

**Statement of
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USDA Forest Service
Before
Committee on Resources
Subcommittee on Forest and Forest Health
U.S. House of Representatives
Concerning
Interagency Cooperation in Wildland Fire Fighting
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Show Low, Arizona**

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

Thank you for the opportunity to talk with you today about interagency cooperation in wildland fire fighting. I am Bob Leaverton, National Fire Plan Coordinator for the Southwestern Region of the USDA Forest Service headquartered in Albuquerque, New Mexico.

In my testimony today, I will give an overview of the 2002 wildland fire season, and key aspects of our cooperative wildland firefighting operations, especially safety. I want to emphasize that safety is reflected in our operational guidelines because of the many years of experience and evaluation of those experiences by the federal land management agencies and our state, local, and Tribal partners.

2002 Fire Season

As the Subcommittee and everyone here is well aware, the Southwest began the 2002 fire season in its fourth year of drought with no moisture relief in sight. Records from the National Climatic Data Center in Asheville, North Carolina show that May 2002 was the second driest May on record in Arizona and New Mexico in 108 years of record keeping.

Early in 2002, the Southwest Coordination Center meteorologist and fire behavior analyst prepared an assessment of the potential fire situation for the Nation and the Southwest in particular. The cumulative effects of the drought and the long term buildup of hazardous fuels made for a dire fire season prediction and resulted in pre-positioning firefighting resources and the acquisition of a regional prevention team to get fire prevention messages and community action plans in place.

As predicted, it has been a severe and prolonged fire season throughout much of the Nation. As of September 16, 2002, nearly 6.5 million acres have burned nationwide, 21 lives have been tragically lost in the overall effort, and over 2,900 homes and structures have been lost. Thanks to the National Fire Plan, over 17,000 fire employees were in place in the federal agencies to prevent and suppress wildland fires, which kept these statistics from being worse.

Even though we have successfully put out over 99 percent of all fires during initial attack, over 920,000 acres have burned in the Southwest. This is well above the 10-year average of 390,000 acres and is reflective of the drought, weather and the buildup of litter, underbrush, and other fuels.

After visiting several of the catastrophic wildfires that have occurred this fire season, President Bush announced his Healthy Forest Initiative in August. This initiative is meant to respond to the hazardous fuels buildups in our nation's forests and grasslands. The President stated that the need for a plan to restore our forests and rangelands has never been greater. When coupled with seasonal drought, unhealthy forests, overloaded with fuels are vulnerable to unnaturally severe wildfires. The Administration's legislative proposal, which was submitted recently to Congress, aims to reduce hazardous fuels as well as catastrophic wildfire threats to communities and the environment. The proposal would allow for the timely treatment of forests at the greatest risk and would give first priority to wildland urban interface areas, municipal watersheds, areas affected by disease, insect activity, wind throw, and areas susceptible to catastrophic reburn.

The Incident Command System

I would now like to turn to the Incident Command System. Federal agencies, states and rural fire departments operate under the Incident Command System (ICS) when fighting fires on federal lands. The ICS uses standard organizational structures, training, and position qualifications in order to for us to integrate firefighting resources easily into an effective, rapid response team.

The National Interagency Fire Center (NIFC) in Boise, Idaho serves as the national coordination, dispatch, and communications center for all wildland fire agencies. Co-located at NIFC are: Forest Service, Bureau of Land Management, Fish and Wildlife Service, National Park Service, Bureau of Indian Affairs, the National Weather Service, Office of Aircraft Services and the National Association of State Foresters. Federal and state agencies work with Tribal and local agencies and share firefighting supplies, equipment, and personnel to facilitate efficient and cost-effective firefighting. Partnerships with state, local, and rural agencies enhance these efforts.

The Southwest was the first area of the country to adopt a multi-agency fire suppression organization back in 1983. The multi-agency Southwest Coordination Center in Albuquerque locates and dispatches equipment and people when one of the 11 zone dispatch centers in the Southwest needs assistance meeting the needs of local units in their zone. The Southwest West Coordination Center reports to the multi-agency Southwest Fire Management Board and the current Chairman is Kurt Rowdabaugh with the Arizona State Land Department.

Major fires come under the direction of multi-agency national incident command teams, called Type I teams, of which there are 16 in the United States. Incident command teams are organized, trained, and qualified using the ICS system. Each team trains and works together throughout the fire season. The team has specific lines of delegated authority and formal reporting relationships with the local agency and they are responsible for operations, planning, logistics, and finance. The incident commander and staff, in concert with local units, work with administrative and resource advisors to determine firefighting objectives and potential strategies, and set immediate priorities. At an incident, local agencies first brief the national team about the local situation and continue to do so throughout the incident. Safety is always the incident command team's highest priority.

