

**Testimony of
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Bureau of Land Management
Before the Senate Energy Committee
Subcommittee on Forests and Public Land Management
Oversight-Fire Preparedness**

June 29, 1999

Thank you for the opportunity to testify regarding the state of fire preparedness of the major land-managing agencies in the Department of the Interior and the Forest Service. I am the Director of the Bureau of Land Management's (BLM) National Office of Fire and Aviation. Accompanying me today is Ron Dunton, the BLM's Fire Program Manager for the Office of Fire and Aviation. I would also like to introduce Arch Wells, Chief Forester of the Bureau of Indian Affairs who is responsible for the BIA's wildland fire program.

My testimony will provide:

- an overview of the wildland fire season to date;
- a preview of the anticipated 1999 fire season;
- how the Federal land managing agencies prepare for and fight wildland fires;
- how we implement the Federal Wildland Fire Management Policy; and,
- our efforts to move from fire "control" to fire "management."

The National Interagency Fire Center (NIFC), in Boise, Idaho, includes the nation's primary logistical support center for wildland fire suppression. NIFC is home to Federal wildland fire experts in fields as diverse as fire ecology, fire behavior, technology, aviation and weather. Working together and in concert with state and local agencies, NIFC's role is to provide a national response to wildland fire and other emergencies and to serve as a focal point for wildland fire information and technology.

Since its inception in the 1960s, NIFC has grown to house fire offices of the Forest Service, the National Park Service, the Fish & Wildlife Service, and the Bureau of Indian Affairs, as well as the Bureau of Land Management. Also housed at NIFC are offices of the National Weather Service, which provides fire weather briefings for the NIFC managers and the Department of Interior's Office of Aircraft Services. These partner agencies are able to cost-effectively share, rather than compete for, firefighting resources. Today, through cooperative agreements, this highly successful interagency concept extends to all 50 States and Canada. NIFC also assists in firefighting efforts and emergencies in foreign nations when requested by the Office of Foreign Disaster Assistance of the U.S. Department of State.

The Wildland Fire Season to Date

As of June 24, 1999, more than 1,097,400 acres of wildland have burned in 46,272 fires. Compared with the 10-year average (832,497 acres for 38,591 fires) for this same period of time, wildland fire activity is slightly above normal.

Two of the largest fires of the season so far occurred in Florida this spring. The "Deceiving Fire" in the Everglades grew to 170,000 acres and was contained April 27 with the help of approximately 600 firefighters. This fire forced the closure of Interstate 75, a main east-west corridor, for several weeks. The second, the "Friendly Fire" began in Florida's Osceola National Forest and has burned about 70,000 acres to date. Approximately 200 firefighters helped contain the fire by June 15, but crews continue to monitor it and suppress spot fires.

As normal summer weather patterns develop in the West, seasonal wildland fire activity is increasing in many western states. New Mexico and Arizona are reporting areas of drought conditions, which contributes to wildland fire activity in those states. In Arizona, the "Rainbow Fire" near Whiteriver burned more than 4,163 acres before it was controlled June 14. Although approximately 20 structures were destroyed or damaged, firefighters succeeded in protecting several homes. A second fire in Arizona's Grand Canyon National Park, the "Mt. Emma Fire," was ignited by lightning June 10 and is being managed to accomplish resource objectives.

In Alaska, the "Donnelly Fire," which began of human-cause on June 11, was contained on June 21, having consumed over 18,000 acres. Over 600 firefighters worked on the fire, which forced the evacuation of Fort Greely Army Base and the nearby community of Delta Junction.

As seasonal hot and dry temperatures move across the West, agencies continue to respond to new fires. Nationwide, adequate fire suppression resources exist to handle wildland fire activity throughout the United States.

The attached table compares wildland fire activity from January through June 15, 1999, with January through June 15, 1998. Again, the majority of wildland fire activity through June 15, 1999, has occurred in the southern and eastern United States, which is normal given the migration of fire activity from the eastern United States in the beginning of the year to the west as spring turns into summer.

