully the Forest Service did not experience any fatalities during ground fire operations this year, we lost one firefighter during a training accident early in the season. Our cooperators likewise suffered losses when three lives were lost as a Neptune airtanker crashed in Utah while en route from Montana to a wildfire in New Mexico; and two Los Angeles County firefighters paid the ultimate price during the Station Fire on the Angeles National Forest. We mourn the loss of our fellow firefighters—our hearts and prayers go out to their families. We vow never to forget their sacrifices, and we pledge our dedication to fostering a culture where good, sound risk management practices, grounded in doctrine, are used with every action we take, every day.



Wildland fire management work is complex. While there are only two kinds of fire (wildfire and prescribed fire), there are innumerable variables associated with planning and preparing for those fires. The significance of what we do is astonishing and impacts a vast number of people and resources across the nation. We have an amazing group of people who work for us, and with us—together, that makes the organization a success.

Our work this past year focused on preparing for wildfires; treating dense, hazardous vegetation in advance of a fire happening; partnering with federal, state, and local cooperators; and managing wildfires when they occurred. I am extremely proud of the work we accomplished.

During 2009, the wildfire season was defined as, “moderate,” when considering the level of fire activity across the nation. That certainly didn’t mean there were not challenges. Alaska experienced an unusually active fire season, and many of our state partners had their share of fires. On national forest system lands, we had several fires of national significance and six that exceeded the \$10 million mark which will undergo large fire cost reviews.

Although this report will provide you a good cross-section of the accomplishments made by the Forest Service this year, there are several programs/areas that I would like to call to your attention.

Last year, the Forest Service improved the condition of over 3.5 million acres by reducing the dense vegetation—hazardous fuels, across landscapes. In fact, due to the extraordinary work of our dedicated personnel and partners, we exceeded our targeted acres in 2009 by 40 percent. Concurrently, the Forest Service also met the goals for hazardous fuels reduction established by the American Recovery and Reinvestment Act (ARRA).

The Forest Service and the other federal natural resource management agencies successfully implemented the new guidance for the Federal Wildland Fire Management Policy and transitioned to two kinds of fire—planned ignitions or prescribed fire and unplanned ignitions or wildfire. This change was a significant revision after managing under the old implementation strategy for more than three decades. The new strategy afforded the federal agencies the guidance to manage fire under multiple objectives with more specific benefits detailed later in this report.



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Also, significant for its indication of how we work together was the establishment of agency wide engine standards. By initiating these standards, the agency will benefit from streamlined procurement procedures with administrative cost reductions, standard maintenance, reduced training costs, and the ability to move the workforce around without loss of productivity.

On October 29, 2009, the House and Senate passed the Interior, Environment, and Related Agencies Appropriations Act, 2010, which included Title V—the Federal Land Assistance, Management, and Enhancement (FLAME) Act of 2009. President Obama signed this bill into law on October 30, 2009. Many in Congress championed this law in an effort to solve the ongoing, increasing problems with wildfire suppression emergency costs.

In summary, the FLAME Act established two FLAME Funds—one for the Department of the Interior funded at \$61 million and one for the Forest Service funded at \$413 million for Fiscal Year 2010. These funds address the impacts of increasing wildfire suppression costs and their effects on other agency programs. The funds will reduce the need for agencies to transfer funds to wildfire suppression from other agency programs, which historically led to considerable disruption to important program functions. One year after enactment of the FLAME Act, the Secretary of the Interior and the Secretary of Agriculture are required to submit a report to Congress containing a cohesive wildfire management strategy consistent with previous GAO recommendations. Collaborative work to complete the cohesive strategy will commence early in 2010.

During 2009, we worked directly with the National Association of State Foresters and the International Association of Fire Chiefs, as well as other federal, state, and local governmental and non-governmental partners, in an effort to more clearly define our roles and responsibilities both nationally and internationally—so each of our programs will better complement the other.

We made many significant accomplishments in 2009, many of which are detailed in this report. Much of our success, however, is directly dependent on the people who do the work on the ground. Without their efforts, and those of our partners, we would accomplish nothing. Every year brings new challenges but with the support of our highly talented, professional employees, and our national and international partners, I look forward to addressing the challenges to come in 2010. In the meantime, I hope the 2009 accountability report will illustrate the good work we do each and every day.



—*Tom Harbour, Director*  
Fire and Aviation Management  
USDA Forest Service

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## Part I. Introduction

### A Look Back at the 2009 Wildfire Season

Nationally, across federal, state, tribal, and local jurisdictions, the 2009 wildfire season was considered moderate. The season began with significant wildfire activity across the states of Texas, Oklahoma, Kansas, Missouri, and Arkansas. As spring approached, wildfire activity expanded into Florida, Mississippi, and North Carolina.

In parts of the West, rainfall kept fuels moist and green through June, which resulted in moderate fire weather conditions and slowed the start of the western fire season. As a result, fire season did not begin in the western United States until the middle of July.

Unlike the lower 48 states, Alaska experienced a very busy wildfire season. Prolonged warm, dry conditions across much of Alaska's interior led to an unusually active fire season. Nearly three million acres of Alaskan forested land burned across jurisdictions in 2009. Although not a record, the acres burned were significant and represented approximately one-half of the total acres burned for the entire country this year.

A weak monsoon weather pattern in the southwestern United States played a significant role in the outcome of the western wildfire season. Typically, this weather pattern brings increased moisture and lightning events into the Southwest in July and August. The lightning events that routinely occur with this weather pattern did not occur in 2009. Although Utah and Colorado experienced some large fires, most of the Southwestern and Great Basin regions experienced a moderate season.

One of the most significant wildfires of the year was the Station Fire, which burned north of Los Angeles from late August to late September. More than 4,800 firefighters and support personnel were assigned to this

fire at its peak. The fire burned in extremely rugged terrain and was one of 2009's toughest wildfire challenges. In the end, more than 160,000 acres were burned and 209 structures were lost.

Unlike fall fire seasons of the past several years, as late summer, early fall approached, the national fire season ended without complications. Nationally, across all land ownerships, the fire season concluded with nearly 6 million acres burned—just under the annual average for the past decade.

During the 2009 wildfire season, the National Preparedness Level—the gauge used to rate the intensity of the fire season by the National Interagency Fire Center, reached the level of three out of five at the height of the season. The 2009 fire season was the first time in the past half a decade that the National Preparedness Level did not reach level four or five.

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**Burnout nears meadow in Funny River area  
Shanta Creek Fire  
Alaska**



## Part II. 2009 Wildland Fire Management Appropriation

### Managing Fire Suppression Costs

In fiscal year (FY) 2009, the USDA Forest Service (Forest Service) reported nearly 7,770 wildfires on national forests and grasslands across the United States. These fires resulted in approximately 716,000 acres burned with suppression expenditures reaching over \$1 billion. Although less acres burned in FY 2009 as compared to FY 2008, the numbers of fires reported increased, and the effects of the wildland urban interface and climatic and ecological changes

continued to make the protection of life, property, and natural resources more complex, demanding, and expensive. As such, the agency continued its efforts to manage costs.

In FY 2009, the agency expanded and continued to implement an aggressive hazardous fuels reduction program, accelerated the use of risk-informed fire management, expanded operation efficiencies, and continued use of management controls. Specifically, Forest Service actions included:

- Focused hazardous fuels treatments in those areas closest to the wildlands—the wildland urban interface (WUI) areas, and in the fire-adapted ecosystems that presented the greatest opportunity for restoration.
- Expanded the use of the Wildland Fire Decision Support System (WFDDSS) tools across the agency.
- Continued the use of science-based tools giving fire managers the capacity to deliver better results on all wildland fires, either planned or unplanned.
- Continued work with partners to build strong, cooperative frameworks that promoted safety, success, and ecosystem health.
- Implemented revised guidelines to the Federal Wildland Fire Management Policy that promoted efficient, effective management of both planned and unplanned wildland fires.

Fire and Aviation Management worked aggressively within the agency and with cooperators to implement these strategies and to manage suppression expenditures. While Forest Service suppression expenditures exceeded \$1 billion, the agency’s costs would have been much higher without these management controls. Agency actions resulted in significantly lower suppression expenditures than would have occurred under traditional strategies.

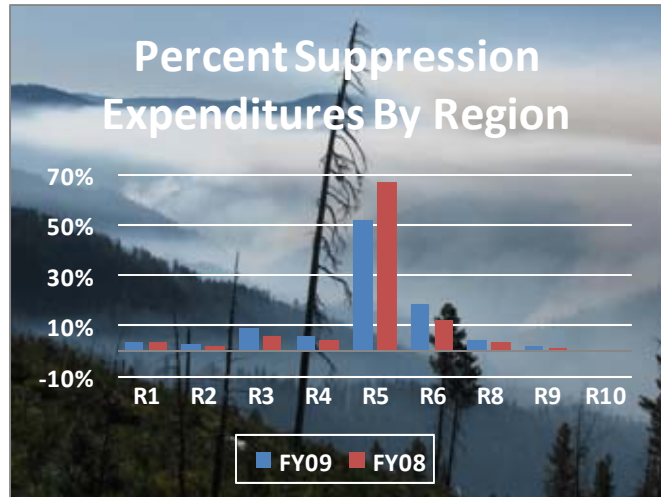
As was the case in FY 2008, Forest Service wildfire activity in FY 2009 was dominated by Region 5—California. During this timeframe, 43 percent of the agency’s total number of acres burned were accounted for across the national forests in California, and wildfire suppression expenditures in Region 5 consumed more than 50 percent of the Forest Service’s reported wildfire suppression costs in FY 2009.

Moderate activity in Region 3, the Southwest, resulted in additional expenditures in the spring and early summer, followed by two of the largest fires of the season—the La Brea and Station Fires in Region 5 in August. Fire activity in Region 6, the Northwest, was considered normal.

The agency identified six fires in FY 2009 with federal expenditures over \$10 million. These fires accounted for over \$176 million of incident specific agency expenditures. Of the six fires, five occurred in California and one in the Pacific Northwest Region—Region 6.

Forest Service large fires (300 acres and greater) averaged over \$2 million each in FY 2009, down from \$6 million last year and approximately \$4 million each in previous years.

**Graphic 1. Percent of Suppression Expenditures by Region for Fiscal Year 2008 and 2009**



**Wildland Fire Management Appropriation**

The Forest Service operated under short-term Continuing Resolutions (CRs) from October 2008 into March 2009. These CRs allowed the agency the ability to continue all requirements, authorities, conditions, limitations, and other provisions of the FY 2008 Appropriations Act, other than emergency funding.

On March 11, 2009, the Forest Service received a Wildland Fire Management Appropriation totaling more than \$2.1 billion. In June, an emergency supplemental was received in the amount of \$200 million. As a result of this funding and the reduced level of wildland fire activity, there was no need for the Forest Service to consider or request the transfer of other agency funds to wildland fire.

The total Wildland Fire Management Appropriations in FY 2009 were over \$2.3 billion, including the June 24 supplemental.

The Wildland Fire Management Appropriation represented nearly 45 percent of the Forest Service’s discretionary appropriations in FY 2009, up from 43 percent in FY 2008. According to the President’s FY 2011 budget, the Wildland Fire Management Appropriation will represent 43 percent of the agency’s discretionary budget in 2011.

In FY 2010, Fire and Aviation Management will continue to aggressively pursue strategies to enhance efficiency and cost effectiveness including risk-informed allocation of preparedness resources, increasing accountability for large fire management, establishing performance metrics for large fires, risk-informed prioritization of hazardous fuels treatments (Hazardous Fuels Prioritization Allocation System), prioritization of funds to states (State and Private Forestry Re-Design), and other actions.

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## Part III. 2009 Major Accomplishments

Fire and Aviation Management continues to resolutely work toward accountability expectations outlined by the Secretary of Agriculture, the Chief of the Forest Service, Office of Management and Budget (OMB), Government Accountability Office (GAO), the Office of the Inspector General (OIG), and other regulatory agencies to ensure programs across the board perform well and demonstrate measurable progress to enhance the management of programs.

In an effort to clearly demonstrate the significant accomplishments of Fire and Aviation Management during fiscal year 2009, actions are not only tied to the goals identified in the Fire and Aviation Management Strategic Plan, but an account of Fire and Aviation Management Performance Measures are likewise provided in this report.

### National Fire and Aviation Management Strategic Plan

Fire and Aviation Management (FAM) completed a draft of the National Fire and Aviation Management Strategic Plan in July 2008. The plan is tiered to the USDA Forest Service Strategic Plan, Fiscal Years 2007-2012, and is intended to provide specific, measurable goals, objectives, and strategies for all FAM programs. The strategic plan incorporates the associated goals, objectives and strategies previously outlined in the Forest Service Aviation Strategic Plan and the Accountable Cost Management Strategy. The strategic plan encompasses other agency plans such as the Wildland Fire and Fuels Research and Development Strategic Plan, the Woody Biomass Utilization Strategy, and the Forest Service Restoration Framework. The plan concentrates on FAM's quest for sound, cost-effective management practices that will lead to healthy fire-adapted landscapes.

Development of annual work plans is an ongoing process and will guide all activities that support the FAM program. These operating plans, or work plans, will include critical support from interagency partners and the public.

The accomplishment portion of the FY 2009 FAM Accountability Report is tiered to the six goals of the strategic plan as follows:

- Goal 1: Technology and Science
- Goal 2: Protection and Management
- Goal 3: Hazardous Fuels and Restoration
- Goal 4: Community Assistance
- Goal 5: Communication
- Goal 6: Workforce

The accountability report lists each goal and its respective objective, followed by the significant accomplishments associated with each goal. In some cases, specific successes are recounted through success stories.

