# Committee on Resources,

## Subcommittee on Forests & Forest Health

forests - - Rep. Scott McInnis, Chairman
U.S. House of Representatives, Washington, D.C. 20515-6205 - - (202) 225-0691

## Witness Statement

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Chairman McInnis, distinguished members of the subcommittee, it is a great privilege to have the opportunity to once again present testimony to this body. My opportunity to speak to Mrs. Chenoweth-Hage and Mr. Hill in Missoula last September was a memorable experience.

I will not comment on the "Thirty Mile" Incident at this time. Many people have been speculating about fire experience, training and forest fuel conditions as causal factors without ever really examining the actual situation.

Way back in the 1950's and 1960's the California Division of Forestry and the U.S. Forest Service supported studies to look at fire weather and fuel conditions under "sheltered fuelbreaks." The term "sheltered" comes about by the thinning of understory trees and shrubs and removal of larger trees to leave a widely spaced overstory. The term "fuelbreak" simply means a strip or wide zone of modified fuels. Fuelbreaks, as opposed to fire breaks, cannot stop a fire unless suppression personnel are present and capable of suppressing the surface fire moving through the fuels on the ground. "Fire breaks," are narrow strips of bare mineral soil devoid of fuel. These were often jeep roads bulldozed down the middle of fuelbreaks. The studies indicated that any tree manipulation deemed adequate to prevent the movement of crown fire across the fuelbreak created conditions that were hotter, drier and windier that the adjacent unmodified forest. This is not rocket science. The spacing between the trees allowed greater solar heating of the surface fuels, and the increased air movement dried these fuels near the ground.

Why do fire managers entertain thinning as a fuel treatment? They do so in hopes that a crown fire will not be sustained when it reaches well-spaced trees. The reduction of surface fuel decreases the convective energy heating of tree crowns and the spacing of the tree crowns limits the amount of radiation heat transfer to adjacent trees. If these reductions are sufficient, the fire drops to the surface. If this surface fire is low intensity, fire fighting personnel have a chance to suppress the fire. In other words, intensive surface fuel reduction must be combined with thinning and access for such treatments to be effective. Simply thinning without intensive surface fuel reduction will increase fire risk and potential fire behavior.

What degree of thinning is effective? I don't think we know the answer to this question given the variety of site conditions, fuel loadings and stand structures that exist in the West. The best we can do are empirical "rules of thumb" developed from observation. Thanks to long term, active research by the U.S. Forest Service experiment station, we have a good computer-based model of surface fire. Currently the development of a crown fire model to test the effectiveness of thinning is limited, but is being enhanced currently thanks to Congressional action providing funding for the Joint Fire Science Program.

Have we ever thinned large forested areas solely for fire management objectives before? How many of you have heard of the Ponderosa Way and Truck Trail? This was a 650-mile-long fuelbreak and road that spanned the length of the Sierra Nevada Mountain Range in California. This fuelbreak was constructed by the U.S. Forest Service using CCC labor during the Great Depression to do battle with the enemy of the forest, wildland fire. After the cheap labor force was gone it could not be maintained. It is now hardly visible on aerial photos. Once the trees are thinned, how can we afford to maintain such fuelbreaks? We have been there and done that! Such a strategy only makes sense if there are very high values-at-risk adjacent to the fuelbreak.

Comments I made in the September 16, 2000, hearings are worth repeating here. Much of the land burned on the Bitterroot National Forest in Montana last year was cut-over land, where the large widely spaced pines had been harvested and dense understory Douglas-fir released to grow. Nearly all the trees that burned last year had never seen a fire in their lifetime. Simply thinning such stands of fir will not solve the fire problem. Observations indicate that stands thinned to less than 20 feet between tree crowns carried crown fire readily. In addition, severe disease problems have occurred from such thinning in Douglas-fir where they are the climax species. Ponderosa pine must be restored to such sites. Where Ponderosa pine stands exist, thinning and removal of much of the Douglas-fir understory is desirable. In many areas of the West plant succession has progressed to such a point that the shade tolerant understory is too large in diameter to kill with prescribed fire. In such places, harvesting these trees is an ideal way to reduce fire hazard.

At higher elevations in forest that have historically had longer intervals between fires, the opportunity to mechanically thin is extremely limited due to lack of wind firmness. Such trees may have all originated from one major disturbance and need adjacent trees to help block the wind. Climax forests at higher elevations were seldom thinned by fire, so if they were to be thinned by harvest, disease problems may be enhanced by such actions as would blowdown. We may have to live with such low frequency/high intensity fire, while progressively thinning seral species stands adjacent to the urban/wildland interface.

It is significant to me that the four fire fighters who lost their lives in Washington State were working on a fire situated in a "roadless area". Hence the political posturing about fuel treatments and their effects on fire behavior and risk. Since 1964 and the passage of the Wilderness Act, the actions of Congress required two separate reviews and evaluations of roadless areas as candidates for wilderness status. Over 58 million acres of National Forest have "roadless" status. After seven administrations these lands remain in this status. Fire management is carried out to support the land management decisions that have been made. The people of this country have yet to choose, so I cannot support any actions in the name of fire management that would bypass such an important choice by the American people. The vast majority of the acreage is non-commercial (low productivity) and remote. Thinning such forested land would destroy potential wilderness quality and enhance flammability. I also firmly believe that such actions would be an incredible waste of resources, especially when I consider the vast acreage of the wildland/urban interface that is already roaded and for which many land-use decisions have already been made.

Last year fire managers using well-conceived wilderness fire management plans combined with the federal wildland fire policy which allowed "wildland fire use," saved the U.S. taxpayers millions of dollars and preserved the naturalness and wildness of wilderness. Many lightning-caused wilderness fires were monitored rather than actively suppressed which allowed suppression personnel to defend lives and property along the wildland/urban interface. Rather that spending millions of dollars and risking many lives in suppression efforts, a natural process was allowed to operate as freely as possible in places set aside for naturalness. I urge that the implementation of the National Fire Plan include funding for the development of

fire management plans specifically for roadless areas. Without such plans there can be no wildland fire use where lightning-caused fires may be allowed to burn. These areas have very low timber values and high public value.

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