Wildland Fire Cycle in the United States

Generally, the wildfire season in the southeastern states gets underway in January. The potential for fire activity continues in this area, and by April, fire potential begins to increase in the Midwestern states. By May, the Southwest begins its burning season, while in the eastern states there is a decrease in fire potential. During June and July, most of the western states (in the lower 48) and Alaska typically experience an increase in wildfires. Across the entire west coast, wildland fires peak during August and September, while in Alaska, the potential for fire activity begins to decrease. By October, the fire potential in most of the western states has decreased. Southern California is the prominent exception, as the potential for fire activity peaks in October. As fall and winter approach, the cycle begins again as snow falls in the western states, and fallen, dry leaves begin to pile up throughout the Southeast.

June/July 1999 Wildland Fire Potential

While we cannot accurately predict the severity of the upcoming fire season, we can make certain observations which are helpful in anticipating fire potential. "La Nina," the cold phase of 1998's El Nino weather cycle, has brought above-average snowfall to Pacific Northwest states, northern California, northern Nevada and the Northern Rockies. Areas farther south have experienced moderate winters with below-normal snowpack and precipitation. The entire tier of southern states from California to Florida has been drier than normal and moderate to severe drought is occurring. Limited areas of drought exist in Virginia, West Virginia, and Maryland. Long-range weather forecasts call for little change: a continuation of above normal temperatures and below normal precipitation in the southern states. Alaska received little precipitation early in the winter and, in most cases, is still below normal (primarily in the interior portions of the state.)

The following wildland fire potential is developed monthly to provide a planning tool for fire managers based on scientific indicators. However, changing weather patterns or human-caused incidents may alter the situation dramatically. The fire situation nation wide is monitored on a daily basis, to allow managers to react appropriately.

Southwest (Arizona, New Mexico, and western Texas)

Temperatures have been normal to above-normal for most of the area, while rainfall has been normal to below normal. Moderate to severe drought conditions are being reported for most of Arizona, southwest New Mexico and southwest Texas. These conditions could produce extreme wildland fire activity in these areas. The long-range forecast predicts above-normal temperatures in the south and below-normal in northern Arizona. Below-normal precipitation is predicted for southeast Arizona, New Mexico and west Texas.

Alaska

Temperatures and precipitation have been normal to below normal during the past month. Due to this cooler-than-normal spring and early summer, seasonal "green-up" has been delayed. Given the current conditions, additional wildland fires that occur are expected to remain small throughout June.

Northern Rockies (northern Idaho, Montana, and North Dakota)

Weather conditions for most of this geographic area have been normal during the past four to six weeks. As a result, typical fire activity is expected throughout June and early July. The long-range forecast predicts below-normal temperatures and above-normal rainfall over most of the area.

Great Basin (southern Idaho, Nevada, Utah, and western Wyoming)

Most of this area has received normal temperatures and rainfall, and is expected to experience typical wildland fire activity. The exception is in a small pocket covering southern Nevada and the corners of southwest and southeast Utah, where moderate drought conditions are being

reported. Conditions in this area exist for active wildland fire behavior during the next few weeks. The long-range forecast predicts below-normal temperatures for most of the area. Above-normal precipitation is forecast for Idaho, the northern portions of Nevada and most of Utah.

Northwest (Oregon and Washington)

There are pockets of moderate drought conditions in the northeast and north central Oregon. The rest of Oregon and all of Washington have received normal to above-normal rainfall, and are expected to experience normal seasonal fire activity during the next month. The long-range forecast predicts below-normal temperatures along the coast and above-normal precipitation over most of the area.

California

The southern part of the state has received below-normal temperatures and above-normal rainfall during the past four to six weeks. The northern section experienced normal temperatures and below-normal precipitation. As a result, the extreme fire conditions that existed in southern California are now closer to normal for this time of the year. The long-range forecast predicts below-normal temperatures along the coast and precipitation is expected to be above-normal in the northern region.

Rocky Mountain (Colorado, Wyoming, Nebraska and South Dakota)

Temperatures have been normal to below-normal with normal to above-normal precipitation. Moderate drought conditions exist for south-central Wyoming and northeastern Colorado, however the rest of the area is reporting normal conditions. The potential for wildland fire activity is typical for this time of year. The long-range forecast predicts below-normal temperatures and above-normal precipitation in Wyoming, northwest Colorado, northwest Nebraska and most of South Dakota.

