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Statement of

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Restoring, and Protecting Communities, Water, Wildlife and Forests in the Aftermath of Catastrophic Events
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Mr. Chairman and members of the Subcommittee, thank you for the opportunity to speak to you today on this topic important to so many of us, especially the residents of this community who have experienced first-hand the devastating effects of large wildfires. We also want to thank you, Mr. Chairman, for your efforts to secure the passage in Congress of the Healthy Forests Restoration Act as part of the President's Healthy Forest Initiative.

Background

Catastrophic events such as wildfire, wind events, ice storms, insect infestations and disease, and invasive species impact millions of acres of forests annually across the United States. Wildfire can be one of the most complex events that affect forests. For example, it is widely acknowledged that wildfires have both beneficial as well as damaging effects. Ecological impacts of fire vary with forest type, stand density, fuel loading, fire intensity, slope and soil characteristics, and weather conditions. In some cases, wildfires can reduce fuel build-up, release plant nutrients back into the soil to enhance plant growth, and keep areas open and free of shrub and tree growth among others. However, when wildfires reach catastrophic size and intensity, changes in species composition and structure after fire may make these areas more susceptible to future fire and may not meet long-term objectives for wildlife, recreation use, and other resources. Severe fires typically increase the likelihood of invasion of exotic grasses and other undesirable plant species. Shrubs, stimulated to sprout or germinate after fire, may prevent establishment or suppress growth of trees.

The need for restoration from wildfires on National Forest lands is determined by wildfire scope; ecosystem characteristics; economic, social, and ecological values at risk; and land management objectives as described in the applicable Forest Plan. Forests, in the long term, are adapted to recover from such events, although recovery from catastrophic wildfires may take tens to hundreds of years and sometimes result in modifications to forest type. In these cases, management objectives, which address these considerations and reflect research findings, are the critical factors in determining the amount, type, and location of restoration treatments. Many disturbed areas should be, and are, left to recover naturally, but there are times when reforestation or other management objectives, including the commercial removal of dead and dying trees, is the appropriate and responsible thing to do.

As you are well aware, we have seen a dramatic increase in large fires in the Western United States over the last 10 years. The reasons for this are numerous, past fire suppression practices and the resulting increase in fuels, drought, and insect and disease infestations. The risk to life and property is magnified due to the exponential increase in housing density in the wildland-urban interface lands. A short drive into the

Black Butte Ranch and Camp Sherman communities or the high recreation use Suttle Lake area, not far from this hearing location at Sisters High School, are classic visual examples of this situation.

Emergency Stabilization, Rehabilitation, and Restoration

Long before the final wisps of smoke are put out by either firefighters, or in the case of very large fires, winter precipitation, Forest Service personnel are beginning an assessment of what is needed to jump-start a blackened landscape on its long road to recovery. There are typically three stages of restoration: emergency stabilization, which occurs in the first year and addresses threats to life, property, and further damage to watersheds; second, rehabilitation of resources affected by the fire, including man-made improvements; and third, longer term restoration which includes reforestation and other treatments needed to restore functioning ecosystems.

Emergency stabilization treatments are conducted through the Burned Area Emergency Response (BAER) program, which has public health and safety as its first priority. Treatments vary based on the values at risk and the probability of protecting those values. The nature and extent of treatments are based on fire severity, watershed characteristics, vegetation, and predicted post fire weather conditions. Since we fund emergency stabilization with emergency wildland fire funding, we require that treatment measures provide essential and proven protection at a minimum cost in order to qualify for funding.

For example, some severely burned soils can repel water and increase runoff. This, in turn, can lead to increases in surface erosion, stream channel degradation and flooding. Debris and sediment contained in floodwaters can block culverts or other drainage structures and cause major damage to roads and fish habitat. Immediately following a wildfire, a BAER team evaluates watershed conditions and resource values at risk, then prescribes and implements appropriate treatments. One such treatment, for instance, may be removal of existing culverts within a drainage to minimize risk of road failures and sediment delivery downstream when a precipitation event occurs.

In this Region in 2003, eleven fires were evaluated by BAER teams and nine of the fires, burning 209,000 acres, were determined to need BAER treatments. A total of \$2.4 million was approved for this work. One hundred seventeen miles of roads and trails were stabilized and 70 other BAER projects, including weed treatments, ground and aerial seeding, hazard tree removal, culvert replacement, improvement of road drainage facilities, and protection of heritage sites were completed.

