

Committee on Resources

Subcommittee on Forests & Forest Health

Witness Statement

Testimony for the Committee on Resources, Subcommittee on Forests and Forest Health
U.S. House of Representatives
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I am pleased to be here to share with you some observations of the fires in Montana and to offer some ideas for moving ahead in view of the changes that have occurred. My name is Perry Brown and I am the Dean of the School of Forestry at The University of Montana-Missoula. This is a school that contains forestry, range, wildlife, recreation, wilderness, and natural resource conservation programs. At least 10 of our faculty, representing economics, social science, forest ecology, soils, insects and disease, silviculture, range management, recreation, and wildlife are engaged in research that includes fire as a prominent focus. I have asked Dr. Ronald Wakimoto, one of the leading fire ecologists in the Nation and one of our active fire researchers to extend my testimony with a few additional comments.

At the outset let me say that I have been very impressed and heartened by the community spirit shown by the people of western Montana, especially those who live very close to the major fire zones. I also must applaud the many people from near and far that have worked so hard to protect lives and property. They have been heroic in much that they have done.

The fire situation this summer was unusual in two respects. **First, we have suffered through an unusually hot and dry period.** We have recorded several days of record high temperature and even more days of near record high temperature. In addition, by mid-August we were over three inches below the normal precipitation; not terribly bad except that this deficit accumulated since May 1. That is, this has been a very hot and dry summer; much hotter and dryer than one could have expected. **Second, many of the fires that we experienced occurred around and near areas of human habitation.** While we have had many fires in the past, and we will have many more in the future, this year many of the fires were in places where people live and thus they have added concern and human drama to the situation. The movement of people into forested environments has put many people and their houses into areas of high risk for fires.

Many of these areas where people have located were harvested in the past, but since those days the land has been divided into smaller tracts and there has been little to no treatment of the forest. Many landowners have simply let the trees and the understory vegetation grow.

Given these two unusual situations (extremely hot and dry/people living in the forest), when the lightning storms came across the path that they followed, the result was fairly predictable. We had several hot, rapidly moving fires that threatened, and in some cases removed, houses and other buildings.

The forests of Idaho and western Montana are forests developed and regulated by fire. Depending on the forest type, fires have been very frequent to very infrequent, but fires have shaped the forests and led to their maintenance and replacement over millennia. Given the drought conditions of this year, fires burned in roaded and unroaded areas, and they burned in previously harvested and not harvested areas. Unless we clear and pave these lands, fires will burn on them. In the low elevation forests of western Montana, where most of the threat to life and land occurred, both high grade harvesting during the early part of the 20th Century and the near total suppression of fire for decades were major factors in creating high fuel loads and conditions to influence fire behavior.

Over the past several years we have recognized the need to find ways to reduce fuel loads in many of our forests, both public and private, and to take measures to reduce the risk to homes and other buildings. Prescribed burning, removal of understory vegetation, and thinning of densely stocked stands are methods that we have considered and used. But, it is far easier to talk about such methods than it is to put them into practice. The problems are many and include 1) the lack of will to appropriate the money necessary to implement fuel reduction methods on the scale needed, 2) concerns that people have about health effects of smoke, 3) fears about the possible escape of prescribed fires, and 4) the distrust among many people interested in forests. In some cases there has been a lack of research that could inform us about the ecological and social impacts of various methods. Added to this over the years have been conflicting values and goals, lack of leadership and vision, conflicting laws and regulations, and other human centered factors that have stymied our ability to get to the task at hand. If there is one conclusion that we all might share it is that wildfire is both ecologically and socially complex, and thus there are no simple solutions or prescriptions.

We do need to learn about the myriad factors that contributed to the spread and behavior of the fires that we have been experiencing. Certain management practices of the past, inattention to forest conditions in some places, and extremely hot and dry conditions were major factors in the events of this summer. We need to learn just how they interacted and we need to find ways to reduce the risks that they present in the future.

Looking ahead, we need to begin to move beyond the fires and gain the will to reduce fuel loads over large areas, but especially near to homes and towns. We are not going to prevent fires. Lightning is going to come and it is going to strike flammable material, but we might be able to influence the rate of spread, the intensity of fire, and other fire behavior characteristics.

What might we do? First, we must realize that each stand is likely to be different in how it should be treated. There are places where we can implement prescribed burning now. There are other areas where the vegetation is too dense to safely prescribe burn. In these areas some form of mechanical treatment is needed first. Such treatment, however, is expensive and it is either going to require a large non-revenue generating investment in risk reduction through understory removal or it will require revenue generating harvest combined with understory removal to achieve acceptable risk reduction. Given the economics of individual situations there are places where one approach is going to be better than the other. To get to where we need to get, substantial investments are going to be necessary; we simply have a lot to change and that is going to cost money. And, to do this work responsibly, what is done and where it is done likely will hinge considerably on potential impacts to soil, water, and other resource elements. Finally, to protect soil and water, wildlife habitats, and places for people, there also will be places where the forest should be left alone.

In addition to the investment needed in the treatment of forest stands, we also need to make greater effort to educate people about living in and near forests and how they might reduce risk from fire. State foresters,

fire departments, insurance companies, and the Cooperative Extension Service need information, tools, and personnel to enhance fire protection programming. We also ought to be looking toward risk ratings and incentives to encourage fire responsible forest dwelling. In addressing forest health and productivity issues of these nonfederal forest lands, the National Coalition for Sustaining America's Nonfederal Forests recently issued a report on research, education, and outreach programming that is needed (*A National Investment in Sustainable Forestry*). Funding relevant programs described in this report would go a long way toward providing the knowledge and education needed to deal with many forest-urban interface issues.

Since we know we will have fire in these fire developed forests, we need to invest now in research and technology that will help predict where fires are likely and in how to achieve fire control when they do occur. Work of scientists at the universities of Idaho and Montana and the Rocky Mountain Research Station's Fire Sciences Laboratory of the USDA Forest Service was instrumental in the fire control efforts this summer, and continuing development of knowledge and innovation is going to be helpful in the future. These efforts need to be supported at much higher levels than ever before.

We have had big fire years in the past and we will have them in the future. Nature will determine when and where they occur. But, we can learn from the events of this year, in some places we can reduce risks now, and through observation and research we can learn to anticipate better and to modify risks and fire behavior in the future.

Additional comments by Ron Wakimoto, Professor of Fire Ecology and Management at the University of Montana are attached as an extension of this testimony.

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