

**Statement of Linda Goodman  
Regional Forester  
Pacific Northwest Region  
USDA Forest Service  
Before the  
Subcommittee on Forests and Forest Health  
Committee on Resources  
United States House of Representatives  
Concerning  
Wildfires and Their Aftermath: Protecting Communities, Watersheds, and Wildlife  
Okanogan, Washington  
October 4, 2006**

Mr. Chairman and Congresswoman McMorris:

Thank you for the opportunity to appear before you to discuss the wildfires that we recently experienced here in north central Washington and the effect of wildland fire on our communities, watersheds, and wildlife. I am Linda Goodman, Regional Forester for the Pacific Northwest Region of the USDA Forest Service. I am accompanied today by John Newcom, Methow Valley District Ranger; Mark Morris, Tonasket District Ranger, and Jim Boynton, Supervisor of the Okanogan and Wenatchee Forests where the Tripod Complex Fire took place this summer. In my testimony today, I will discuss the wildland fire situation, the ecosystems affected, past hazardous fuels treatments completed and post-fire efforts underway.

**INTRODUCTION**

It is appropriate this hearing should take place at Okanogan - one of many north central Washington communities directly affected by the 175,000-acre Tripod Fire. The Tripod fire is located in north central Washington State on the mountains between the Okanogan and Methow Valleys in Okanogan County. It spans about 162,000 acres of the Okanogan National Forest, and about 13,000 acres of the Washington State Department of Natural Resources' Loomis State Forest. The town of Okanogan endured heavy smoke from the fire many times over the past two months. Other communities, such as Conconully, were affected by the smoke and the fire as well. That no homes were lost despite extreme weather conditions and rapidly spreading fire is a tribute to the thousands of fire fighters who came from all over the nation, Canada, Australia, and New Zealand to help fight this blaze. Their efforts were also helped by the strategic placement of previous National Forest timber sale thinning work and past large-scale use of prescribed fire to reduce hazardous fuels.

I would like to extend special thanks to the Washington Department of Natural Resources, the Okanogan County Commissioners, the Okanogan County Sheriff's office, the Washington Department of Emergency Management, and Health Department, the U.S. Army Task Force Blaze assembled at Fort Lewis, Washington, the Department of Homeland Security, and the British Columbia Forest Service for extensive support and cooperation during this emergency. The citizens of Okanogan County have also been remarkable in their support of firefighters and their understanding of strategies used to combat a very violent and unpredictable fire. The "Thank you Firefighters" signs placed along roadsides by county residents were a real morale boost during this very long summer.

The USDA Forest Service enjoys a close working relationship with our fellow natural resource agency in the State of Washington, the Department of Natural Resources. Our fire fighting resources and managers work and blend together in a seamless manner in our fire suppression efforts.

We also appreciated the cooperation of many members of the public such as grazing permit holders and snowmobile groups who provided knowledge of the area to support the firefighting efforts. Our fire fighting efforts were most effective due in large part to the local cooperators and contractors who did such critical work as operating heavy equipment like dozers, low boys and excavators, or felling trees. Many local businesses such as gas stations, laundromats, and stores also provided services. In addition, I join our firefighters in saying thank you, Mr. Chairman, for your work in the passage of the Healthy Forest Restoration Act. The new authorities that you have supported have been most helpful in our fuels reduction work.

### **Wildland Fire Season**

So far this year more than 9 million acres (83,000 fires) have burned in the United States, nearly twice the 10 year average of 5 million acres. About half of these acres occurred on State and private lands, and reflects significant fire activity during January and February in Texas and Oklahoma. While the acres burned are certainly the largest seen in a few decades, aside from several very large fires including the Tripod, and the amount of fire on state and private lands, it has essentially been a normal, active fire season on Federal lands.