Rehabilitation of resources is the second phase of post-fire restoration. A Forest-level assessment of the work, beyond that identified in the BAER process, is completed. The forest then prioritizes the work based on the type and severity of impacts, and available resources. This work may include replacement, reconstruction, or heavy maintenance to roads, trails, bridges and recreation facilities. Development or protection of wildlife and fish habitat improvements, especially when it relates to threatened and endangered species, is often appropriate.

Finally, long term restoration may include vegetative treatments in areas where we can help expedite the recovery process through carefully planned activities, including timber salvage operations and reforestation activities. This is, by far, the work that takes the greatest effort and is often the most costly. In the case of very large fires or in places where a succession of fires over recent years has impacted the same landscape, a Ranger District's or Forest's priorities often shift from their normal program of work to post-fire restoration and salvage. Deschutes National Forest Supervisor, Leslie Weldon will speak more on this topic during her testimony. From a Regional perspective, we have shifted priorities as well to make resources available to respond to the significant impacts caused by these large, uncharacteristic fires.

Following catastrophic events, we salvage trees for both ecological and economic reasons. Prescriptions are developed to achieve specific land management objectives. For example, prescriptions to achieve wildlife habitat objectives may include maintaining snags, coarse woody material, and other features beneficial to late-seral dependent wildlife species. Other harvest prescriptions are designed to couple the objective of leaving large trees in place, while removing other dead or dying trees, to expedite the establishment of a new forest and reduce long-term fuel loads.

There will be other situations where removing dead and dying trees are primarily for economic and social benefits. Time is of the essence to remove these trees while they still have commercial value. Timber salvage operations can provide jobs in the woods and mills of nearby communities; forest products for the American economy are the end result. Purchaser deposits generated from salvage sales are often important to completing the reforestation work.

Following a fire, an interdisciplinary team will make a determination as to what areas will require reforestation treatment to restore forest cover. The silvicultural prescription provides direction for how many young trees must be reestablished, the proper mix of vegetation, the target forest structure and composition of the reforested area. The desired future condition may be a structurally complex conifer dominated forest to provide habitat for the Northern Spotted Owl, the development of cover in key winter range for elk, or a myriad of other combinations representing the spectrum of resource benefits embodied by our National Forests. Natural regeneration, allowing the forest to grow on its own, is often one of the options used to reforest part of a fire area.

Science and Restoration

Our knowledge about post-fire restoration is incomplete but growing. Our Forest Service researchers, in collaboration with other scientists, are working to increase our understanding of how ecosystems respond to fires and how management actions can affect desired outcomes. For example, there are as many as ten different research studies associated with the Biscuit Fire Recovery Project.

Planning Tools for Post-Fire Work

Because the effects of wildfire can vary so greatly, it follows that the restoration work needed afterwards has the same variability. On some large scale fires in urban interface zones, the complex planning effort may take long as 2 years to complete.

We are seeking every opportunity to use the new tools that we have been given over the last few years within the Pacific Northwest Region. We are currently in the planning phase for 13 fire restoration projects and we have implemented at least some or all of at least 11 fire restoration or salvage decisions. Categorical Exclusion #11 is being used for post-fire rehabilitation on at least 10 projects in the Region. Categorical Exclusion #13, a new limited tree removal category for salvage of dead and dying trees, is being used even more.

Deschutes Experience

The Deschutes National Forest experienced six large wildfires (Eyerly, Cache Mountain, Davis, 18 Mile, Link and the B&B Complex) covering 146,000 acres in 2002 and 2003 with the B&B Complex by far the largest at about 92,000 acres. We have been actively involved in post-fire rehabilitation and analysis, and are proceeding with the environmental analyses and salvage sale planning for all the fires. Beyond our immediate concerns for public health and safety, our focus has been the restoration of healthy and productive forest ecosystems for habitat, water and biological diversity for the long term, balanced with the need to provide economic benefits for nearby communities.

I will focus on the B&B fires, Mr. Chairman, but I wanted the committee to know that the kinds of work that we did for this fire recovery project also had to be done for all fire recovery projects across the forest. The B&B Complex Fires started on August 19, 2003 and was declared contained in October, 2003. The fires burned across two National Forests, the Confederated Tribes of Warm Springs Reservation, State of Oregon lands, and private lands. Fires burned portions of the Metolius Watershed on the Sisters Ranger District where nearly 83,000 acres of the 149,000-acre watershed has been affected by fires since 1996.