East

Moderate drought conditions exist in portions of Wisconsin, the mid-Atlantic States and New England; severe drought exists in portions West Virginia and Maryland. The long-range forecast predicts above-normal temperatures over most of the area with a range from below- to above-normal rainfall forecast.

South

Most southern states along the Gulf Coast and Atlantic coast continue to report moderate to extreme fire conditions. Northern and central Florida is experiencing extreme drought conditions, increasing their chances of active fire behavior throughout June. Above-normal temperatures are also predicted for the entire area, adding to the extreme conditions that currently exist.

Managing Wildland Fires

No single Federal, state, local or Tribal fire suppression organization is designed to handle its entire fire workload during peak periods. Federal agencies maintain interagency cooperative agreements, as well as with the Department of Defense and with state and local entities, to assist in protection responsibilities, information, training and support. There is a three-tier interagency coordination system-local, regional and national-- which seeks to ensure efficient use of all fire suppression resources regardless of agency affiliation.

Local crews and equipment respond first to a wildland fire. On public lands, approximately 98 percent of wildland fires are stopped during this first response -- or "initial attack" -- phase. If local resources are exhausted, resources are ordered and assistance is provided on a wider regional basis-based on the closest forces concept-from the unit's Geographic Area

Coordination Center. The eleven Geographic Area Coordination Centers are located in:

Albuquerque, New Mexico Riverside, California

Salt Lake City, Utah Fairbanks, Alaska

Portland, Oregon Broomfield, Colorado

Missoula, Montana Milwaukee, Wisconsin

Reno, Nevada Atlanta, Georgia

Redding, California

It is only when resources in the geographic area can no longer support the fire suppression efforts, that the geographic area coordination center requests assistance from the National Interagency Coordination Center (NICC) located at the NIFC in Boise, Idaho. Typically, these are large, "escaped", fires. Although they comprise only about two percent of all wildland fires, these fires are the most dangerous to life and property and the most expensive to fight.

The National Interagency Coordination Center coordinates support and moves resources among geographic areas. Representatives of the BLM, the Forest Service, the Bureau of Indian Affairs, the National Park Service, the Fish and Wildlife Service, and the National Association of State Foresters have established a national Multi-Agency Coordination (MAC) Group. The MAC Group works cooperatively to set priorities and allocate scarce firefighting resources. If necessary, the MAC can seek assistance from the Department of Defense and Canada.

To ensure consistent and seamless firefighting, the National Wildfire Coordinating Group has established standards for all incident management teams and firefighting crews. This system allows for uniform deployment of resources and common terminology, communications and fire suppression procedures.

Among the national resources prepositioned across the country in order to respond to major fire activity are:

- Seventy 20-person crews which are highly trained and qualified to handle complex firefighting situations. These are commonly referred to as Hotshot crews.
- 409 individual smoke jumpers used for initial attack throughout the western states, and supported by 19 aircraft.
- 58 contract air tankers equipped to drop retardant on wildland fires.
- One contracted large transport aircraft to shuttle crews and supplies.
- 11 lead planes used for tactical operations.
- 23 heavy and medium helicopters.
- Three aircraft equipped with infrared scanners to detect heat sources through smoke and map wildland fires.
- 17 Incident Management Teams (Type I Teams) trained to manage large, complex incidents anywhere in the country.
- 447 20-person Type II crews positioned among the geographic areas. Although these crews are primarily assigned within their geographic areas, they can be dispatched through the National Coordination Center to another area if necessary.
- 50 communication kits equipped to support a major incident.
- 21 each of contract caterers, shower facilities, and commissary units to support fire personnel on large incidents.
- 11 national warehouses (with locations in each geographic area) stocked with firefighting equipment and supplies to support incidents within that area.

These resources are involved in initial attack activities within their geographic regions. Through coordination of efforts and prepositioning of resources (both human and material), we are preparing to respond rapidly, efficiently, and effectively to serious wildland fires.