The FAM Performance Measures include the following areas:

- Forest Service Strategic Plan
- Program Assessment
- 10-Year Comprehensive Strategy Implementation Plan (updated December 2006)
- Forest Service National Measures Set

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#### Smoke Column from the Table Mountain Fire Beaverhead—Deerlodge National Forest Montana



## Goal 1—Technology and Science

*Fire and aviation management decisions are informed by best available science and technology.*

### Objectives:

1. Annually prioritize, support, and select the research, development, and utilization of future technologies that assist fire management leaders in informed decision making.
2. Have a support system in place, including adequate training and hardware which readily transfers new technology to the field upon completion.

### Continuous Improvement in Decision Making for Large Fire Management

The primary focus of the National Incident Management Organization (NIMO) program in FY 2009 was focused on the implementation of the Continuous Improvement in Decision Making for Large Fire Management program. Work through this initiative started the process of institutionalizing the application of risk management, utilizing technology, and engaging communities and stakeholders. It is believed that the NIMO teams, through the application of alternative suppression strategies and tactics afforded by this initiative, achieved an estimated savings of nearly \$300 million in suppression costs during FY 2009.

#### Implementation

The NIMO program was tasked with the development of the Continuous Improvement in Decision Making for Large Fires (CI) initiative—a complex, dynamic fire management model, in response to the changing fire environment which has resulted in larger fires that have become increasingly more complex and dangerous.

The basis of the model called for assessments on large wildfires and revealed the need for improved risk management and stringent accountability of resource allocation and expenditures.

During FY 2009, the four NIMO teams assisted 30 national forests within five geographical areas. These forests were identified as those most likely to experience large, costly fires.

The first phase of the CI approach was a series of pre-wildfire season sessions which were held on national forest units and included other federal, state, and local partners, community leaders, and incident management team members. During these sessions, strategies were developed and actions were identified to better manage large, long duration fires while considering:

### Helicopter makes water drop on the Station Fire California



- Reduction of risk to firefighters and the public,
- Demonstrated responsible management,
- Improved results on the land,
- More prudent resource allocation decisions,
- Collaborative decision processes on large fires, and
- Aggressive education and dialogue with neighboring publics regarding the potential for catastrophic wildfire.

The NIMO teams led focused simulations using Google Earth as a platform to display information geospatially. The training sessions were designed to discuss methods for managing incidents including operational risk management, resource pooling, and the use of the Wildfire Decision Support System (WFDSS) tools. Simulations often involved over 100 participants at a time and allowed for discussions regarding preparation for wildland fires and better, more collaborative management of a large, complex wildfire event should one occur.



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## Wildfire Decision Support System

Aggressive development and deployment of the Wildland Fire Decision Support System (WFDSS) tools continued in FY 2009. The system supported managers in making wildland fire decisions that ensured the safety of firefighters and the public, protected structures and natural resources, and efficiently used firefighting resources, thereby reducing costs and potential losses on complex wildland fires.

The WFDSS tools were an integral part of the second phase of CI as implemented by NIMO. These tools, coupled with other emerging technology and a local knowledge base, helped managers measure the probability of success and make well-informed decisions.

On each forest, CI methods were tested with agency administrators fully engaged. As a result, managers felt knowledgeable and empowered to make appropriate decisions. Local communities indicated communication was transparent, and they felt well educated and prepared.

## Emerging Technology

Emerging technology played a large role in managing risks encountered by firefighters while reducing costs. NIMO teams developed a system that offered multiple alternatives that not only evaluated the resource levels used, level of exposure, and estimated cost but, likewise, measured the socio-political consequences. These “prospectuses” were shared and discussed with key leadership in the organization. Risk-based decisions were adopted by fire managers and line officers alike.

Photo recon of vegetative conditions, structures, and water sources was conducted, and digital files were sent to fire managers in order to enhance planning and operational intelligence. This reconnaissance displayed near real-time fire behavior and weather information from the field and provided a visual platform for public meetings.

During the FY 2009 wildfire season, the NIMO teams managed or assisted in strategic planning with agency administrators on nine wildfires on national forests across the west and mid-west portions of the United States—five in California, two in the Pacific Northwest Region (Oregon and Washington), and two in the Northern Region (Montana, northern Idaho, and northwestern Washington).

At the end of FY 2009, the NIMO teams conducted an after action review and discussed lessons learned from the 2009 program. Plans are to expand the program in FY 2010.

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**Smoke from the Canal Creek Fire  
Willamette National Forest  
Oregon**



## Automatic Wildfire Surveillance System

A smoke detection/surveillance system was installed by the San Dimas Technology and Development Center on the Shasta Bear Lookout in Redding, California. This is a Cal Fire lookout that overlooks both state and federal lands. The system is being monitored jointly by the Forest Service and Cal Fire Emergency Operations Center. The lookout is remote, and power is not available. Therefore, photovoltaic and fuel cells are being considered as a source of power. Initial evaluation of the system indicates that the system is viable. Remote access to the system, which allows remote parties to view “events,” works well. Further testing will be conducted as soon as a power solution is implemented.

## Aerial Delivery of Fire Retardant

After consultation with the United States Fish and Wildlife Service (FWS) and the National Marine Fisheries Service, the Forest Service signed a decision to ensure that environmental safeguards are in place during the use of aerial fire retardant. New procedures were established to ensure that aerial fire retardant is formulated and used in ways that avoid harm to vulnerable fish and wildlife species and their habitats.

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**Aerial Retardant drop accomplished over the Taylor Fire  
on the Coconino National Forest  
Arizona**



**Delegation of Authorities for Incident Management Teams Regarding the Use of Aerial Retardant**

Each Forest Service Region was responsible to update map information and provide that information to Incident Management Teams when a team was assigned to a wildfire incident on their respective national forest. Further, forest supervisors assigned resource advisors to wildfires to ensure resource protection requirements were known and followed, including the exclusive use of water only during wildfire events when and where appropriate. Resource protection requirements were also incorporated into the Delegation of Authority and provided the incident commander.

**Reasonable and Prudent Alternative**

Reasonable and Prudent Alternatives (RPA) were prepared and provided to regional foresters, regional fire directors, threatened and endangered species (TES) directors, and forest supervisors prior to the beginning of the FY 2009 fire season. Forest supervisors were required to contact the local FSW and NMFS offices prior to the beginning of fire season to discuss relevant RPAs.

**Reporting of Wildland Fire Chemicals in Designated Areas of Critical Habitat**

The Forest Service directed all field units to report wildland fire chemical accidents and spills in waterways, within a 300 foot buffer, or in non-waterway of threatened and endangered species habitat.

When retardant or foam was used to suppress a wildland fire where it adversely affected any threatened, endangered, proposed species, or designated or proposed critical habitat, the Forest Service line officer was

directed to initiate an emergency consultation with FWS and/or NMFS officials to monitor, determine significant effects, and design appropriate responsive measures.

**Wildland Fire Chemical Systems**

The Wildland Fire Chemical Systems (WFCS), located at the Missoula Technology and Development Center in Missoula, Montana, provided national resource agencies detailed information to promote safe, effective use of suppression chemicals and delivery systems. The following represents some of the accomplishments and programs implemented by WFCS in 2009:

**Lot Acceptance and Quality Assurance Program**

As of September 18, 2009, WFCS analyzed more than 500 samples of retardants from 94 bases to insure that the retardant was the proper viscosity and had the correct salt content to be effective when dropped from air tankers. They, likewise, assisted base managers in correcting any problems.

**New Product Evaluation**

WFCS continued to evaluate new retardants, foams, gels, and color for gels. As of September 22, 2009, they had analyzed 12 retardants, 6 gels, and 1 foam. The new retardants being evaluated contain no sulfates and have a lower toxicity to aquatic species. WFCS goal is to being full scale use of these retardants by FY 2011.

**Gel Evaluation Study**

WFCS assisted in developing an operational test plan and field protocols for obtaining and testing water and gel samples from the Martin Mars.

**Environmental Monitoring**

WFCS collected and compiled information provided by the field for use in assessing the effects of fire chemicals in waterways, riparian areas, and in TES habitat.

**Toxic Release Inventory Reporting**

Reviewed retardant utilization during FY 2008 at all Forest Service retardant bases to determine if a Toxic Release Inventory Report was required by the Environmental Protection Agency (EPA). When required, those bases were provided assistance by WFCS personnel to ensure accuracy of reporting requirements.

**Training**

WFCS personnel provided instruction to members of the aviation and wildland firefighting community, including air tanker pilots, regarding the types of fire chemicals and the factors that influence drop performance.

## National Fire Decision Support Center

With the creation of the National Fire Decision Support Center (NFDSC) at the National Interagency Fire Center in May of 2009, corporate delivery of decision support increased the quality and consistency of tools available to Forest Service administrators during wildfire incidents. These tools improved agency officials' ability to make risk-informed decisions during a wildfire incident. This investment complemented ongoing actions, such as large fire strategies, implementation of the updated guidance for the Federal Wildland Fire Policy, and deployment of the Wildland Fire Decision Support System's tools.

The NFDSC is a collaborative effort between Fire and Aviation Management and Research and Development. The Center provides a key link between wildland fire science development and the appropriate application of that science. The NFDSC delivers:

- corporate decision support and monitoring,
- improved fire science support so risk models can be enhanced,
- development of fire economic models to inform agency administrator decisions,
- state-of-the-art risk management protocols, and
- social sciences that helps inform decisions.

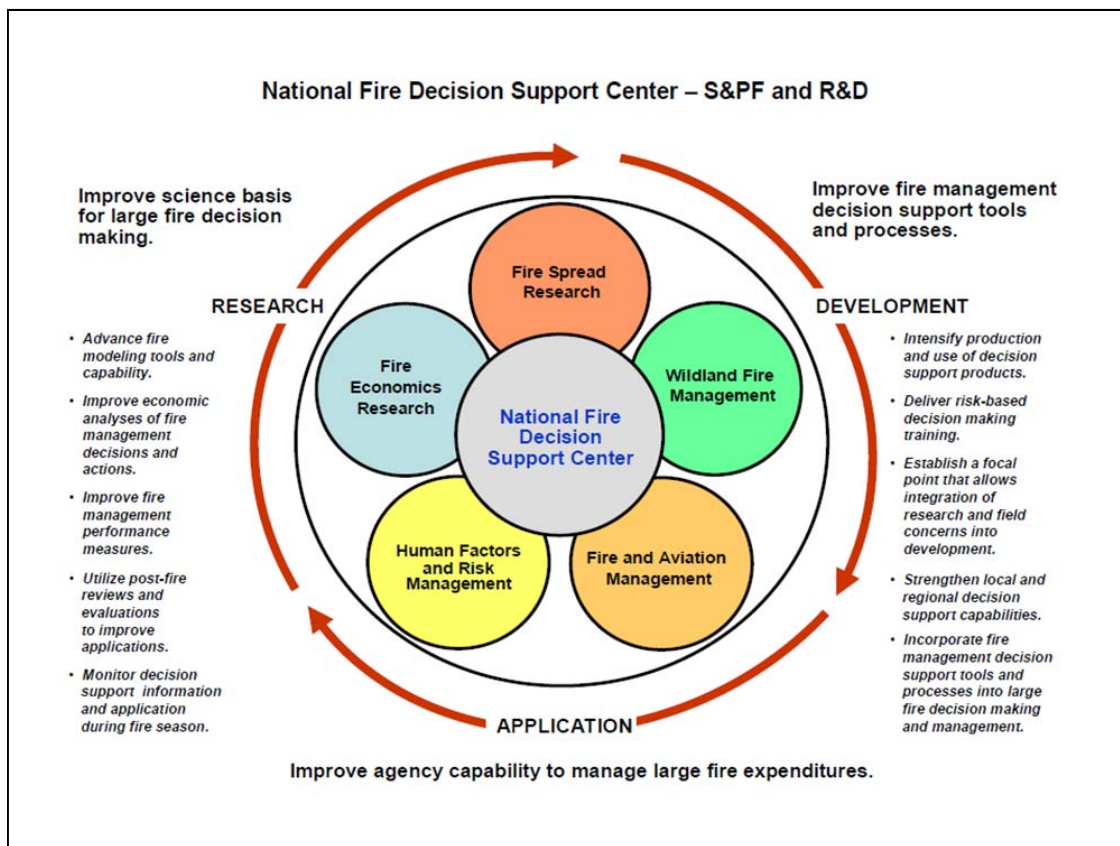
The NFDSC also supports the field in the use of Fire Program Analysis and LANDFIRE.

The NFDSC provides real-time decision support for large fires that consider incident-specific fire behavior, values at risk and performance, and decision analysis. The result is better risk-informed strategic and tactical decisions for wildland fires, reduced firefighter exposure, improved basic science for large fire decision making, and improved capability to manage large fire expenditures.

The NFDSC is comprised of the following divisions:

- Wildland Fire Management Research, Development and Analysis,
- Human Factors and Risk Management Research, Development and Analysis,
- Fire Spread Research, and
- Fire Economics Research.

Graphic 2. National Fire Decision Support Center





## Goal 1—Success Stories, Science and Technology

### Management of the Boze and Rainbow Creek Fires

On September 12, through September 13, 2009, lightning struck in the Umpqua National Forest and the southern Cascade Range in Oregon. Fifty ignitions were detected as result of this lightning event. Within several days, all wildfires were contained except the Boze Fire. As the complexity of the Boze Fire exceeded the capabilities of local fire management officials, the Umpqua National Forest assigned the management of the fire to the Pacific National Incident Management Organization (NIMO) team, already in place providing assistance with the Forest's long-term implementation plan for the fire.

The Boze Fire burned in inaccessible, steep, dangerous terrain prohibiting safe, direct firefighter access. Initial fire response included the approach of using existing roads and trails as fire containment lines. High temperatures and low humidity fueled the fire growth, causing spotting which the firefighters were unable to contain. On the same day, the Rainbow Creek Fire ignited as a result of lightning and quickly burned hundreds of acres two miles east of the Boze Fire. Both the Boze and Rainbow Creek fires doubled in size in only a few hours. Fire crews were removed from the fireline due to safety concerns and the volatile conditions experienced on both fires.