Immediately after a fire has been declared out, there is a review of the fire fighting efforts. For major fires, there are additional reviews for safety (a review that is ongoing during the fire), cost, equipment use,

strategies, and agreements with local firefighting agencies. These reviews allow us to evaluate the efforts and make adjustments for the future.

Responding To A Fire

When responding to a fire, coordination operates on several levels. At the very beginning of a fire (called initial attack), the local zone center (White Mountain Zone for example) is responsible for coordination and dispatch of local resources and equipment. Once it is apparent the incident will not be contained at initial attack or if a unit is facing multiple ignitions with people or equipment shortages, then orders are placed with the geographic area coordination center (Southwest Coordination Center, for example). If shortages continue, the Geographic Coordination Area places orders at NIFC. The coordination center at NIFC will then go to adjoining Geographic Coordination Areas to acquire the assets that are needed.

In major fire suppression response efforts, NIFC establishes priorities for the Nation when multiple geographic areas are involved. In the Southwest, when there are several major incidents occurring at the same time with competing demand for resources, the Geographic Area Multi-agency Coordination Group in Albuquerque establishes priorities for the Southwest based on the potential to harm people and communities. When it is reasonable to expect a fire can be contained within first operational period, dispatch centers at the local level may coordinate directly if the resources are used for initial attack on adjacent jurisdictions.

The factors that determine the number of firefighters dispatched to a fire include the severity and location of the fire and the current demand from other fire locations. A wildfire in a wildland-urban area draws more firefighting resources than a fire in a more remote area.

Years of experience have shown us that it is unwise to tap ALL nearby resources to fight a fire. Given the fire danger in an area and fire behavior, firefighters, engines and other equipment are needed at their home bases to deal with the possibility of new fire starts. Parts of the country without severe fire conditions can often more easily and safely provide additional firefighters and equipment.

Safety

Firefighting is a high risk, high consequence activity, and firefighter and public safety are our highest priority. The Forest Service and Interior agencies have strong firefighter safety and training programs. Following the 30 Mile tragedy in July, 2001, where four firefighters lost their lives, we reexamined our safety programs and identified areas that needed improvement. The areas identified include managing firefighter fatigue, reinforcing the use of the 10 Standard Fire Orders, the 18 Watch Out Situations, and reinforcing training to avoid entrapment by fire. All of these improvements are in place this year and have been important during this year of severe fire activity.

In the initial stages of a large fire, we are often approached by volunteers who want to help but are not familiar with the Incident Command System or do not have adequate training or equipment to fight wildland fires. Without the proper training, equipment, and understanding, volunteers can put themselves and others into unnecessary danger.

When there is extreme fire behavior such as occurred on the Rodeo-Chedeski Fire, then even the most

experienced firefighters are kept out of harm's way until it is safe for them to attack the fire.

Rodeo-Chedeski Fire

When the Rodeo fire started on June 18, 2002, the Southwest was in the midst of a severe drought with several large fires burning and no weather relief in sight. By June 20, 2002, the Rodeo fire had grown to 85,000 acres and was about 10 miles south of Show Low Arizona, and had a 6-mile flame front.

Weather, fuels, and drought conditions all contribute to the number, size, and behavior of wildfires. The overall fire behavior exhibited at the Rodeo-Chediski fire would be rated as extreme in most senses. Historically, large fire events on the Mogollon Rim are driven by frontal passage winds in spring and early summer that tend to push the fires in a southwest to northeast direction. Fires tend to be long and narrow in dimension. Traditionally the fires are contained with an anticipated drop in wind speed occurring near sunset, or they are contained after pushing through the Ponderosa Pine into the Pinyon Juniper. The Rodeo-Chediski Fire departed from this model and was a plume, fuel, and topographically driven fire.

The initial fire spread was influenced by the prevailing southwest winds and the southerly aspects of the Mogollon Rim. During the days of extreme fire growth, the fire was driven by the wind, fuels, and the terrain. The availability of fuel due to low live fuel moistures became an influence and assisted in the creation of towering plumes – building columns of smoke that act as a chimney. A rapid increase in fire movement occurred on all flanks once the plume collapsed, spreading superheated winds, and brands at ground level. Ignitions caused by spotting were numerous and quickly gained size. Spotting occurred up to 1 mile ahead of the flaming front on all sides of the falling columns of air. Towering smoke plume development was evident up to 5 times per day on various parts of the fire throughout the duration of the active fire advance. In addition, independent crown fire was occurring when plumes collapsed. These events are extremely rare in the Southwest and represent extremely dangerous conditions.

Saving Homes

No forest can be made fire proof. As homes and communities are built in the wildland-urban interface, they face the additional risk of fire. Efforts to reduce hazardous fuels on federal land must be coupled with efforts to assist private landowners to take preventive action in their own communities. During dry years or under adverse weather conditions like the Southwest has experienced during 2002, wildland-urban interface areas that have high-risk fuels may experience fires that quickly exceed firefighters' capabilities with initial attack forces.