Implementing the Federal Wildland Fire Management Policy

The 1994 fire season was a devastating one for the country; 114,066 wildfires burned more than 4.7 million acres. The Departments of the Interior and Agriculture spent \$925 million fighting fires. But most tragic, it was the deadliest summer in more than six decades. Fire took the lives of 34 wildland firefighters, including 14 on Colorado's South Canyon Fire.

In response, the Secretaries of the Interior and Agriculture chartered a review of the Federal wildland fire policy. The final report, completed in December 1995, reconfirmed that public and firefighter safety is the top priority of the Federal government in fighting fires. Protecting property and resource values is our second priority. The report also recognized and emphasized the natural role and importance of fire in the ecosystem.

The Federal Wildland Fire Management Policy, among other documents, has highlighted how our past success in suppression of all wildland fires is one of the reasons for the current ecologic dilemma that threatens much of our country. For example, historic evidence shows that much of our rangeland, chaparral and certain pine forests burned historically every 10 to 50 years. Unless we want to continue to build a national tinderbox, threaten communities, place our firefighters under increasing and unnecessary risk, and continue to degrade the health of our rangelands and forests, we need to bring fire cycles closer to historic levels, or at least to more productive levels.

We will move forward under the direction outlined in the Federal Wildland Fire Management Policy to expand our planning for and application of wildland fire to enhance resources and reduce hazardous fuels.

With the Federal government's priorities clearly defined -- insuring the safety of firefighters and the public and protecting property and natural and cultural resource values -- the firefighting agencies set out to make changes in their programs to insure appropriate preparation for wildland fires. I'd like to discuss a few examples of the actions taken at an interagency level, as well as some specific efforts by the BLM, to improve our fire preparedness.

Workforce Training, Qualifications and Retention

The Secretaries of Agriculture and of the Interior directed the development of standard qualifications for fire management personnel who make critical fire management decisions. An "Interagency Fire Program Management Qualifications Guide" is currently under agency review, and is planned for release in September of 1999. Agencies involved in the preparation of the guide are the Fish and Wildlife Service, the Bureau of Indian Affairs, the National Park Service, the Bureau of Land Management and the Forest Service.

Although qualification standards for firefighters already exist, reviews of fire programs and policies conducted since 1994 indicate that specific positions -- work leaders, fire specialists, or program managers -- may require additional training or experience specific to fire management.

The guide will contain the information necessary for the new standards, including competency descriptions for 11 key wildland fire management positions; minimum qualification standards for the 11 key positions; and job performance standards.

The BLM and other agencies are addressing some of these concerns today with new training, and by converting critical temporary appointments -- especially all crew leaders and helitack managers -- to career seasonal positions. The "Fire Leadership and Management Excellence" course discusses ethics, conduct, and sexual harassment, so firefighters are better prepared for leadership assignments. The shift of firefighters from temporary to career seasonal positions provides them with retirement and health benefits, along with the increased job security afforded permanent employees.

Standards and Procedures

Safe, effective and efficient wildland fire operations require a thorough understanding of many policies, principles and procedures. In 1996, the BLM established national operating standards, requiring all BLM firefighters to gain a level of efficiency and skill that will promote safe, effective, and efficient firefighting operations. These standards are set out in the Standards for Fire Operations, commonly called the "Red Book." The Red Book is updated annually; it provides guidance and clarification on wildland fire policy; safety procedures; fire use and suppression; fire preparedness and prevention; protection priorities; interagency cooperation, roles, and responsibilities; and wildland/urban interface issues.

Fire Preparedness Reviews

In 1996, a national team of fire experts (at the BLM and its interagency partners) began conducting formal preparedness reviews of fire and aviation programs in the field. Although reviews had been conducted in previous years, a national standard had never been applied and the reviews had never been completed by a team of interagency fire practitioners. The mission of these national reviews, which are conducted in each state every three years, is to ensure that the standards set out in the Standards for Fire Operations are being met. These evaluations also help managers prepare for the fire season by identifying program weakness and recommending corrective actions.