#### “Prospect” Used by the Team

Using the long-term implementation plan and a risk-assessment model called, “Prospect,” the NIMO team, officials on the Umpqua National Forest, and the Douglas County Forest Protective Association were able to make risk-informed decisions, considering the identified risks, values and resources at risk, remoteness of the fire, and weather projections—cooler, wetter fall weather, to manage the fire.

#### First Day of Rainbow Creek Fire Umpqua National Forest Oregon



As a result, managers employed a “point-protection” strategy—checking the fire’s spread to protect values at risk until the cooler, wetter weather moderated the fire activity.

It is projected that the implementation of the Continuous Improvement in Decision Making for Large Fire Management on the Boze Fire reduced exposure of firefighters from potentially 380,000 hours to a total of 73,000 hours, with a projected cost savings of nearly \$18 million in fire suppression costs while effectively protecting the resources and values identified in the long-term implementation plan.

#### Key Points

- The Forest Service evaluated “values at risk;” then, suppression activities were tiered to protection priorities.
- Values at risk were protected using the minimum resources necessary and provided protection only as the fire approached predetermined trigger points.
- Risk-informed approach was based on firefighter safety, probability of success, and current and predicted weather conditions. The associated reduced cost of fire suppression was an outcome of the “Prospect” used during the Boze Fire—not a driving force for the decisions made.
- Approach reduced overall costs by reducing the numbers of ground and aerial suppression resources used to meet objectives.
- Implementation of CI reduced exposure of firefighters from potentially 380,000 hours to a total of 73,000 hours, saving approximately \$18 million in fire suppression costs.
- Strategies were developed collaboratively between the NIMO team and Forest Service with participation from the Douglas Fire Protective Association.

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## Forest Service Firefighters Provide Assistance After Airplane Crash in Wilderness

On July 14, 2009, it appeared to be a great day for flying when veteran flight instructor Art Lazzarini and the pilot boarded their Cessna 206 on a rugged Idaho mountain airstrip. No one could have predicted what would happen next when shortly after takeoff, the aircraft clipped the top of a tall pine tree in a remote area of the Frank Church Wilderness area. Lazzarini, who specializes in backcountry flight training, initially thought the stout, single-engine utility airplane could survive the impact and keep flying. It was only after a second, third, and fourth impact, that he knew they were going down.

The airplane came to rest about three-quarters of a mile from the gravel airstrip near the Middle Fork of the Salmon River. The Cessna's owner—the pilot, suffered only minor injuries; but Lazzarini wasn't so lucky as he sustained a broken wrist, hand, and thumb on the right side, along with a fracture to his right forearm and pelvis in the crash. With the assistance of the pilot, Lazzarini was freed of the plane's wreckage. Only then, did he contemplate the several issues that hampered their chances for a speedy rescue.

First, no one at home knew when the pair left Hailey, Idaho, or that they were going to take off from the unattended Simonds airstrip. The two had added it to their itinerary only after landing or practicing approaches at several nearby airstrips. They had not filed a flight plan with the FAA, and it was very unlikely that anyone had seen them go down. Several people, however, knew that their final destination was McCall, Idaho, as Lazzarini was scheduled to teach a course there the day of the crash. Fortunate for the two, the students and other instructors were sure to miss him.

Although the airplane was equipped with a standard emergency locator transmitter (ELT) which was certain to send out a blaring signal, the United States' satellites, five months earlier, stopped monitoring their particular frequency. That meant only local pilots flying above them might hear it; and even if heard, the signal would only alert the Civil Air Patrol or other searchers who could just track the signal to a 20-square-kilometer search area. It would be a difficult search to say the least considering they fell amid a very tall, thick stand of trees.

The one thing they did have in their favor was that Lazzarini and the pilot each had a personal locator beacon (PLB). The pilot dug the orange, handheld devices from the wreckage of the plane, placed them on the top of the airplane, and hit the 911 buttons. As he did so, an instant emergency message was sent to a communications center in Houston, Texas, where the dispatcher immediately started making telephone calls and sending email



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**McCall  
Smokejumpers  
assisted in rescue  
operation**

messages to those people identified by the two men when they purchased the PLBs.

One of those designated by Lazzarini was Lori MacNichol, the owner of McCall Mountain/Canyon Flying Seminars, where Lazzarini had been scheduled to teach later that morning.

Immediately upon notification, MacNichol plugged the reported latitude and longitude into Google Earth and took note of the location of the crash and the nearest available airstrip. The dispatcher, following local protocols, notified the local sheriff. MacNichol called the state aeronautics bureau and was informed the agency did not do rescues, only searches.

MacNichol didn't need someone to search—she already knew the location of the accident; so she called the Forest Service's aviation center in McCall, Idaho. At that time, a Forest Service de Havilland Twin Otter carrying smokejumpers was on a training mission just a few miles away from Yellow Pine, the location of the accident. MacNichol gave the latitude and longitude coordinates to the Forest Service dispatcher who relayed them to the Twin Otter crew via radio. Five minutes later, the Forest Service aircraft was overhead and saw the wreckage, but determined that the Simonds airstrip was too short for them to safely land.

Shortly thereafter, a medical helicopter set down in a remote field near the crash site and emergency medical technicians hiked to the accident site. Upon arrival, they stabilized Lazzarini; however, they were unable to carry him through the dense forest and over the rough terrain. It was then that another helicopter from the Forest Service carrying firefighters arrived overhead. The firefighters rappelled down ropes to the site of the accident and described the scene to the aircraft carrying the smokejumpers. Soon, the smokejumpers parachuted into the area and joined the other firefighters. The smokejumpers used chainsaws to clear a landing zone for the medical helicopter that subsequently, transported Lazzarini to a hospital in Boise where he was treated and recovered.

Thanks to the Forest Service firefighters Lazzarini arrived at the hospital less than four hours after the accident.

## Goal 2—Protection and Management

*The Nation's communities are protected and well-prepared for fire and the Nation's resources are protected and managed through safe, efficient, effective wildland fire and aviation management and emergency response.*

### Objectives:

1. Manage wildland fires and emergency responses safely, efficiently and effectively as they occur.
2. Reduce the number of human-caused wildfires through prevention and education on an ongoing basis.
3. Land and resource management plans are developed to guide fire management and protection activities through desired conditions, objectives and guidelines.

## Wildland Fire Serious Accidents

The 2005 Accident Investigation Guide states, “A Forest Service serious accident is one that involves:

- a death,
- three or more persons hospitalized after treatment for reasons other than observation,
- wildland fire shelter deployments or entrapments,
- property damage, other than aircraft, that exceeds \$250,000, or
- damage to aircraft that exceeds \$1 million or results in total destruction of the aircraft.”

For this report, an accident is considered a “Forest Service accident” if it involved Forest Service personnel, regardless of location or jurisdiction, or if it happened, regardless of agency affiliation, on an incident under Forest Service jurisdiction.

### Fatalities

During FY 2009, there were a total of four fatalities in Forest Service aviation operations. There were no Forest Service fatalities in ground fire operations. Three of the aviation fatalities occurred when a contracted Forest Service airtanker crashed in Utah while en route from Montana to New Mexico. One aviation fatality occurred in a rappel accident in California during proficiency training.

### Entrapments

FY 2009 saw a continuation of the decline in the number of Forest Service entrapments and entrapment-related fatalities that has been the trend for the past three years. The number of entrapments and the number of people involved in entrapments decreased significantly from what was experienced in FY 2008. In FY 2007, the Forest Service had 27 people entrapped, with five entrapment-related fatalities on the Esperanza Fire. In FY 2008, the Forest Service had six people entrapped with one fatality on the Panther Fire. In FY 2009, the Forest Service had one entrapment with no fatalities.

Graph 3. Fatalities during Calendar Years 2006—2009



### Hazard Trees

In FY 2009, there were several near misses involving hazard trees but no fire-related fatalities involving Forest Service employees.

### Heavy Equipment Operation

A firefighter suffered serious injuries after she was run over by a gray water truck at night while sleeping in a fire camp in California. There was a decrease in water tender and dozer accidents and near misses in FY 2009 when compared with FY 2008.

Wildland firefighter fatalities decreased significantly, across agencies, in calendar year 2009 from the number of fatalities reported for calendar year 2008.

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## 2009 Implementation Guidance for the Federal Wildland Fire Management Policy

The Federal Wildland Fire Policy was adopted by the Forest Service and other federal natural resource management partners in 1995. The policy states, “*Fire, as a critical natural process, will be integrated into land and resource management plans and activities on a landscape scale, across agency boundaries. Response to wildland fire is based on ecological, social, and legal consequences of fire. The circumstances under which a fire occurs and the likely consequences to firefighter and public safety and welfare, natural and cultural resources, and values to be protected, dictate the appropriate response to fire.*”

In 2001, a review was conducted by the federal resource management agencies who affirmed this policy to be sound. In 2003, operational clarification and continuing guidance supporting implementation of this policy was issued. In 2008, as a result of a field test and review, federal wildland fire leadership determined that the 1995 Federal Wildland Fire Management Policy remained sound. However, they also determined that revising the 2003 Implementation Guidance would reduce confusion and provide a more flexible approach to natural resource management goals. Initial action on human-caused wildfires would remain constant—suppress the fire at the lowest cost with the fewest negative consequences with respect to firefighter and public safety.

In 2009, revised policy implementation guidance moved to two kinds of wildland fire—planned ignitions (prescribed fire) and unplanned ignitions (wildfire). This revision allowed fire managers the ability to manage a fire for multiple objectives and increased managers’ flexibility to respond to changing incident conditions and firefighting capability while strengthening strategic and tactical decisions that supported public and firefighter safety and resource management objectives.

A new wildland fire analysis and decision process was devised to improve decision documentation, risk assessment/decision support, and operational implementation.

### Forest Service Engine Standardization

The Fire Vehicle Standardization Committee was established to develop recommendations for fire vehicle standardization policy and develop a series of common models to be used nationally. In January 2009, the new standards were accepted and approved by agency leadership. Benefits to adoption of nationwide standardization include:

- streamlined procurement procedures and administrative cost reduction,

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### Firefighters on the Williams Creek Fire Umpqua National Forest, Oregon



- cost discounts for bulk ordering of like models/specifications,
- reduced training costs,
- ability to move workforce around without loss of productivity, and
- standardization of maintenance of all apparatus on engines.

Eliminating the basic purchase and model build-up for the current numbers of engine models—over 30, will lead to a greater economy of scale.

### National Interagency Support Cache Strategic Plan

A contracted analysis was done to evaluate the current National Interagency Support Cache (NISC) system and determine the optimal number and location of national caches. An analytical assessment of the size, location, and workload of the optimal cache system was performed. The results of the model developed during this study showed that the NISC system is generally operating in the correct locations and with the correct number of facilities. The outcome indicated that adding a Type 1 national cache in Sparks, Nevada, and adjusting the Rocky Mountain and Silver City caches to a lower type cache would increase the cost effectiveness of the entire system. Additionally, the results indicated that the Ontario Interagency Support Cache is not located in a cost-effective location and should be further evaluated for relocation to a different southern California site.



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## Implementation of Structure Exposure Protection Principles

A significant role of the Forest Service is to manage natural resources on public land and unwanted wildland fire is a primary mission in that role. Wildland firefighter training, tools, and personal protective equipment are based on the wildland environment. This does not prevent using wildland tactics in the wildland urban interface—those developed lands closest to the wildlands, when risks are mitigated. Wildland firefighter training in this area, however, is centered on the concept of preventing wildland fire from reaching areas of structures and/or reducing the intensity of fire should it reach structures. Fire suppression actions on structures that are outside federal jurisdiction, outside the scope of wildland firefighting training, or beyond the capability of wildland firefighting resources are not appropriate roles for the Forest Service.

### Six Principles

The Forest Service developed six structure exposure protection principles:

1. Actively support creation of Firewise communities and structures that can survive wildland fire without intervention, and support the concept that property owners have the primary responsibility for reducing wildfire risks on their land and assets.
2. Actively work toward applying Firewise concepts to all Forest Service owned properties and permitted use areas to serve as a model to publics and communities.
3. Apply strategies and tactics to keep wildland fires from reaching structures, as prudent to do so.
4. Be proactive in developing agreements with interagency partners to clarify structure protection policies.
5. The Forest Service structure protection role is based on the assumption that other departments and agencies will fulfill their primary roles and responsibilities. The Forest Service will not assume individual, local, or state responsibility for structure protection.
6. Prior to task implementation on any incident, a structure protection role briefing will be conducted.

### Forest Service Role

Forest Service personnel may engage in support of other cooperators in structure protection activities when requested by local government under terms of an approved cooperative agreement or when operating under unified command. The agency is permitted without an agreement to render emergency assistance to a local government in suppressing wildfires and in preserving

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### Forest Service develops Structure Exposure Protection Principles



life and property from the threat of wildfire when property trained and equipped agency resources are the closest to the need, and there is adequate leadership to do so safely. Agency personnel will not routinely provide emergency response nor will the agency supplant the local government responsibility to do so.

### Local Jurisdictional Responsibility

Local governments will assume financial responsibility for emergency response activities, including structure protection, within their jurisdiction.

### Tactical Operating Principles

When engaging in structure protection activities, Forest Service personnel will apply the following tactical operating principles:

- The first priority for all risk decisions is human survival—firefighter and public.
- Incident containment strategies specifically address and integrate protection of defensible, improved properties and wildland values.
- Direct protection of improved property is undertaken when it is safe to do so; when there is sufficient time and appropriate resources available; and when the action directly contributes to achieving overall incident objectives.
- Firefighter decision to accept direction to engage in structure protection actions is based on the determination that the property is defensible and the risk to firefighters can be safely mitigated under current or potential fire conditions.
- A decision to delay or withdraw from structure protection operation is the appropriate course of action when made in consideration of firefighters safety, current or potential fire behavior, or defensibility of the structure or groups of structures.