Despite the 9 million acres burned, the number of structures lost in wildfires is estimated at far below the previous high years. For example, during 2002 and 2003, a total of 12 million acres burned, along with near 5000 primary homes; by comparison, 674 homes have been lost in wildfires thus far in 2006. Wildfires in Texas and Oklahoma burned mainly sparsely populated areas that did not lead to a large number of fatalities or damage to residential structures. In addition, the federal agencies have placed an emphasis on fuel reduction treatments in the wildland-urban interface and collaborative work with communities which may have helped contribute to this reduction. Since 2004, land management agencies have treated more than 5 million acres in the wildland-urban interface areas (more than half the total of hazardous fuel treatments), and thousands of

communities are included in Community Wildfire Protection Plans under the Healthy Forests Initiative.

On National Forest System lands, normal to above normal potential for large fire activity has been present in most areas of the western United States over much of the fire season due to lingering drought and continued hot temperatures. The vast majority of wildland fires are extinguished before they grow to become large incidents. Interagency cooperation is increasingly important; because nearly 77 percent of this year's fires were on state and private lands. Forest Service suppression costs for this year's fire season will exceed \$1.5 billion.

Fire conditions in north central Washington this summer were consistent with the rest of the western United States. Record weather conditions in August and September intensified the situation. Temperatures and energy release component readings, a measure of the flammability of fuels, were at record highs, and humidity readings were at all time lows. These conditions came after seven years of drought.

The Tripod Fire began July 24 and is not likely to be completely controlled until a "season ending" weather event which normally occurs around mid-October. The fire suppression cost to date is nearly \$82.5 million, including about \$13.5 million for the Washington Department of Natural Resources, and about \$69 million for the Forest Service. A fire apportionment agreement signed on August 10, 2006 between the USDA Forest Service and the Washington Department of Natural Resources is the basis for the agreed upon apportionment of the fire costs between the agencies.

Several factors contributed to the cost of suppressing the Tripod Fire included the protection needs of three communities adjacent to the fire, (Winthrop, Conconully, Loomis), a threat to the major power line supplying the entire Methow Valley, and suppression strategies implemented to protect the 134,000 acre Loomis State Forest. The fire area comprising almost 300 square miles necessitated a large amount of fireline and associated suppression support activities. Rugged terrain, low humidity and fuel types contributed to extreme fire behavior necessitating indirect fire fighting techniques and the need for significant air support to suppress the fire. Based on the location of where the Tripod fire started, the Okanogan National Forest Fire Plan specifies that this area is unsuitable for wildland fire use strategies and suppression action was necessary due to the proximity to the towns of Twisp and Winthrop.

The area burned in the Tripod fire is currently nearly 40 miles long and up to 12 miles wide. It has burned primarily at higher elevations in the Granite Mountain, Tiffany, and Long Swamp Inventoried Roadless Areas, the Pasayten Wilderness, and the Loomis State Forest conservation areas. In all these areas, there were extensive concentrations of 80 to 100-year-old beetle-killed spruce and lodgepole pine trees. Stand replacement fire is the norm in this area, much of which is above 5,000 feet in elevation. Although wildfires are relatively infrequent at such elevations, they tend to burn with extremely high intensity. This natural forest cycle coupled with drought conditions, increased tree density, reduced forest health and extreme fire weather can result in catastrophic fire conditions. Trees

like lodgepole pine and Engelmann spruce tend to grow in large even-aged groves following wildfire. As they approach 100 years of age, the trees become susceptible to mortality from insects and fire. Mountain pine beetle and spruce bark beetle populations have reached levels that have overwhelmed even the healthiest trees.

Because the trees have been recently killed and still have dead needles in their canopies, there are unusually high levels of standing dead fuel which is very susceptible to drying on hot summer days and especially when the wind blows. These fuel types often burn very intensely in crown fires with flame lengths of up to 300 feet in the air. These forest stands are very thick with no natural escape routes or safety zones for fire fighters. As a result, fire fighters must use indirect fire fighting tactics, building fire lines miles in front of the main fire and burning out well in advance to rob the main fire of fuel. This is a difficult tactic to employ in rough, remote roadless country with poor access.