Safety Awareness

In 1995, the Federal firefighting agencies commissioned a study of "Wildland Firefighter Safety Awareness." The goal of the study was to identify cultural barriers to firefighter safety and propose workable solutions. As part of the study, over 1,000 individuals within the wildland firefighting community were interviewed. The results of the study have led to the development of the "Safety Awareness in the Fire Environment Initiative" (SAFE) which endeavors to create an environment and culture that puts safety first through action, leadership, commitment, and accountability. Effective implementation of the SAFE program is of the highest priority for the Federal firefighting agencies.

Joint Fire Science Program

The 1995 Federal Wildland Fire Management Policy directs the agencies to achieve a balance between suppression capability and fire use to regulate fuels and sustain healthy ecosystems. In 1998, Congress directed the BLM, the Bureau of Indian Affairs, the National Park Service, the Fish and Wildlife Service, U.S. Geological Survey, and the Forest Service to establish a Joint Fire Science Program (JFSP) to provide a scientific basis and rationale for implementing fuels management activities, with a focus on activities that will lead to the development and application of tools and information to help managers better use fire.

The four issues that the Joint Fire Science Program will address to insure on the ground success of the fuels management and fire use activities are:

- The need to develop and implement consistent interagency fuels mapping and inventories with common classifications and resolution within ecosystems.
- The need to evaluate and compare fuels treatment practices and techniques, including prescribed fire, thinning and other mechanical means, increased utilization of biomass, and no treatment.
- The need to develop treatment schedules, determine the frequency of subsequent treatments, and coordinate treatment schedules among the agencies.
- The need to establish compatible interagency processes and procedures for monitoring, evaluating, and reporting fuels treatments.

Wildland-Urban Interface

Fires in the wildland-urban interface (the area where homes meet the wildlands) have the greatest potential for life-threatening situations, economic loss, and watershed damage. The BLM is a major manager of these lands. One way we are addressing these issues is to work closely with rural fire departments. In the western United States, the BLM has agreements with over 1,500 rural fire-protection entities. Some of these rural fire departments are well-funded, equipped and trained; others are not.

The Federal firefighting agencies are working cooperatively with many of these organizations to share training and technology. In New Mexico, many of the BLM's field offices (including Roswell, Carlsbad, and Farmington) assist the New Mexico State Forestry Office in wildland training programs for rural and volunteer fire departments. In Eastern Idaho, the BLM, the Forest Service, the Fish and Wildlife Service, the National Weather Service, and state and local agencies have signed a mutual aid agreement with 48 of the 52 local fire departments. This Eastern Idaho Fire Cooperative provides for cooperative training, prevention, operations and tactics.

Fire Prevention and Education

Every year hundreds, and perhaps thousands, of human-caused wildfires threaten human life and result in millions of dollars in damage to public and private lands and to natural resources. These fires also destroy critical watersheds, resulting in soil erosion and damage to adjacent communities. Many of these fires are caused by carelessness, and many are accidents due to a lack of understanding about fire conditions and the causes of fire. National Wildland Fire Prevention and Education teams help create awareness and educate the public about fire-safe practices. These interagency teams were used extensively during the 1998 season in areas of extreme fire danger such as Texas, Utah, Florida, Arizona, New Mexico and Colorado. As wildland fire agencies step up their prescribed and wildland fire programs, these teams can also help educate the public about the natural role of fire in the ecosystem.

In the Boise, Idaho area, the Forest Service and the BLM have cooperated with state and local agencies through the Treasure Valley Interagency Fire Prevention Cooperative to present fire education/prevention to the public, focusing especially on the wildland/urban interface. Efforts

include annual door-to-door literature drops for homeowners with information on defensible space. Just last month, the BLM and the Forest Service participated in a two-day Public Conference in Coeur d'Alene on "Wildland Fire: Strategies to Protect Your Home and Family."

Moving from Fire Control to Fire Management

While fire suppression has been the preeminent strategy over the past 80 years, scientists and public land managers now recognize that fire is a natural event. Exclusion of fire throughout the 20th century has resulted in a decrease in fire resistant species and an increase in flammable vegetation.