- Firefighters at all levels are responsible to make risk-decisions appropriate to their individual knowledge, experience, training, and situational awareness.
- Every firefighter is responsible to be aware of the factors that affect their judgment and the decision making process.
- An individual's ability to assimilate all available factors affecting situational awareness is limited in a dynamic wildland urban interface fire environment. Every firefighter is responsible to recognize these limitations and apply experience, training, and personal judgment to observe, orient, decide, and act in preparation for the "worst case."
- It is the responsibility of every firefighter to participate in the flow of information with supervisors, subordinates, and peers.

Where conflicts occur, employees will be expected to weigh the risk versus gain and operate within the intent of agency policy and doctrine.

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**Converted DC-10 and commercial B-747 aircraft were evaluated during VLAT study**



**NASA Assists with Very Large Aerial Tanker Evaluation**

During FY 2009, the Forest Service partnered with the National Aeronautics and Space Administration (NASA) on several aviation-related projects including an evaluation of the Very Large Air Tankers (VLAT)—converted commercial B-747 and/or DC-10 aircraft, for wildland firefighting in the aerial retardant delivery role.

Since neither the Forest Service nor the Department of the Interior staffs possessed the engineering skills to properly assess larger aircraft, the Forest Service collaborated with the NASA Dryden Flight Research Center to plan and conduct evaluations of aircraft to

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**NASA Dryden Flight Research Center conducted VLAT study for the Forest Service and DOI**



determine their suitability for firefighting. For example, NASA is currently assisting the Forest Service with technical contract requirements that would improve the safety and airworthiness of the agency's airtanker fleet. NASA is also helping the Forest Service evaluate airtanker compliance with the National Transportation and Safety Board's (NTSB) safety recommendations of 2004.

During the VLAT study, NASA used data provided by the customer, vendors, and other sources to analyze the performance, handling qualities, systems, and structural suitability of the DC-10 and B-747 as potential VLAT aircraft. Simulator and, in the case of the DC-10, in flight evaluations of the aircraft performing mission-representative tasks were performed. Based on this analysis, it was concluded that VLAT aircraft are probably compatible with the wildland fire suppression mission, however, steep or rugged terrain, reduced visibility due to smoke and ash, and situations where topography or other factors result in irregularly-shaped delivery zones will adversely affect or preclude aerial retardant delivery by VLATs to a larger degree than other aircraft. The Forest Service will use the report from NASA to support further evaluations of VLAT aircraft.

The Forest Service plans to continue their partnership with NASA and eventually form an interagency airworthiness evaluation board to review and evaluate new aircraft that may be suitable for firefighting.

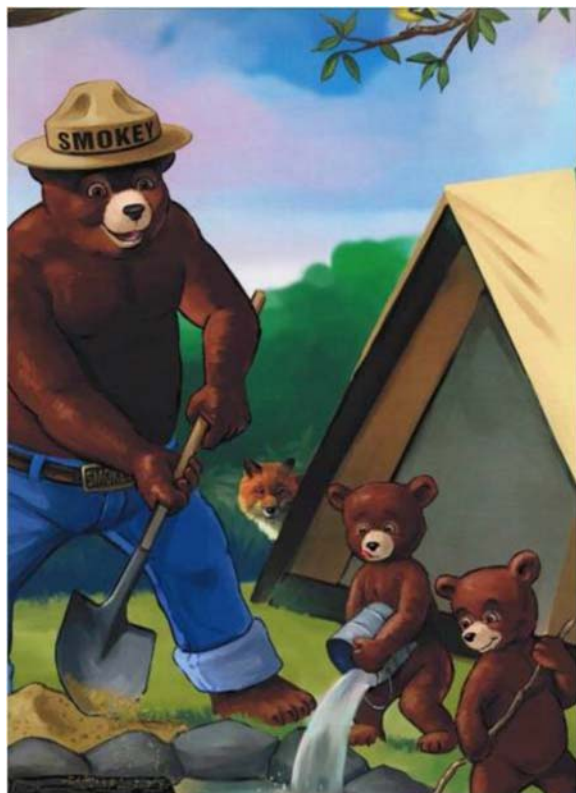
## Fire Prevention

During 2009, “human caused” fires continued to dominate headlines—especially in southern California. Arson, debris burning, and various miscellaneous actions dominated the list. Nationwide, 9 out of every 10 wildfires are caused by human carelessness.

In 2009, Smokey Bear turned 65 years old, and his message of personal responsibility remains as relevant today as it was in 1944. Numerous celebrations were held across the United States.

On August 9—Smokey’s “birth” date, the Forest Service introduced a new illustrated story book for pre-readers. The book is meant to be read to youngsters, and the text is in both English and Spanish – the Forest Service’s first bilingual book. Free copies of the book were offered to teachers; and within four weeks, more than 10,000 teacher’s copies and 60,000 children’s copies were requested. The response was so overwhelming an additional printing was ordered. This new story book will allow Smokey’s message to return to classrooms and mentor a new generation of Smokey helpers.

The “*Get Your Smokey On*” campaign went into the second year with a new public service advertisement alerting people to the hazards of leaving a fire while it is still smoking/smoldering. The campaign encourages young adults to develop fire safe habits and to intervene when they see someone in danger of starting a wildfire.



## All-Hazard Support to the National Response Framework

The National Response Framework (NRF) details how the nation conducts all-hazard response, from the smallest incident to the largest catastrophe. The NRF identifies the key response principles and how communities, states, the federal government, private sector, and nongovernmental partners apply these principles for a coordinated, effective national response. In addition, it describes special circumstances where the federal government exercises a larger role, including incidents where federal interests are involved and catastrophic incidents where a state would require significant support.

The NRF builds upon the National Incident Management System (NIMS) coordinating structures to align key roles and responsibilities, linking all levels of government, nongovernmental organizations, and the private sector. It emphasizes partnerships, citing that response to an incident is a shared responsibility that begins at the local level. Under the NRF, all incidents are managed locally. If the local responders need assistance, they first request local mutual aid from surrounding communities, then assistance from the state. The state, if overwhelmed, can request assistance from either neighboring states or the federal government. For non-fire incidents, request for federal assistance are coordinated through the Federal Emergency Management Agency (FEMA).

There are 15 Emergency Support Functions (ESFs) identified in the NRF that provide resource support to FEMA or the affected state or states. At the federal level, the Forest Service is the Coordinator and Primary Agency for ESF #4, Firefighting. The mission of ESF #4 includes coordination of federal firefighting activities and resource support to rural and urban firefighting operations. The Forest Service is also responsible to provide support to 12 of the remaining 14 ESFs. During disasters, the NRF may identify other agencies which may be responsible for providing support to a state through tasks typically provided by the Forest Service.

At both the national and regional levels, federal disaster response was fairly active during 2009 through both exercises and declared emergencies/disasters. There were six ESF #4 activations under the NRF. A few highlights of the Forest Service’s all-hazard support to the NRF during fiscal year 2009 included:

### Hurricanes Anna and Bill

These back-to-back hurricanes threatened United States territories in the Caribbean and Atlantic basins. An ESF #4 Primary Leader (ESFL) accompanied a FEMA Incident Management Assistance Team to Puerto Rico prior to the storms. The role of the ESFL was to identify potential support that could be provided through ESF #4.



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## Presidential Inauguration

ESF #4 was activated in support to this National Special Security Event because of the potential for a major emergency due to the number of people expected in the District of Columbia and the surrounding communities during the Presidential Inauguration. ESF #4 was prepared to coordinate firefighting resources in support of FEMA or other ESFs, as well as, the District of Columbia, Maryland, and Virginia should it have been necessary.

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**ESF #4 was activated during Presidential Inauguration to coordinate firefighter resources should they have been necessary**



## North Dakota Flooding

Flooding occurred along the Red River Basin in North Dakota and Minnesota and along the Missouri River in the vicinity of Bismarck, North Dakota. The rivers exceeded previous record levels; and according to the National Weather Service, “behaved in ways never previously observed.” ESF #4 provided FEMA and North Dakota with communications equipment, planning expertise, and equipment and supplies from the state firefighting cache to assist with the “flood fight” and subsequent evacuations.

## North Dakota Tornado

On the evening of July 9, 2009, an EF-3 tornado with winds up to 150 miles per hour touched down in the southern part of Dickinson, North Dakota. Several hundred homes, apartments, and businesses were damaged. Power and telephone lines were knocked out and massive debris was hindering response efforts. As an extension of the disaster assistance already in place in North Dakota, FEMA issued a Mission Assignment to ESF #4 in accordance with the Forest Service NRF support mission to provide emergency road clearing.

Forest Service personnel created emergency travel lanes through the debris and cut down hazard trees to make it safe for local emergency responders to conduct response operations.

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## Property Damage in American Samoa



## American Samoa Tsunami and Typhoon Melor

Following a major earthquake, a tsunami seriously impacted American Samoa. An ESFL and ESF #4 Wildland Support staff member accompanied a FEMA Incident Management Assistance Team to American Samoa to identify potential support that could be provided through ESF #4. During that response, Typhoon Melor was poised to strike Saipan and Guam. A wildland interagency incident management team was mobilized to assist FEMA in providing life-saving and life-sustaining supplies to the islands; thankfully, a last-minute change of course spared the islands.

## International Fire Activities

Over 100 years of wildland firefighting experience has earned the Forest Service the worldwide reputation as experts in the field. This experience, along with the technical and professional expertise of fire specialists, provides the basis for the Fire and Aviation Management’s (FAM) international fire program. FAM built and maintains strategic national alliances through emergency firefighting arrangements with Canada, Mexico, Australia, and New Zealand.

During 2009, firefighting assistance was requested from Australia and Canada through these bilateral firefighting arrangements. A handcrew, miscellaneous overhead, and several Burned Area Emergency Rehabilitation Teams (BAER) were sent to Australia in February 2009. Additionally, several smokejumpers and an incident management team were sent to British Columbia, Canada, during August of 2009 to provide assistance.



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Throughout the year, FAM assisted other nations in building their internal capacity in wildland fire management. Through the sponsorship of International Programs, FAM employees traveled to the countries of Mozambique, Congo, Tanzania, Ethiopia, Lebanon, Paraguay, and Russia to provide wildfire technical assistance to the governments of these countries.

Forest Service assistance to Greece during the 2007 and 2008 wildland fire season continued into 2009. The Forest Service hosted participants from the Hellenic Fire Service to attend aerial supervision and organized handcrew training. The Forest Service also hosted a study tour for the Chief Fire Officer of the Hellenic Fire Service here in the United States during April 2009.

FAM has been an active member of the North American Forest Commission (NAFC), Fire Management Working Group (FMWG) for over 40 years. The NAFC is one of six regional forestry commissions of the Food and Agriculture Organization, United Nations. NAFC provides a forum of wildfire policy and technical information sharing for member nations (Canada, Mexico, and the United States) to discuss and address North American forests and wildfire issues. The FMWG, established in 1962, is one of the nine working groups under the NAFC. In October 2009, the Pacific Southwest Region hosted the 43rd meeting of the FMWG in central California.

During April and May of 2009, the FMWG sponsored a three week study tour of Australia and New Zealand for participants from FAM, the Department of the Interior, and the Canadian Forest Service.

Study tours, or international field trips, are designed to give participants a better understanding of wildfire related problems in other countries, as well as the methods used to solve these issues. Participants visited offices and field sites arranged by the host country. The exchange of information that occurs at these events results in recommendations and considerations for improvement in wildfire management from both visitors and hosts. A

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#### Forest Service hosted a Study Tour for the Chief Fire Officer of the Hellenic Fire Service



comprehensive report, including recommendations for consideration, is compiled at the end of the tour.

Through these study tours, a strong networking and system for cooperation has evolved between the wildfire communities in Australia, New Zealand, Canada, Mexico and the United States. Many important tools and technologies have been adopted based on information exchanged on these study tours, including the use of the Incident Command System (ICS) in Australia and New Zealand, the exchange of research, and emergency operational assistance during severe wildfire and bushfire seasons between the United States, Australia, and New Zealand.

FAM continued work with the Forestry Department of the Food and Agriculture Organization of the United Nations in 2009. Through this partnership, FAM employees assisted in the development of the international voluntary wildfire management guidelines. These guidelines have been translated into several foreign languages and afford better cooperation and understanding of wildfire management within and between countries.

## Goal 2—Success Story, Protection and Management

### Implementation Strategy for the Federal Wildland Fire Management Policy

In February 2009, the National Wildfire Coordination Group (NWCG) approved changes to the implementation strategy for the Federal Wildland Fire Management Policy. These changes were designed to improve decision support for determining the level of response to a wildfire and to increase local manager flexibility in managing individual wildfires. These changes were expected to increase cost effectiveness in firefighting and reduce damage from wildfires. Additionally, it was expected that local managers would be better able to use unplanned ignitions to meet land management desired condition objectives.

Nationally, the 2009 fire season was relatively mild with few instances of suppression resource shortage or large, long-term damaging wildfires. Many managers at local levels used the increased flexibility afforded by the 2009 Implementation Strategy and the mild fire weather to achieve land management plan objectives when wildfires

occurred in the right location at the right time.

In the Southwest Region, national forests experienced approximately 80,000 acres burned from unplanned ignitions. Post-fire evaluations demonstrated that nearly 90 percent of those acres experienced improved condition as a result of the wildfires.

The Meason Fire on the Gila National Forest in New Mexico burned in June 2009. The fire progressed toward a small community and was aggressively suppressed with no loss of life and no structures lost or damaged. The side of the fire opposite the community was managed with objectives to reduce vegetation density and to successfully improve vigor of the remaining vegetation.

Nationally, Forest Service managers used the increased flexibility cautiously but were able to achieve more than 300,000 acres of improved conditions through establishing resource benefit objectives on a small percentage of lightning-caused wildfires.