Over the last decade, several tragedies occurred as firefighters tried to control wildland fires threatening human developments. For example, in 1991, six firefighters lost their lives on the Dude fire near Payson, Arizona while attempting to protect a rural subdivision.

Type I incident command teams have members who are structural firefighting specialists. These structural specialists provide advice to the Operations Chiefs and Incident Commander on capabilities and needs in relation to structures threatened. Approximately 125 structural engines and water tenders were ordered for the Rodeo-Chediski fire. Numerous structures were saved by aggressive structural protection from the local fire departments and agency-owned engines.

It is common practice to anchor the fire and then proceed along the flanks of the fire to pinch it off as conditions allow. On the Rodeo-Chediski Fire, due to the immediate need to protect as many structures as possible, the head of the fire became the primary place for suppression. This called for a different style of tactics in fighting the fire. Lack of resources and time dictated that little triage was possible before the fire entered several communities. Clearing out a path and burning to remove fuels and provide a safe area was attempted, however the fire advanced too quickly for these efforts to work. Firefighters, dozers, and structural engines were forced to leave housing areas due to extreme spotting and control problems. The best and safest route was to allow the flaming front to pass through the subdivisions, then get behind the front and save the structures which did not burn with the initial flames. Flame lengths were in excess of 150 feet and this tactic was the only one that could be done safely.

Over 400 homes and structures were destroyed by the Rodeo-Chediski fire after about 30,000 people were evacuated, but thousands more homes were saved. Most importantly, there was no loss of human life.

In many areas, heavy equipment such as bulldozers and excavators are effective firefighting tools (generally in areas of less than 35 percent slopes in Arizona and New Mexico). Fire fighting plans usually specify what types and where the equipment can or cannot be used because of significant environmental or other concerns.

Use of The Military

We are often asked about using the military to fight fire. Under the 1975 Agreement with the Department of the Defense and the Economy Act of 1932 (as amended), civilian firefighting agencies may not call upon the military for help until all civilian resources are in use, including contractors. The military can provide a variety of assets to the firefighting endeavor. These include heavy and medium lift helicopters as well as eight C-130 E and H models modular airborne firefighting systems (MAFFS) that are used for dropping fire retardant. Battalions are broken into 25, 20-person crews led by crew bosses and strike team leaders from agencies that provide fire skills and experience. With one week of classroom and on-the-job fire specific training, these crews are operational in 8 to 10 days. The National Multi-agency Coordination Group at NIFC makes the decision to activate the military when all other resources are committed.

National Fire Plan and Community Assistance

The National Fire Plan was born out of the 2000 fire season. The plan emphasizes five key points:

- Preparedness – strengthen and enhance federal firefighting capability
- Restoration and Rehabilitation – rehabilitate fire damaged wildlands and restore high risk ecosystems
- Hazardous Fuels Reduction – reduce the risk of catastrophic wildfire, mitigate hazards, and restore fire adapted ecosystems with an emphasis on the wildland-urban interface
- Community Assistance – work with communities to reduce the risks of catastrophic fire
- Accountability – ensure efforts achieve the desired goals of the National Fire Plan

I would like to emphasize the community assistance part of the National Fire Plan. It helped prepare local volunteer fire departments in this area for this fire season and it will continue to help us improve our cooperation. Each year, assistance monies are made available through the state forester to volunteer fire departments. These grants assist in paying for training in the incident command system and for equipment

needed for cooperative wildland firefighting in a safe and effective manner. The Forest Service and the Department of the Interior trained thousands of local and volunteer firefighters in wildland firefighting technology in FY01 and those efforts have continued. In addition, the Forest Service and the Department of the Interior agencies work with the National Association of State Foresters and the National Fire Protection Association in programs such as FIREWISE, a cooperative community program that helps homeowners protect their homes from wildfire. The National Fire Plan and community assistance are essential parts of improving our skills and preparedness.

Summary

As predicted, 2002 has been a severe and prolonged fire season. We have in place a long used and tested national model in the Incident Command System. When responding to a fire, coordination operates on several levels from the local to the national. Firefighting is a high risk, high consequence activity and firefighter and public safety are our highest priority. The extreme fire behavior of the Rodeo-Chedeski fire made conditions exceedingly dangerous and difficult to fight. While we were not able to save every home, thousands of homes were saved and more importantly, there was no loss of human life. The National Fire Plan has given us the resources to increase our firefighting capabilities, reduce hazardous fuels, and provide community assistance and we appreciate the support of Congress for the National Fire Plan.

This concludes my statement, Mr. Chairman. I would be happy to answer questions.