Prescribed fire is designed to reintroduce wildland fire into an ecosystem where it has been suppressed or eliminated and is needed to restore ecosystem health. But prescribed fire also

poses a great challenge to Federal land managers who will need to overcome public fear of fire and very real air quality concerns in order to restore fire to its natural place in the western landscape. This reintroduction of fire is critically important to prevent catastrophic fires in areas of excessive fuel buildup. As more and more people have moved into fire-prone landscapes, the wildland-urban interface is now our backyard.

In 1998, a change in the wildland fire management appropriation structure created a new sub-activity titled, "Hazardous Fuel Reduction Operation." This funding provides for the cost of implementing prescribed fire projects and mechanical treatments to reduce hazardous fuels and to restore fire to ecosystems. Through this new authority granted by Congress, the BLM set aside more than \$7.5 million to implement 337 fuels-management projects in 10 western states and Alaska.

Because of this funding, in 1998 BLM fire managers and natural resource managers treated 200,223 acres through prescribed burning, and an additional 30,000 acres mechanically. This reflects a 220 percent increase over 1997 totals, and a 255 percent increase over the 10-year average. In 1999, BLM managers plan to treat 314,000 acres with prescribed burning, while the other Interior agencies combined are expected to treat another 600,000 acres. With the funding now set aside, managers hope to achieve a more stable number of projects and land acres treated each year.

In August of last year, the Federal wildfire fighting agencies issued a prescribed fire implementation guide. This document, the "Wildland and Prescribed Fire Management Policy: Implementation Procedures Reference Guide," includes recommended formats for consistent implementation of the appropriate management response for each wildland fire occurrence and prescribed fire application.

The National Wildfire Coordinating Group's efforts to develop national standards for prescribed fire plans, national training courses, and qualification standards for personnel involved with prescribed fire operations has improved interagency sharing and is reducing the risk associated with prescribed fire activities. For example, the BLM's Boise Smoke jumper group has joined other Federal agencies' firefighting personnel in extending their expertise to assist in hazardous fuels management projects. The BIA and the Forest Service initiated the Fire Use Training Academy in Albuquerque to meet the training needs of prescribed fire. Additional training in prescribed fire management makes better use of specialized personnel, during times when wildland firefighting activity may be low.

Beyond healthier landscapes and safer firefighters - taxpayers benefit. Conducting prescribed fires typically costs about \$30 per acre, but can range from \$5 to \$70 per acre depending on the size of the fire, the type of material burned, and the proximity to structures. In contrast, suppressing wildland fire costs about \$700 per acre, but can range from \$500 to \$1,600 per acre depending on its severity.

In New Mexico, the BLM has focused much of the hazardous fuels reduction projects on local community protection. For example, the Socorro Field Office has conducted intensive projects on Horse Mountain in Catron County, and the Las Cruces Field Office has similar projects

outside of the communities of Pinos Altos and Timberon as well as in the Organ Mountains to protect the adjacent subdivisions.

Prescribed fire can no longer be looked at as something that is done only by suppression forces when there are no wildfires burning. Fuels management and prescribed fire in many areas require dedicated personnel for the full field season. Managers and their resource specialists recognize that fire, as an ecological process, is a tool they can use to benefit their programs. Land use plans are being updated through public participation to ensure that fire is considered in all aspects of resource management.

Conclusion

The fire offices for the five Federal wildland firefighting agencies -- the Forest Service, the Bureau of Land Management, the National Park Service, the Bureau of Indian Affairs, and the Fish and Wildlife Service -- will continue the coordination and cooperation that has proven so effective. At all times, foremost in our minds is safety- safety of the public and of the firefighters.

Additionally, we must acknowledge that fire plays a critical role in ecosystems. As land managers we must not only control fire, but manage fire: to acknowledge the risk it presents and understand how it serves as a vital tool in our efforts to maintain and restore healthy forests and rangelands. We must also understand and accept the importance of using fire to reduce wildland fuels to reduce the risk of catastrophic wildfire and make our wildlands a safer place for the public and our firefighters.

Thank you for this opportunity to testify. We would be happy to answer any questions.

[LINK TO MORE INFORMATION ABOUT BLM'S FIRE PROGRAM](#)