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**The Meason Fire on the Gila National Forest, New Mexico, was managed with increased flexibility under the 2009 Implementation Strategy**



### Goal 3—Hazardous Fuels and Restoration

*Hazardous fuels are treated, using appropriate tools, to reduce the risk of wildland fire to communities and to the environment. Fire-adapted ecosystems are restored and maintained to achieve land management plan desired conditions, to mitigate and respond to the effects of a changing climate, and to achieve sustainable environmental, social, and economic benefits.*

#### Objectives:

1. Within the context of a changing climate, prioritize and implement socially, economically, and ecologically sustainable management actions to reduce wildland fire risk to communities and natural resources.
2. Use fire or mechanical fuel treatments to create landscapes in which fire can be used to meet integrated resources management objectives and land management plan desired conditions for restoration, maintenance, and protection.
3. Capitalize on opportunities to derive economic benefits, recover treatment costs, or increase capacity to execute fuels treatment projects.
4. Hazardous fuels and other vegetation treatment objectives are achieved in an integrated fashion with a high degree of efficiency and effectiveness.

### Hazardous Fuels Accomplishments

The task of improving the state of vegetation conditions (fuels) and ecological restoration is a overwhelming task faced each year by federal, state, and tribal land management agencies, their partners, and the local communities closest to the wildlands. The rate at which development is happening in the wildland urban interface, coupled with climatic and ecological changes continue to make wildland fire management more complex, demanding, and expensive. As communities and resources are best protected from wildfires by reducing the accumulation of dense vegetation before unplanned ignitions start, the need is urgent. Consequently, the agency continues to collaboratively address this dilemma through vigorous management, program alignment, and resource leveraging.

The moderate wildfire season, good weather, and the efficient use of resources during FY 2009 afforded fire managers the ability to make exceptional progress toward fuel treatment accomplishments. In fact, the Forest Service and partners exceeded targets by 40 percent during 2009—improving conditions on over 3.5 million acres across the United States. Notable is that this work was accomplished while concurrently accomplishing Forest Service American Recovery and Reinvestment Act (ARRA) goals as well.

Factors that contributed to this success were attributed to the following:

- the level of American Recovery and Reinvestment Act funding was not available when initial targets were established;

**Previously masticated fuels were burned during the Embargo project on the Rio Grande National Forest in Colorado**



- additional accomplishments occurred when natural ignitions presented opportunities to move areas toward desired conditions; and
- supplementary growth was realized through the State Fire Assistance program and other integrated programs.



The Forest Service prioritized work toward the reduction of vegetation adjacent to communities. This has been the case since the National Fire Plan was established in FY 2001. Since that time, 64 percent of hazardous fuel accomplishments have occurred in those areas closest to our wildlands—in the Wildland Urban Interface (WUI). Nearly 11 million acres have been treated directly adjacent to communities, an area more than twice the size of the Commonwealth of Massachusetts.

In FY 2009, the Forest Service improved conditions on 2.2 million acres of WUI. The reduction of hazardous vegetation in the WUI is the most complex, costly work conducted, and must be balanced with the risks associated with the work, as well as the weather conditions, access,

smoke concerns, and the intricate collaborative relationships with communities, stakeholders, and partners.

Funding through the American Recovery and Reinvestment Act of 2009 (ARRA) provided for the completion of hazardous fuel reduction work on more than 123,000 acres in 2009.

Accomplishments realized from FY 2001 through FY 2009 are reflected below in Table 1\*.

**Table 1. Hazardous Fuels Reduction Accomplishments, FY 2001—2009**

Accomplishments	2001	2002	2003	2004	2005	2006	2007	2008	2009
Acres Treated Hazardous Fuels	1,362,000	1,258,000	1,453,000	2,561,000	2,722,000	2,547,000	3,027,000	3,038,000	3,598,000
WUI Acres	612,000	764,000	1,114,000	1,700,000	1,658,000	1,590,000	1,654,000	1,941,000	2,190,000
Non-WUI Acres	750,000	494,000	339,000	861,000	1,064,000	957,000	1,373,000	1,097,000	1,408,000

\*Table statistics are rounded to the nearest thousand

### Fuel Treatment Effectiveness Program

In FY 2009, the Forest Service implemented a program to evaluate the effectiveness of fuel treatments when they are tested by wildfires. As a result, an assessment is conducted by fire management specialists when a wildfire starts or burns into a previous fuel treatment. The review’s purpose is to determine if the fuel treatment either affected fire behavior by reducing the intensity and/or rate of spread or if suppression effectiveness was improved through enhanced firefighter safety, reduced suppression costs, and/or reduced potential fire damage.

While many fire incidents from 2009 remain to be assessed, the evidence is very strong that treatments are effective in reducing both the cost and damage of individual wildfires which start in or burn into previous projects completed to reduce the density of the vegetation in those areas.

**Firing operation around the Mount Wilson Observatory during the Station Fire was safely conducted due to previous work in the area**



## Goal 3—Success Stories, Hazardous Fuels and Restoration

### Fuel Treatment Effectiveness Program—A Great Evaluation Tool

In 2009, more than 100 assessments were conducted evaluating the effectiveness of prescribed fire and mechanical hazardous fuel reduction treatments. Two large wildfires which burned in 2009 in the vicinity of numerous prior fuel treatments clearly demonstrated the positive impact of fuel treatments—the La Brea Fire on the Los Padres National Forest and the Station Fire on the Angeles National Forest.

In August 2009, the La Brea Fire burned nearly 90,000 acres near Santa Maria, California. Although this was a large, costly wildfire, the total impact would have been much greater without several fuel treatments which had been completed by Los Padres National Forest personnel.

Between 2005 and 2009 more than 13,000 acres were treated with prescribed fire to reduce dense vegetation for better protection of the communities closest to the wildlands, municipal watersheds, and habitats for federally listed species. When the La Brea Fire burned into these treated areas, fire intensity lowered significantly, enabling suppression forces to contain that portion of the fire perimeter. Had the treatment not been completed prior to the wildfire, hundreds of homes in the Tepusquet Canyon area would have been threatened and many would likely have been burned.

The evaluations completed in 2009 provided strong evidence that wildfires which start in or burn into areas which have been treated to reduce the density of vegetation burned with less intensity and resulted in reduced losses and costs.

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**La Brea Fire on the Los Padres National Forest, California, burns up to areas where work was completed to reduce/stop the spread of wildfire**



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## Dry Fork Project on the Gallatin National Forest, Montana

On September 16, 2009, fire personnel from all districts of the Gallatin National Forest and the forest helitack crew were joined by personnel from the Yellowstone National Park, local Bureau of Land Management, and the Sweet Grass County Volunteer Fire Department to implement the Dry Fork prescribed burn project—a 2,300 acre prescribed burn on the Big Timber Ranger District of the Gallatin National Forest in Montana.

The area of the project contained dense vegetation with the ability to carry future wildfire toward both the East Boulder Mine and adjacent private landowners. Successful implementation of this project would vastly reduce the likelihood of future wildfire in this area.

Initially, winds were not favorable for ignition of the fire, so the project did not begin until the next day, late in the day. With more favorable weather conditions on the second day of the project, work commenced early, with project completion late in the evening on the third day. Along the perimeter of the burn, firefighters with drip-torches were supported by engines as they lit the outer limits of the treatment area with fire. The interior of the unit was ignited using aerial ignitions and a plastic sphere dispenser or PSD.

The successful completion of this project was a huge accomplishment and collaborative effort for the Gallatin National Forest. Completed safely with no accidents reported, all objectives of the project were met. The public was well informed prior to and throughout the project. As a result, public support for the project was outstanding.

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**Firefighters lit the perimeter of the area with drip-torches as they were supported by engines from the local volunteer fire department**



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**The interior to the unit was ignited using aerial ignitions and a plastic sphere dispenser**



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**Outcome of Dry Fork project**





## Success Stories, American Recovery and Reinvestment Act of 2009

### ARRA Funds the Huron Fuels Reduction Project —Huron-Manistee National Forest, Michigan

In the middle of tough economic times for Crawford, Oscoda, Alcona, and Iosco counties in northeastern Michigan, the American Recovery and Reinvestment Act (ARRA) has brought nearly \$3.9 million to the area in funding for the Huron Fuels Reduction Project.

The purpose of the Huron Fuels Reduction Project is to reduce wildfire hazards on the public lands of the Huron-Manistee National Forest. To help accomplish this objective, the Huron Shores and Mio ranger districts hired a fuels crew of 51 new employees.

The vast majority of crew members were unemployed, local northern Michigan community members. Crew member Matt Wright of Mio grew up in Oscoda County and had moved downstate for his job as an electrical engineering technician. During a round of cutbacks, he had recently been laid off. "If this job hadn't worked out, my family and I probably would have had to leave Michigan in order to find work," said Wright.

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***"If this job hadn't worked out, my family and I would have had to leave Michigan in order to find work"***—Matt Wright of Mio, Michigan

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The crew began their tour of duty in July with an intense training period that focused on safety, first aid, wildland firefighting tactics, and chainsaw operations. The fuels crew worked long hours, starting each day with physical training for the entire crew. Crew members jokingly referred to their exercise time as a Forest Service version of the popular reality show, *"The Biggest Loser."* Despite the jokes, all crew members reported an increase in their physical fitness level, an essential component of the job.

The crew also participated in daily safety briefings and spent the days working as a team to cut, chip, stack, and haul hazardous fuels. The crews also performed prescribed fire activities when the proper burning conditions were present.

Donna Schrader of Mio felt there was great morale on the crew as well as a friendly competition between crews to see who can get the most work done safely in the field. She said, "It kept things fun and helped to set the bar high. Everyone was looking out for everyone else and encouraging people to do their best."

The fuels crew continued their efforts in the field until winter weather prevented it. The crew will return to work again in the spring of 2010 and will work through the end of September. Although these are temporary positions, the majority of crew members are positive about the experience they've gain and thankful for the opportunity to have a job that allows them to both stay in northern Michigan and provide for their families.

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#### Huron National Forest hired a 51-person fuels crew to accomplish the Huron Fuels Reduction Project



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#### The crew began their training in July 2009



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## **Head Thin Stewardship Project Deschutes National Forest, Sisters Ranger District, Oregon**

On paper, the 500-acre Head Thin Stewardship Project on the Deschutes National Forest in Oregon looked like many other projects designed to improve forest health and reduce the risk of catastrophic wildfire; but this project led to a different kind of paper—a paycheck—for independent contractors working together as subcontractors on an ARRA-funded project.

Scott Melcher of Melcher Logging Company in Sweet Home, Oregon, works all over the state; but when Melcher was awarded the stewardship contract for the central Oregon project, he wanted to put local people to work, which meant pulling a crew together from the surrounding areas of Sisters, Redmond, and Bend. Crew members came from unlikely backgrounds: small-business owners working sporadically or not at all; laid-off construction workers; and unemployed truck drivers joined the ranks along with wildland firefighters and loggers.

Although only a short hike into the Head Thin Project area along an old logging road, walking to work for the crews quickly became difficult as dense stands of overstory trees, mixed with a variety of understory material created a variety of hazards. Wood and brush on the ground created the risk of tripping in the dim light under the thick tree canopy. It was a beautiful setting for some very hard work.

To restore the areas along the waterways (in the riparian), sawyers removed fir trees under eight inches in diameter. Stacking crews followed behind, wading through hip-deep piles of limbs and boughs, which were piled for burning during winter. Work along the waterways was done by hand due to the sensitivity of those areas. Mechanical equipment was left behind for chainsaws and strong backs.

"These guys can do anything, but their backs and arms are sore; that's for sure," Melcher said of his crew. It didn't take long for their backs to get used to the work—work that not only improved the condition of the forest but gave central Oregon residents a paycheck and a reason to hope for the future.

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**Work to cut and remove overgrown brush and trees is performed to reduce the likelihood of future catastrophic wildfires**



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**Logs and brush are piled as crews work on the Head Thin Stewardship Project**





## Goal 4—Community Assistance

*Communities in fire-adapted ecosystems are well-prepared for wildland fire.*

### Objectives:

1. Continue to assist communities in building capacity to prepare for, suppress, and reduce losses from wildland fires.
2. Reduce the number of human caused wildfires through prevention and education on an ongoing basis.
3. Provide assistance to our partners and cooperators in the wildland urban interface in accordance with mutual agreements
4. Property owners and communities are fully engaged and proactive in mitigating impacts of wildland fire in the wildland urban interface.
5. Outreach to diverse and underserved communities at all levels of program delivery.

## National Firewise Program

Wildfires continue to happen in the wildland urban interface (WUI)—those developed areas closest to the wildlands, and to be a challenge for both the people who live there and for firefighters and fire managers. These fires are a threat to the residents and contribute considerably to the cost of suppressing a wildfire. In 2009, the Forest Service continued to work in collaboration with partners at every jurisdictional level to address these issues.

In 2009, the Firewise program continued to be the most visible citizen-based program to encourage residents to take individual responsibility for reduction of risks to their properties from wildland fires. The program was strengthened by the National Fire Protection Association and saw a rise in the numbers of communities involved as a result—from approximately 400 communities in 2008 to nearly 600 by the end of 2009.

Additionally, the Firewise Communities USA program expanded to include recognition of communities involved in other Firewise activities. The multi-tiered approach was designed to encourage communities as they move toward full Firewise recognition status. Development of the multi-tiered approach started in 2008 and continued through 2009 with targeted awareness directed toward state liaisons and tribal authorities. The three tiers include:

- Firewise Special Project Awards,
- Firewise Community Protection Achievement Awards, and
- Firewise Communities USA

**Graphic 3. Three-tiered Firewise Communities USA Program**



### Firewise Special Project Awards

The first tier or step before full Firewise recognition is Firewise Special Projects Awards. This tier was designed to recognize the efforts of communities or residents who make improvements but have not yet achieved full Firewise Communities USA status. The program encourages continued participation in Firewise activities that could lead to national recognition, help measure Firewise activity on the ground, and make Firewise projects more visible.

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## Firewise Community Protection Achievement

The second tier of the program is Firewise Community Protection Achievement—when several communities in a larger geographic area such as a county achieve Firewise recognition. These awards acknowledge Firewise oriented efforts in larger geographic areas covered by Community Wildfire Protection Plans (CWPPs). The awards are given when 75 percent of a jurisdiction’s identified communities-at-risk achieve Firewise recognition.