Fire teams consider dead spruce and lodgepole as the most difficult fuel type in which to fight fire. Such fires frequently produce fire brands and starts past the areas where they are trying to build line. The current fire situation is much improved with the onset of Fall weather, with small weather fronts bringing minor amounts of moisture and increased humidity.

## **FUELS STRATEGY**

The geographic scope of the fire-fuels problem is large. A key part of the solution lies in strategically reducing the amount of fuel on both public and private lands in order to protect people and communities and improve land conditions. We have a complex fire and fuels regime in the Pacific Northwest. The National Fire Plan and the Healthy Forest Initiative help to address these situations. Our goals include lessening the risks from catastrophic wildfires by reducing fuels build-up in forests and grasslands and by reducing threats from flammable invasive plant species on rangelands in the most efficient and cost effective manner possible.

Implementing this strategy is challenging due to extended drought, recent changes in climate, human demographics, and societal expectations of forests and rangelands. Even with the challenges, we are making progress through our community based stewardship, and we are making a difference. From 2001 through the end of September 2006, the Federal land management agencies have treated over 18 million acres of federal lands under the Healthy Forest Initiative and the National Fire Plan through landscape restoration actions.

On the Okanogan and Wenatchee National Forests, strategic placement of hazardous fuels reduction projects has focused on the wildland urban interface by using timber stand thinning and prescribed burning in roaded areas nearer communities. Since 2003, the Okanogan National Forest has moved 23,732 acres into a better condition class. Fuels reduction treatments that were completed prior to the Tripod fire were useful in the

suppression efforts for the fire as they allowed firefighters to safely burn out areas to protect the communities of Conconully and Winthrop.

Healthy Forest Restoration Act (HFRA), Healthy Forest Initiative (HFI), and stewardship contracting authorities have all been used to reduce fuels on other areas of the Forest. On the Tonasket Ranger District, HFI and stewardship contracting were used on the Siwash Thin project in 2005. HFRA authorities were used on the "Two Lakes" project in 2005 and 2006. Two Lakes is a large fuel reduction project that has resulted in the sale of over 10 million board feet of timber. Numerous private homes, resorts and campgrounds have had the fuel reduced in their vicinity with this project. On the Methow Valley Ranger District, the Hungry Hunter Stewardship Project southwest of Twisp is using a combination of commercial harvest and non-commercial thinning and prescribed fire.

Federal and State land management agencies and local communities use Community Wildfire Protection Plans to determine hazardous fuels treatments in the wildland urban interface. Community Wildfire Protection Plans have been completed for the Methow Valley and for the community of Havillah in northeastern Okanogan County. The Okanogan County wildfire protection plan is the preparation stage and is scheduled to be completed by February 1, 2007.

Citizens who live or vacation in fire-prone areas will gain valuable information about how to increase their safety and protect their homes and property through the FIREWISE program. Homeowners can learn how to protect their homes with survivable, cleared space and how to build their houses and landscape their yards with fire resistant materials. Information about FIREWISE can be found at [www.firewise.org](http://www.firewise.org), sponsored by a consortium of wildland fire agencies that includes the Forest Service, the Department of the Interior, the National Fire Protection Association, and the National Association of State Foresters.

### **Post-Fire Stabilization and Restoration**

The Tripod Fire Complex burned primarily in high elevation spruce and lodgepole pine forests and burned more intensely than typical fires. Burn severities were relatively high with about 24% in the high class, 27% in moderate, 47% in low and 2% unburned. Burn severity is a reflection of high fuel loads and weather conditions. Because natural large wildland fires in the upper elevations are infrequent, they often experience a high burn severity.