## Firewise Communities

The third tier is to achieve full Firewise recognition—Firewise Communities USA.

In 2009, the Firewise program embarked on a multi-year outreach program designed to build stronger working relationships with state foresters, state fire chiefs, community representatives, the media, and state liaisons. During the Firewise Liaison Tour, National Fire Protection Association (NFPA) Firewise staff visited 14 states to conduct meetings, hold training sessions, develop media coverage, and introduce the Firewise concept. In the end, Firewise developed lessons learned to identify those strengths, success stories, and issues in order to bolster the program.

The Forest Service strengthened its commitment to Firewise by incorporating Firewise principles in their structure exposure protection principles. Those guidelines support creation of Firewise communities and structures that can survive wildland fire without intervention. They support the concept that property owners have primary responsibility for reducing wildfire risks to their lands in the WUI. The result is a *consolidated* package of tools that when focused and interconnected in a community-at-risk, becomes an inclusive partnership with a common goal—the reduced cost and risk of wildfire.

The “*Ready, Set, Go*” concept, piloted by Ventura County in California, offers a practical, reasonable, and simple checklist to enable residents to get ready for a wildfire, get set to evacuate, and conduct a successful evacuation. “*Ready, Set, Go*” will result in a more informed, engaged, and prepared population who can react safely to wildfire, prepare their homes for the fire, provide a safer environment for structure protection efforts, and prepare for and conduct a safer evacuation. The Forest Service collaborated with the Department of the Interior, the National Association of State Foresters, and the United States Fire Administration to support the International Association of Fire Chiefs’ national expansion of the successful “*Ready-Set-Go*” effort.

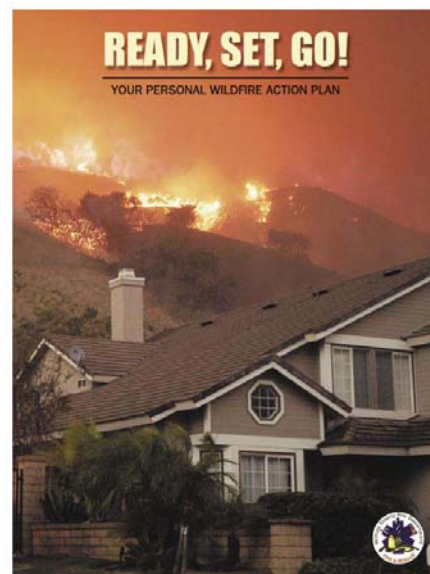
“*Ready, Set, Go*” will roll out nationally in 2010 as a key component of Fire Adapted Communities, along with the

structure protection principles. These principles also stipulate that the Forest Service will actively work toward applying Firewise concepts to all Forest Service owned structures, facilities, and permitted use to serve as a model to publics and communities.

As a result of the information contained in the 2009 Quadrennial Fire Review, and as a tie to the FLAME Act and the Government Accountability Office’s (GAO) direction to land management agencies to create a Cohesive Fire Strategy, the Forest Service developed a Fire Adapted Community process.

A Fire Adapted Community is defined as a knowledgeable, engaged community in which the awareness and actions of residents regarding infrastructure, buildings, landscaping, and the surrounding ecosystem lessens the need for extensive protection actions and enables the community to safely accept fire as a part of the surrounding landscape.

Fire Adapted Communities, as a process, combines successful programs and initiatives, like Firewise, CWPPs and vegetation management, with new initiatives such as “*Ready-Set-Go*” to reduce risk, protect homes and lives, and reduce suppression costs for wildfires.



## Cooperative Fire

The Cooperative Fire Program has two main components, the State Fire Assistance (SFA) program and the Volunteer Fire Assistance (VFA) program.

### State Fire Assistance Program

The SFA program assists several national initiatives, such as Firewise and the Smokey Bear campaign, but also provides funding to state forestry agencies for a variety of activities, including:

- wildfire response, coordination, and delivery;
- compliance with the national safety and training standards that ensure state and local crew deployment to federal fires and other emergency situations;
- hazard assessments and fuels treatment projects;
- and public education efforts.

In FY 2009, grant funding through this program supported:

- more than \$11 million in preparedness activities and another \$7.9 million for suppression operations and support;
- \$7.7 million in funding for the purchase, maintenance, and rehabilitation of equipment and training for over 42,000 personnel;
- \$4.5 million funding for conducting prevention and education programs; and
- over \$6 million in funding for communities to conduct risk assessments and complete fire management planning activities, such as Community Wildfire Protection Plans (CWPP).

SFA provided \$61 million of funding for hazardous fuels treatments, partly with additional funding secured through supplemental appropriations. This funding benefitted over 2,200 communities—those closest to the wildlands, for the treatment of over 176,000 acres of hazardous fuels. This funding also leveraged the

treatment of another 335,000 acres. In total, SFA funds directly assisted nearly 20,000 communities, while indirectly benefiting many more.

### Volunteer Fire Assistance Program

The VFA program, formerly known as the Rural Community Fire Protection program, is administered by state forestry agencies through the distribution of 50/50 cost-sharing grants to local fire departments in rural communities. The program's main goal is to provide federal financial, technical, and other assistance for the organization, training, and equipping of fire departments in rural areas with a population of 10,000 or less. The VFA program provided over \$10 million dollars for the purchase, maintenance, or rehabilitation of equipment; supported the expansion or establishment of 512 new fire departments; and funded the training of over 24,000 personnel in FY 2009. Grant funding benefitted over 10,000 communities.

State Foresters evaluate the progress made toward reducing the threat of wildfire in communities at risk. If the community has met one of the following three conditions, a “Community at Risk” may be considered at reduced risk by the State Forester:

1. treated high priority fuels according to its CWPP,
2. achieved Firewise or equivalent recognition, or
3. enacted mitigation or fire prevention ordinances.

### Community Wildfire Protection Plans

Community Wildfire Protection Plans (CWPPs) address wildfire response, hazard mitigation, community preparedness, and structure protection. CWPPs provide communities a tremendous opportunity to influence how and where federal agencies implement fuels reduction plans on federal and non-federal lands. The table below illustrates the current status of CWPPs, as well as Communities at Risk (CAR):

**Table 2. Current state of Community Wildfire Protection Plans (CWPPs) and Communities at Risk (CAR)**

NASF Region	States with CAR List/Map	Total CAR	CAR Covered by CWPP	CAR at Reduced Risk
West	17	6,206	3,923	1,576
South	13	57,394	1,128	8,505
Northeast	19	6,030	519	212
<b>Total</b>	<b>49</b>	<b>69,630</b>	<b>5,567</b>	<b>10,293</b>

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## Federal Excess Personal Property Program

The Federal Excess Personal Property (FEPP) program allows the loan of Forest Service-owned property, including much-needed equipment and supplies, to state foresters to assist state and rural agencies and volunteer firefighters in preparedness for suppression and pre-suppression missions on federal, state, and community lands. The program provides items from fire hoses to heavy equipment, allowing substantial savings to the taxpayers.

In FY 2009, over 800 property items were acquired and assigned to 41 state cooperators. This included more than 400 pieces of rolling stock. Trucks and trailers are normally equipped with tanks, generators, and pumps to assist firefighters on wildland and brush fires. Eleven pieces of heavy equipment were loaned to state cooperators to help maintain and build fire roads. The value of the property items distributed through FEPP in FY2009 had an acquisition cost of nearly \$20 million dollars.

State foresters and the Forest Service have mutually participated in the FEPP program since 1956. Currently, the inventoried property value exceeds \$1 billion with over 140 operable aircraft and more than 36,000 items on the federal inventory, including nearly 24,000 vans, trucks, and trailers. In FY 2009, the program acquired more than \$19 million in fire equipment and supplies to be used for firefighting. Inventoried items include vehicles, trailers, generators, heavy equipment for road maintenance, forklifts, and fire boats. Common durable items such as pumps, tanks, and small generators (with a value less than \$5,000) are typically acquired to be placed onto a vehicle or trailer. Consumable, low-dollar property items include vehicle and aircraft parts, blankets, boots, gloves, hoses, hand tools, office equipment, and construction materials. Currently, 50 states and 5 territories participate in the FEPP program.

## Department of Defense Federal Firefighter Property Program

The Federal Firefighter Property (FFP) program began in March of 2006. Through the FFP program states are afforded the opportunity to acquire title to excess military equipment; then, assign that equipment to rural fire departments. The Department of Defense (DoD) authorized the Forest Service FEPP program to manage the transfer of DoD property through a Memorandum of Agreement.

The major difference between the FFP program and the FEPP program is the ownership of the items acquired. All items acquired through the FEPP program remain the property of the Forest Service and are loaned to the

recipient agency, while items acquired under the FFP program belongs to the recipient. The FFP program's assets are screened at a higher level, therefore, making better quality and larger quantities of property available for the firefighting agencies. The program also acquires items for emergency services such as search and rescue, hazardous material spills, and emergency medical services in addition to firefighting, making it of more benefit to participating agencies. These functions often fall within the firefighting agencies' responsibilities but are not applicable to the FEPP program.

Currently, 28 states—4 more than reported last year, have signed agreements with the Forest Service to participate in the FFP program. Participants include the states of Alabama, Arkansas, Colorado, Connecticut, Florida, Idaho, Indiana, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Dakota, Texas, Virginia, Washington, and Wyoming. New agreements between non-participating states and the Forest Service are being completed; five additional states are expected to be under agreement in FY 2010.

In 2009, over \$91 million in equipment was distributed to 23 states, as compared to \$68 million and 20 states last year. The Missouri Department of Conservation acquired 38-2,500 gallon stainless steel tanks at a cost savings of more than \$1 million to the state agency. Through the FFP program, state cooperators acquired more than 1,000 vehicles in 2009 with an original acquisition cost of over \$49 million. Vehicles were refurbished and equipped with pumps and generators to assist in rural and wildland firefighting.

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**Fire trucks such as this one are loaned to states through the FEPP program**





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## **Assistance Provided by NIMO to Successfully Meet ARRA Reporting Requirements**

At the request of the Office of Management and Budget (OMB) and the Recovery and Transparency Board, the National Incident Management Organization (NIMO) successfully assisted with the unprecedented initial reporting of accomplishments for the American Recovery and Reinvestment Act (ARRA).

### **Mission Assignment**

The mission assignment issued to the USDA Forest Service was to provide an Incident Management Organization (IMO) operated under the Incident Command System (ICS) to develop and execute a plan to support the required reporting under the American Recovery and Reinvestment Act. This was an exciting challenge for the Forest Service and the IMO, as it was the first incident command system organization ever developed to handle an incident/event that spanned the entire nation, including the United States territories.

More than a dozen different Departments participated in this government-to-government ARRA Recovery Reporting Assistance Support program. Department and agency personnel were provided to field questions and provide the clarification required to successfully assist the states and United States territories in meeting the established reporting requirements of the Act. It was an honor and a privilege for the USDA Forest Service to have been tasked to lead this project to a successful conclusion.

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### **Members of IMO meet with Deputy Secretary Kathleen Merrigan and Forest Service Chief Tom Tidwell**



## Goal 4—Success Stories, Community Assistance

### Firefighters in Wyoming Give New Life to Military Vehicles

Volunteer firefighters from across Wyoming gathered in Cheyenne for training on how to maintain fire trucks that once belonged to the Department of Defense. The vehicles were acquired by the state of Wyoming through the Federal Excess Personal Property (FEPP) program administered by the USDA Forest Service.

Firefighters from fire departments around the state and the Air Guard trained under the guidance of the Wyoming State Forestry Division on how to keep their trucks operational. These trucks, once two-and-one-half ton military transport trucks, were refurbished into wildland fire engines. Through the Wyoming Forestry Division and the USDA Forest Service, 150 trucks were distributed to rural fire departments across Wyoming who otherwise may not have been able to acquire a fire engine for their rural communities. In total, Wyoming has over 400 FEPP vehicles valued at \$17 million to loan to Wyoming's 23 counties.

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***“There are many of the smaller rural departments in the smaller communities within the state that their only fire protection are these vehicles, so it’s a huge impact with that respect. Without these vehicles, without this program, they would have no fire support at all”***—

Wyoming FEPP Manager Steve Stowe

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### FEPP Program Provides Nassau Oaks Volunteer Fire Department Much Needed Water Tender

When the Florida Division of Forestry recently screened for excess personal property at Eglin Air Force base, they were lucky to find a 1991 Oshkosh R-11, 6,000 gallon fuel tanker stationed at the Naval Air Station in Jacksonville, Florida. The tanker was in great condition and had only 2,789 miles logged at the time of screening.

Subsequently, this FEPP item was placed on loan by the Florida Division of Forestry to the Nassau Oaks Volunteer Fire Department just north of Jacksonville. At the same time, the department received a Volunteer Fire Assistance 50/50 grant for \$8,076.00 to do the work necessary to convert the fuel tanker to water tender. Essentially, that meant that the Volunteer Fire Department had to spend that amount and would be reimbursed for 50 percent of the cost. With the award of

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**Wyoming has over 400 FEPP vehicles valued at \$17 million on loan to Wyoming’s 23 counties**



the grant, Nassau Oaks did the conversion work and added a light package. For \$4,038, the water tender was ready to fight fire. The finished product is now Nassau Oaks Volunteer Fire Department Tanker 11 and is fully operational. The department is extremely happy with both its performance and capacity.

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***“We really appreciate the USDA Forest Service and the folks that make the Federal Excess Personal Property program work so well.”***—Matt Weinell, Florida Department of Forestry

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### Nassau Oaks Volunteer Fire Department Tanker 11



## Goal 5—Communications

*The Fire and Aviation Management vision, direction, and expectations are understood, accepted, and supported internally, externally, and internationally, by stakeholders and cooperators.*

### Objectives:

1. Continually, leadership direction and expectations are clearly understood throughout the organization and are complementary with our cooperators.
2. Leadership, at all levels, delivers a clear, consistent message to the public regarding fire and aviation management programs and emerging strategies.

### Social Media Webinars

The National Incident Management Organization (NIMO) organized and hosted several social media webinars for Public Information Officers and Public Affairs Officers nationwide in order to develop a better understanding regarding how this medium could be used during large fire incidents to monitor and ensure the correct information is disseminated.

### National Fire and Aviation Management Website

The Forest Service is in the process of modernizing and standardizing the agency's "look" on the worldwide web. The national office of Fire and Aviation Management is an active participant in this revision and is capitalizing on the opportunity to give the national program's website a much needed "makeover." The new website will be cleaner, simpler, and more relevant to our publics.

The new website will be reorganized into the following structure:

- Managing Wildland Fire
- Aviation
- Partners in Wildland Fire
- Prevention and Education
- Wildland Fire Science
- Working in Wildland Fire
- Publications

The new website keeps content that is relevant to the public at large separate from the content that is strictly intended for the interagency wildland fire management community. The new website will take advantage of modern technology, such as podcasts and streaming video.

The new website will be complete and available in FY 2010 and will be available at the current site: [www.fs.fed.us/fire](http://www.fs.fed.us/fire) when active.

### Fire Management Today

*Fire Management Today* has served the wildland fire community since its first issue was published in 1936—nearly 75 years ago. The publication provides information regarding new techniques and technologies relevant to wildland fire management. Currently, the publication is published on the quarterly basis and is available in both print copy and on the worldwide web. The Fire Management Today website has been updated with past issues, bookmarked to provide ease in researching issues, articles, or authors. Once the revised national website is implemented, these publications will be found under the "Publications" link.



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## InciWeb

InciWeb is a widely used interagency wildland fire and all-hazard incident information system developed in 2003 with two primary goals:

- to provide a simple, standardized reporting tool for public affairs and public information officers, and
- to provide the public and media a single source of information.

All federal wildland fire agencies and several states participate at various levels. The system is very user friendly and allows anyone with access to the internet the ability to obtain up-to-date information regarding fire facts, closures, press releases, scheduled public meetings, maps, and photos of current and closed incidents. The link to the website is: [www.inciweb.org](http://www.inciweb.org).

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## Fire Operation Rio Grande National Forest Colorado





## Goal 6—Workforce

*Fire and Aviation is a diverse, service-oriented, innovative, highly skilled, accountable organization.*

### Objectives:

1. Develop and maintain a professional wildland fire, fuels management, cooperative fire, and aviation workforce.
2. Continue to support a diverse workforce which reflects the American workforce.
3. Implement a performance management system that honors, values, encourages, and awards innovative thinking.
4. Develop metrics that define employee accountability in meeting their fire and aviation management commitment.

### Human Resource Specialists Support for Wildland Fire Incidents

Human Resource Specialists (HRSP) on wildland fire incidents provide a point of contact for all incident personnel to discuss human resource and civil rights concerns. HRSPs, working with incident management teams, support incident personnel, set the tone for mutual respect, and provide leadership for a harassment free and positive work environment.

In the past nine years, the program has reported an average of 475 serious contacts to HRSPs on incidents each year. Many of the contacts involve early resolution of conflict and mutual respect issues, and provide support to incident personnel involved in critical incidents or with personal emergencies. With an ongoing average of 98% to 99% resolution of Human Resource issues on incidents, the HRSP program is highly cost effective.

In FY 2010, the HRSP Coordinated Program will support the establishment of three new Critical Incident Stress Management (CISM) Fire Peer Teams, and conduct three HRSP courses nationwide. FAM and the HRSP program remain dedicated to providing quality support to incident personnel.

### Fire and Aviation Management Workforce Diversity Program

Annually, FAM contributes \$650,000 in support of workforce diversity proposals throughout the agency to address:

- Workforce Diversity Planning
- Outreach
- Recruitment
- Hiring/Selection of Candidates
- Retention



Evaluation of proposals is based on demonstrated creativity in technique, scope, complexity, and potential for replication or influence nationally.

Oversight of the program is provided by a FAM Workforce Diversity Committee with representation from each region across the country. The committee reports directly to the national director of fire and aviation management.

Funds awarded each year are contingent upon successful implementation of the project and stated accomplishments for each proposal. An annual report is required to evaluate the effectiveness of each project.

The following summarizes the current approved projects approved from 2008 to 2010:

### **Aerial Fire Depot Diversity Model**

The Aerial Fire Depot (AFD) program is an outreach, recruitment, hiring, and retention program that has achieved success in recruiting and retaining a diverse workforce. The AFD's Human Equality Leadership Program is the driving group behind the largest, diverse applicant pool of any smokejumper program in the nation—is a role model for the agency.

The program's vision is of an organization that consists of a highly skilled, dependable workforce that reflects the nation's civilian labor force. The foundation of the model is to be realistic and committed.

### **Great Northern Fire Outreach, Recruitment and Training Program**

The Great Northern program established its roots in the foundational principles of AFD Program. The Great Northern Type 2 initial attack crew has the leadership, tools, and experience to assist others in finding success through their workforce diversity management. This project shares and fosters not only the processes but successes of the Great Northern Fire Crew. The program goal is to develop a national level model that can be adapted and used for development of other programs throughout the agency.

### **Apache-Sitgraves National Forest, White Mountain Apache Tribe Intern Program**

The Apache-Sitgraves National Forest has formed an agreement with the White Mountain Apache Tribe to hire and train tribal members as interns to foster leadership skills, natural resources education (including wildland firefighting), and contracting.

### **Recruitment Program in the Great Basin Region**

This program mirrors the AFD program in the Northern Region. Through this program, recruitment efforts are shared between the two regions.

### **Mount Hood/Gifford Pinchot Type 2 Initial Attack Crews**

This shared project between the Mount Hood and Gifford Pinchot National Forests creates a pipeline of temporary hires from the diverse populations of the Portland and Vancouver metropolitan areas. Both forests have a strong relationship with their respective communities and have developed partnerships with the local community

### **Inner city young adults work as interns and receive training as wildland firefighters**



organizations and schools to make this program a success.

### **Umatilla Fire and Fuels Career Orientation Camp**

The Umatilla National Forest established a Fire and Fuels Orientation Camp in order to promote interest in a fire and/or fuels management career. Through this program, forest officials work in collaboration with other federal and state agencies and the local schools to identify minorities and people with disabilities in the 17 to 18 year age range that may have an interest in the program. During the one-week program, students focus on fire suppression and natural fuel reduction techniques. The program also discusses the hiring process relative to both temporary and permanent hiring opportunities.

### **Veterans Pipeline to Jobs in Fire and Aviation Management**

The Veterans Pipeline to Jobs program was developed as a veterans employment program with the optimal goal of training and subsequently employing veterans as future firefighters or militia firefighters. Through the program, contacts and networks have been established with various veteran's organizations with specific emphasis on diversity organizations. In 2010, funding will be available to cover the salaries and training for three to four candidates through the 1890 Fire Training Program. This will provided selected veterans one season of fire experience and the opportunity to demonstrate their knowledge, skills, and abilities, resulting in the possibility of employment with the Federal Government through the Veterans' Rehabilitation Act (VRA) authority.

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## **Development of 1890 College Students for FAM Positions**

Through this program FAM conducts outreaches, recruits and hires up to 20 students from the 1890 Universities Program and Historic Black Colleges and Universities annually. The training and experienced provided students through this program in the Southern Region of the agency provides students with the competencies to make them highly competitive for permanent positions within the FAM organization.

### **Schenck Job Corp Civilian Conservation Center Type 2 Initial Attack Crew**

The Schenck program provides leadership and training in fire management to Job Corps students while they are working on the Davidson River Initial Attack Crew through the Schenck Advanced Fire Management Training Program. This initial attack crew was mentored and assisted by the Region 1 Great Northern Type 2 Initial Attack Crew. Upon successful completion of this program, students encumber SCEP positions on various Forest Service units across the country. (See success story on page 37 for additional information on the Schenck program).

### **Medewin Tallgrass Prairie Urban Youth (Chicago) Type 2 Crew**

This project improves the diversity of the Forest Service workforce by recruiting inner city young adults as interns and providing the opportunity to learn and train with local county land managers for future employment. This experience includes restoration work, prescribed burning and wildland firefighting. The first three weeks of the internship is intensive and essential training including development of leadership and professional development skills, teamwork, and required basic firefighting skills.

## **Office of Inspector General Discussion Draft, Forest Service's Firefighting Succession Planning Process**

On September 16, 2009, the USDA Office of Inspector General (OIG) provided the Forest Service with a Discussion Draft of their audit report on Forest Service firefighter succession planning. This report focuses on a high-profile issue and contains numerous far-reaching recommendations that could have significant impacts on the agency as a whole.

### **Purpose of the Audit**

The audit evaluated whether the Forest Service has adequately planned for the timely replacement of critical wildland fire personnel as retirements increase and fewer staff volunteer for fire assignments. OIG assessed Forest Service plans for recruiting, training, and developing and retaining those personnel who fill critical firefighter

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**2009 Participants from the 1890 College Student Program**



positions. Barriers were identified that affect the Forest Service's ability to develop and mobilize the firefighters needed to fulfill the agency's wildfire suppression mission.

The report contained four Findings and 20 Recommendations. The findings were focused on the following issues:

1. The need for a national workforce plan to specifically address future critical firefighter shortages,
2. The agency's fire training program does not adequately provide for future needs,
3. The agency's firefighting ability is challenged by the lack of participation, and
4. Unnecessary education requirements compromise the agency's firefighting force.

The Forest Service will provide an official response to the report in the Spring of 2010.

## **Building Capability and Capacity**

NIMO teams continued work mentoring Type 2 and Type 3 incident management organizations in five regions across the country during FY 2009. This work included:

### **Mentoring**

Work with Type 3 incident management organizations focused on the basics—forming incident objectives, developing an incident strategy, conducting an operational period planning meeting, and reviewing individual roles and responsibilities of each team member. Throughout the process, team members from the Type 3 organization interacted with the Command and General staff members of the NIMO team.

The technology, concepts, and methodologies of the Continuous Improvement process was integrated into



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mentoring sessions with Type 2 incident management organizations. These mentoring sessions were conducted both through the use of simulated fire events as well as on active fire incidents managed by NIMO teams. Team members mentored were from Forest Service teams and interagency incident management teams, across other federal, state, and local agencies. The intent was to continue to build capability at the local level.

### **Wildland Fire Decision Support System**

During 2009, NIMO spent an ample amount of time introducing field units to the Wildland Fire Decision Support System (WFDSS). They worked with the developers to finalize the system, scheduled forest and regional level training, and developed and delivered Webinars in order to reach the greatest numbers of people.

### **Training**

NIMO delivered a number of moderate and advanced level fire training courses throughout the year. These courses included the Advance Incident Management course, which was redesigned to better reflect the challenges encountered in today's fire environment, and the Advanced Incident Management Leadership course. During the Advanced Incident Management Leadership course, the NIMO team and the National Leadership Training Steering Committee hosted the first Incident Management Team Staff Ride.

During the staff ride, participants literally “walked the walk” through a previous fire incident. The actions taken at the time of the original incident were discussed as participants walked or rode through the area where the original incident occurred. This concept placed the participant in the shoes of those who originally managed the incident.

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### **Lookout for Williams Creek Fire Umpqua National Forest, Oregon**



Additionally, NIMO worked with other subject matter experts to develop streamlined training—a bridge from Operation Section Chief (OSC) to Planning Section Chief (PSC), for previously qualified OSCs with an interest in becoming a PSC, without having to go back to the start to become qualified.



## Goal 6—Success Stories, Workforce

### Workforce Management and Succession Planning in Southern Region

Historically, the Forest Service has had no uniform approach or formalized program to address workforce management or succession planning. The Human Resource Management Branch of the agency has developed components of the workforce plan, however, these components are not integrated into a comprehensive plan or process for implementation. They have largely been left to the immediate needs of the local units rather than implementing a longer term strategy at either a regional or national level.

Recognizing the need for a strategic approach to workforce development and succession planning, Fire and Aviation Management in the Southern Region—Region 8, with the assistance of the Washington Office National Incident Management Organization (NIMO), has undertaken an initiative to address critical gaps in the regional fire organization. The intent is to establish and implement a workforce development plan that can be used in Region 8 in order to foster the leadership skills and abilities needed in future organizations. This effort focuses on drawing from existing workforce management literature, analyses, and programs—both internal and external to the agency, in order to offer a comprehensive and conscious approach to succession planning.

To date, a current agency situation has been prepared; trends and issues have been identified; and a series of products have been prepared for review by regional executive leadership. Products included:

- Workforce Management Succession Plan,
- Region 8 Workforce “Gap Analysis,”
- Fire and Aviation Management Career Advancement Tool (FAMCAT)—a web-based tool that will allow individuals to view potential career pathways, and a
- Financial Plan for the program.

Although the primary beneficiary of this plan will be Region 8 FAM leaders, managers and employees, a secondary objective is to establish a model process that can be replicated nationally within the FAM organization or regionally into other program areas.



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## Job Corps Civilian Conservation Centers' Plan to Assist in Meeting Workforce Planning Goals

In 2009, the Job Corps Civilian Conservation Centers (CCCs) finalized their strategic plan for continued participation in wildland fire management. The report, *"USDA Forest Service Job Corps Civilian Conservation Centers (CCC) Strategic Plan for Wildland Fire Management and Hazardous Fuels Reduction Fiscal Year 2009—2014*, outlines how to increase usage of CCC student and staff in both wildland fire management and the national incident management system, ultimately aiding the Forest Service and Fire and Aviation Management (FAM) with meeting workforce planning goals.

The plan reflects a strong commitment to recognizing the talents of the CCC student, staff, and graduates and capitalizes on those resources as part of future FAM workforce planning. This plan benefits the CCC students by preparing them for potential long-term employment with the agency as wildland firefighters upon graduation. At the same time, it will, likewise, assist the agency in filling mission-critical skill gaps.