As soon as it was safe to do so, Burned Area Emergency Response (BAER) teams evaluated the area to determine post fire stabilization needs. The BAER work is focused on minimizing threats to life or property or to stabilize and prevent unacceptable degradation to natural and cultural resources resulting from the effects of the fire. We have received funds for this work and it is underway. The Tripod Fire Complex area has a history of frequent debris slides from steep slopes during high intensity storm events. Fires have also been a common historical disturbance. Vegetation recovery in high burn

severity areas of the Tripod Complex will be slow. Our greatest concerns are for the Beaver Creek watershed in the Methow drainage and North Fork Salmon Creek drainage above Conconully. Both of these watersheds are key for irrigation district use, and are at major risk for flooding of homes, valuable pastures and croplands.

We hope to have seeding and water bar work completed on the fire lines by the end of this week. BAER work will go on this fall until we are snowed out of the mountains. This work includes seeding, fertilization, and mulching to protect soils in key watersheds. We will also do road work such as cleaning out culverts and ditches to prevent erosion associated with roads, and felling of hazard snags along roadways. Additional rehabilitation work may take place over the next several years, if necessary, to minimize the spread of invasive weeds into areas disturbed by the fire. We also have work that needs to be done on a priority basis in recreation areas to reduce these safety hazards for our recreational users.

Much of the burned area is important Canada lynx habitat, and the entire fire is within the North Cascades Grizzly Bear Recovery Area. Watersheds in the Methow drainage provide habitat for threatened and endangered fish like salmon and steelhead. Because much of the fire burned in sub-alpine forest where stand-replacing fire is a natural process, the impact of the fire itself on Canada lynx and grizzly bear is not expected to be significant. Over time, new lodgepole pine stands will provide feed and cover for snowshoe hares, key prey for lynx. There will be a reduction in hiding cover for mule deer in the short term, but an increase in browse as vegetation is re-established. Habitat for several woodpecker species will increase because of the large amount of new snags created across the landscape. In areas where trees are removed along roads or in recovery efforts, snags will be left as appropriate for wildlife habitat.

### **Post-Fire Harvest and Recovery**

There are opportunities to promptly implement recovery treatments in response to catastrophic events that affected these areas. These treatments include the removal of some dead and damaged trees in addition to the restoration activities mentioned earlier that are also planned. Effects of post-fire logging and other recovery treatments are site specific and strongly dependent on the way in which treatments are conducted, the extent and severity of wildfires, and what parts of the burned area are treated. Careful planning, appropriately involving the public in the decision making process, and a rapid response to catastrophic events are important components to successfully accomplishing post-fire recovery work.

The level of analysis needed for a salvage project to successfully complete the NEPA process, appeals review and litigation can be substantial. The amount of documentation to accomplish this can be extensive. Timing is critical if we are to use dead and dying timber that is available within the areas affected by wildland fire for wood products. We hope to complete the required environmental documentation for addressing post-fire harvesting and restoration needs as soon as possible, using the existing authorities that we have, so that emergency recovery efforts can occur in a timely manner. Recent

experience following large catastrophic fire events has shown that the NEPA process can take from one to two years to prepare the required NEPA documentation. Administrative appeal and litigation procedures often add to this time period. Legislation such as H.R. 4200 would streamline these administrative procedures, and require their completion within prescribed time frames in the case of pre-approved management practices and for catastrophic recovery projects and research projects. These authorities could reduce response times to a large degree in the case of severe disturbances.

For the Tripod Fire, salvage opportunities are greatest on the Methow Valley Ranger District within already roaded areas at mid and lower elevations. The Methow Valley District has greater potential because a larger part of the fire occurred in previously roaded areas and thus there is access to salvage fire-killed trees. It is not cost effective to helicopter log or build roads to access low-value burned spruce and lodge pole pine. Many areas that are not currently roaded are characterized by steep hillsides with shallow soils so opportunities for using mechanical equipment is very limited due to environmental concerns. There are some limited opportunities for salvage harvesting on the Tonasket Ranger District.

This concludes my statement. Thank you for the opportunity to discuss the our efforts to reduce the risks of catastrophic wildland fire to people, our communities, and natural resources while restoring forest and rangeland ecosystems. I would be happy to answer any questions you might have.