### Job Corps Civilian Conservation Center 2009 Activities

During FY 2009, there were many opportunities for the CCC's to partner with the national forests and grasslands across the United States to gain experience and accomplish work. The following recounts some of those instances:

- The CCC's received funding from FAM for fire-related training of staff and students, training materials, gear, and Center fire organizational leadership. This funding increased the capacity of the Center to support the hazardous fuels programs on national forests and grasslands across the United States.
- The Natural Resources trade students at Trapper Creek Job Corps Civilian Conservation Center in Darby, Montana, participated in the "Fuels for Schools" program by providing woody biomass from their hazardous fuels reduction projects to local schools for heating purposes.
- Fire crews from Anaconda (Montana) and Pine Knot (Kentucky) Job Corps CCC's assisted the Shasta-Trinity National Forest, NIMO, and Forest Service Law Enforcement officials with "Operation Reclaim," in California. During this assignment, the CCC students cleaned up and reclaimed national forest system lands damaged by illegal activity.
- The Schenck Job Corps Civilian Conservation Center (North Carolina) Advanced Wildland Firefighter crew was dispatched to 58 assignments during the 2009 fire season, both for wildfire and hazardous fuels reduction incidents. In the last two years, the Forest Service has hired 19 permanent wildland firefighters from this training crew.
- Students and staff from the Blackwell (Wisconsin) Job Corp CCC were dispatched to the Railbelt Complex in Alaska.

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### Curlew Job Corps CCC Wildland Fire Crew



## Part IV. Fire and Aviation Management Performance Measures and Outcomes

### Performance Accountability

Sound performance accountability requires establishment of relevant measures and reportable outcomes, with transparent reporting toward the desired results of those measures. Wildland fire is a high-profile, interagency program with a significant allocation of agency resources. As such, viable performance accountability is an integral part of the Fire and Aviation Management (FAM) program.

FAM's performance management framework continues to evolve as a result of changes scheduled to occur in FY 2010 including:

- a new *USDA Strategic Plan*,
- the Administration's focus on *High Priority Performance Goal* measures throughout the government, and
- the continued efforts by Office of Management and Budget (OMB) to refine performance assessment.

Excluding the *USDA Strategic Plan* measures which will be replaced in 2010, the following list provides a full accounting of the performance measures reported at the national level by FAM for FY 2009. These measures are part of a multi-faceted performance framework that shapes FAM's work. They are a result of a number of different efforts:

1. The *Forest Service Strategic Plan*;
2. OMB's performance assessment rating tool;
3. Forest Service output measures aligned with Budget Line Items;
4. Forest Service executive priorities; and
5. The interagency and intergovernmental *10 Year Comprehensive Strategy*.

It should be noted that with the federal natural resource management agencies' adoption of the 2009 implementation guidance for the Federal Wildland Fire Management Policy, the term, "wildland fire use" is no longer used. This guidance provides for two types of fire—planned ignitions (prescribed) and unplanned ignitions (wildfire). Accomplishments for what was formerly referred to as "wildland fire use" in the performance measures are recorded in the following tables as "unplanned." This includes those unplanned ignitions that demonstrated hazard reduction and fire effects in alignment with local Land and Resource Management Plan (LRMP) Desired Conditions.

**Table 3. Forest Service Strategic Plan 2007—2017 Performance Measures and Outcomes for FY 2009**

### Forest Service Strategic Plan FY 2007—2012

Numeric designation (if appropriate)	Measure	2009 Actual	2009 Target (if applicable)
1.1a	Number and percentage of acres treated to restore fire-adapted ecosystems that are: (1) moved toward desired conditions and (2) maintained in desired conditions.	<b>Moved toward:</b> 799,215 27 percent <b>Maintained:</b> 1,146,712 38 percent	<b>Moved toward:</b> 1,107,100 42 percent <b>Maintained:</b> 1,054,000 40 percent
1.1b	Number of acres brought into stewardship contracts.	88,303	107,000
1.2	Percentage of fires not contained in initial attack that exceeded a stratified cost index (SCI).	22 percent	20 percent
1.3	Percentage of acres treated in the wildland urban interface (WUI) that have been identified in community wildfire protection plans (CWPPs) or equivalent plans.	41 percent	28 percent



Table 4. Program Assessment Measures and Outcomes for FY 2009

**Program Assessment**

Numeric Designation (if appropriate)	Measure	2009 Actual	Target (if applicable)
	Percentage of total National Forest System land base for which fire risk is reduced through movement to a better condition class.	2.40 percent	3.00 percent
	Percent of fires not contained in initial attack that exceed a SCI.	22 percent	20 percent
	Number of acres maintained and improved by treatment category (prescribed fire, mechanical, and wildland fire use) and of those improved the percent that change condition class.	1,945,927 27 percent	1,200,000 27 percent
	Percent change from the 10-year average for: (1) number of wildfires controlled during initial attack, and (2) number of human caused wildfires.	0.30 percent 5.1 percent	0.50 percent 1 percent
	Total acres treated in WUI and non-WUI and also acres treated for other vegetation management activities that achieved fire objectives as a secondary benefit.	3,598,088	2,485,000
	Number of acres restored and maintained per million dollars gross investment.	4,482	4,100
	Acres moved to a better condition class per million dollars gross investment.	1,487	1,500



Table 5. 10 Year Comprehensive Strategy Implementation Plan Measures and Outcomes for FY 2009

10 Year Comprehensive Strategy Implementation Plan

Numeric Designation (if appropriate)	Measure	2009 Actual	Target (if applicable)
	Percent change from 10-year average for: (a) percent of wildfires controlled during initial attack, and (b) number of unwanted human-caused wildfires.	0.30 percent 5.1 percent	0.50 percent 1.0 percent
	Percent of fires not contained in initial attack that exceeded a SCI.	22 percent	20 percent
	Number of acres treated per million dollars gross investment in WUI and non-WUI areas.	4,691	N/A
	Percent of collaboratively identified high priority acres treated where fire management objectives are achieved as identified in applicable management plans or strategies.	62 percent	N/A
	Number and percent of acres treated through collaboration consistent with this Implementation Plan identified by treatment category (i.e., prescribed fire, mechanical fire, and wildland fire use—unplanned).	<b>Prescribed</b> 1,670,946/ 55.6 percent <b>Mechanical</b> 1,025,705/ 34.1 percent <b>Unplanned</b> 309,915/ 10.3 percent	N/A
	Number and percent of acres treated to restore fire-adapted ecosystems which are: (1) moved toward desired conditions and (2) maintained in desired conditions.	<b>Moved toward</b> 799,215 27 percent <b>Maintained</b> 1,146,712 38 percent	<b>Moved toward</b> 1,107,100 40 percent <b>Maintained</b> 1,054,000 40 percent
	Number of burned acres identified in approved post-wildfire recovery plans as needing treatments that actually receive treatments.	246,000	N/A
	Percent of burned acres treated for post-wildfire recovery that are trending toward desired conditions.	95 percent	N/A

**10 Year Comprehensive Strategy Implementation Plan (continued)**

Numeric Designation (if appropriate)	Measure	2009 Actual	Target (if applicable)
	Number and percent of communities-at-risk covered by a CWPP or equivalent that are reducing their risk from wildland fire. A community is at reduced risk if it has satisfied at least one of the following requirements: (1) recognized as a Firewise community or equivalent, or (2) enacted a mitigation/ fire prevention ordinance, or (3) high priority hazardous fuels identified in the CWPP or equivalent are reduced or appropriate fuel levels on such lands are maintained in accordance with a plan.	10,293 14.7 percent	N/A
	Percentage of at risk communities who report increased local suppression capacity as evidence by: (1) the increasing number of trained and/or certified firefighters and crews or (2) upgraded or new fire suppression equipment obtained or (3) formation of a new fire department or expansion of an existing department involved in wildland firefighting.	19.8 percent	N/A
	Number of green tons and/or volume of woody biomass from hazardous fuel reduction and restoration treatments on federal land that are made available for utilization through permits, contracts, grants, agreements, or equivalent.	3,936,000 green tons	N/A

**Table 6. Forest Service National Measures Set and Outcomes for FY 2009**

**Forest Service National Measures Set**

Numeric Designation (if appropriate)	Measure	2009 Actual	Target (if applicable)
	Acres of hazardous fuels treated outside the WUI to reduce the risk of catastrophic wildland fire.	1,408,269	N/A
	Acres WUI high-priority hazardous fuels treated to reduce the risk of catastrophic wildland fire.	2,189,819	N/A
	Three-year percent of fires not contained in initial attack that exceeded a SCI.	22.0 percent	21.3 percent
	Number of communities receiving firefighting capacity building State Fire Assistance (SFA)	20,050	13,110
	Number of small communities receiving firefighting capacity building Volunteer Fire Assistance (VFA).	10,637	7,324

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A variety of factors have the ability to influence one way or the other the agency's ability to meet all established performance measure targets. Adverse weather, resource availability, whether the treatments are located in the more expensive, complex areas of the country—in the wildland urban interface, and/or the number of treatments required to move an area toward its desired condition, are all examples of factors that can negatively affect accomplishments and the agency's ability to meet established targets.

Overall, the agency continues a major effort to effectively address the wildfire situation in an efficient, integrated, and comprehensive manner. Critical emphasis to continue agency efforts on these objectives will be maintained in FY 2010 and 2011. Targets will continue to be achieved by working in collaboration with federal and non-federal partners and by working across agency programs.

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**Taylor Fire  
Coconino National Forest  
Arizona**



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## Part V. Looking Ahead to Fiscal Year 2010

The Forest Service and Fire and Aviation Management remain committed to the use of new science, technology, tools, and information at both the program and incident levels to work toward the perfection of wildland fire management. The organization is dedicated to working in collaboration with other federal agencies, state governments, and cooperators to be successful. FAM is certain that an expanded, improved knowledge base will propel the organization to established goals associated with a safe, proficient, and effective program.

In concert with the significant accomplishments outlined in this report, 2010 will include a continued scope of work for a large, complex, multi-faceted program as well as work in the following key focus areas:

### FLAME Act Implementation for FY 2010

The FLAME Act provides funding for large fires that are “outside” the regular suppression account and will function as a transfer account to accommodate those large fires that historically have resulted in the greatest expenditure of suppression funds. Transfer of the FLAME Act funds into the suppression account requires a declaration to the Secretary with a request to transfer the funds. FLAME funds can be accessed when either a Type 1 or Type 2 incident management team is assigned or when the suppression account is nearing depletion due to above-normal fire activity.

In 2010, it is proposed that a risk assessment, documenting a risk decision along with a complexity analysis, be prepared by the responsible agency administrator for fires of national significance. Generally, these will be fire on those 30 national forests where exceptionally large fires have historically occurred.

FY 2010 will be a transition year; and since FLAME funds are reserved for Type 1 and 2 complexity rated incidents, complexity determination will be through the use of the current complexity analysis identified in the 2010 Interagency Standards for Fire and Fire Aviation Operations—“Red Book.”

Integration of the Federal Wildland Fire Policy guidance implementation—two kinds of fire, the institution of Continuous Improvement (CI) including the national risk management framework, the Wildland Fire Decision Support System, and complexity analysis improvements will frame the declaration request for the FLAME Act fund transfer.



### Cohesive Wildfire Management Strategy

A Cohesive Wildfire Management Strategy, developed together by the Secretary of the Interior and the Secretary of Agriculture is required by the FLAME Act and due to Congress by October 31, 2010.

Required elements of the strategy were defined in the Act as needing to provide for:

- the identification of the most cost-effective means for allocating fire management budget resources;
- the reinvestment in non-fire programs by the Secretary of the Interior and the Secretary of Agriculture;
- employing the appropriate management response to wildfires;
- assessing the level of risk to communities;
- the allocation of hazardous fuels reduction funds based on the priority of hazardous fuels reduction projects;
- assessing the impacts of climate change on the frequency and severity of wildland fire; and
- studying the effects of invasive species on wildfire risk.

GAO also identified several key areas addressing cost effectiveness of suppression and mitigation, the efficacy of treatments for fuels and Fire Adapted Communities, and establishment of meaningful performance measures. In addition, the Department of the Interior requires that the cohesive strategy must consider and analyze potential climate change impacts when undertaking long-range planning exercises.



The Forest Service, Department of the Interior, and key interagency partners propose a comprehensive analysis that will lead to identifying alternatives for program development, strategic investments, and policy, which will meet objectives established in the 1995 Federal Wildland Fire Management Policy.

### **Revised Federal Wildland Fire Management Policy Guidance Issues**

The Department of the Interior and the Forest Service, in collaboration with state and local partners, adopted new implementation guidance for the Federal Wildland Fire Management Policy in February 2009. This new guidance provided increased flexibility for local agency administrators to manage wildfire in order to achieve both protection and resource objectives. The 2009 fire season demonstrated successful adoption of the new implementation guidance across most areas of the United States.

The October 2009 Fire Season After Action Review (AAR) identified areas in need of continued improvement such as improving the understanding of the revised guidance with more consistent communication and increased collaboration with state and local government.

During 2010, the improvements identified in the AAR as well as the following key points will be addressed:

- Protection of life, property, and natural resources will remain the highest priority for determining responses to wildfires.
- Land and Resource Management Plans will continue to identify the role of wildland fire on all national forests and grasslands.
- Improve understanding of the revised implementation guidance within federal agencies and with cooperators and the public including improved consistency of communication and clear messaging.



- Increase efforts to collaborate with state and local government partners to ensure understanding and agreement of the management of wildfire at local levels. This includes expansion of collaboration—both pre-season and during fire season.
- Standardize assessment of risk, reporting, and collaboration efforts for wildfire and planning for resources needed on long-term incidents.
- Conduct further development, training, and guidance in WFDSS applications to improve its utility for decision support on wildfire and to support long-term incidents. This will include air quality and other decision support tools.