The Sisters Ranger District has completed rehabilitation of the impacts that occurred during suppression activities such as opening roads and building firelines. A substantial amount of the BAER work has also been accomplished including noxious weed monitoring and control, stream channel stabilization, culvert replacement, roadside seeding, and trail reconstruction. Forest Service crews have individually evaluated and marked over 16,500 hazard trees for removal along designated high use roads to re-open portions of the area for safe public access. The district also planted nearly 1500 acres of upland and streamside forests this past spring.

The District was able to quickly offer small salvage sales which focused on the removal of suppression related down timber and hazard trees along roadways. In addition, to meet contractual obligations to timber sale purchasers on active sales affected by the B&B Fire, the district used new authorities developed under the President's Healthy Forest Initiative to quickly plan and implement two small salvage projects within active timber sales.

Moving forward with a larger project in the B&B area has required careful planning to understand the scope

of the fire effects within the watershed. The Metolius is one of the most pristine and ecologically important rivers in the state of Oregon. It was designated as a Wild and Scenic River by Congress in 1988. Its waters support one of the healthiest bulltrout populations in the state. The Metolius will serve as a keystone river for salmon reintroduction (Sockeye and Chinook) under the recently negotiated re-licensing settlement agreement for Pelton Round Butte Dam.

The district worked between November, 2003 and May, 2004 to complete a watershed analysis update that would identify how best to plan salvage sales and key restoration work after over half of the watershed had burned. The watershed analysis set the stage for the B&B Project proposal, providing the basis of a cumulative effects analysis and giving recommendations for salvage for both economic and ecological reasons. The analysis identified stream segments to protect to prevent channel changes and sediment inputs, areas in which to concentrate restoration activities to provide habitat for wildlife species, areas where noxious weeds were likely to spread, and other critical information to help speed planning of the B&B Project in the context of the highly valued Metolius Basin ecosystem.

The Metolius Basin Forest Management Project (FMP) is within the burned area and about 1,000 acres were damaged in the fire. This project was initiated by the community of Camp Sherman who were concerned about the risk of wildfire affecting both their homes and the Metolius Basin and has enjoyed a broad base of public support. When implemented, the Metolius Basin FMP would protect the heart of the Metolius Basin, Camp Sherman, and river headwaters by removing hazardous fuels through thinning, mowing and prescribed fire. The project was identified by the watershed analysis team as a critical project to complete because the remaining unburned area remains at high risk. This area was evacuated twice last summer during the B&B Fire. Project work has been delayed due to ongoing litigation.

Public scoping of a proposed B&B Fire recovery project began July 20, 2004. The Forest Service proposes to treat an area encompassing about 41,000 acres which includes salvage harvesting on ten to fourteen thousand acres. The purposes for the project include the harvest of dead and dying timber before it loses all its economic value, the reduction of harvest slash and small trees to establish fuel conditions to reduce the potential for future uncharacteristic wildfire; to begin restoring fire as an ecosystem component; and the reforestation of historically prevalent species to facilitate development of new forests.

All of the B&B fire complex recovery project lies within the area covered by the Northwest Forest Plan (NWFP) and all activities in this important watershed are being conducted under the standards and guidelines outlined in the Plan. The goals for conditions we wish to establish on the ground include: 1) protection and restoration of forest ecosystems, both within and outside of Late Successional Reserves (LSR's), consistent with natural ecological processes; 2) recovery and utilization of the economic value of timber within the fire-affected landscape to contribute to local and regional economies; 3) protection and restoration of watershed conditions and fishery habitat; and 4) reduction of the risks to public safety from post-fire hazards, including the potential of future high severity wildfires. We are involving the scientific community and conducting the public involvement built upon the successes of the Metolius Basin FMP. We expect to sign the Record of Decision by June, 2005.

The Sisters Ranger District has made important progress on a complex set of issues associated with the wildfires of the past several years. In addition to the Metolius Basin FMP, the McCache Project has cleared the hurdles of an appeal and two lawsuits which were resolved in the government's favor and was sold last week. The Eyerly Fire Salvage project decision was signed August 2, 2004. The Forest has requested and been granted emergency situation determinations using the new 36 CFR 215 authorities on the Eyerly Salvage. Similar emergency situation determination requests are being prepared for other salvage projects on the Deschutes such as the 18 and Davis Fire Recovery Projects.

As you can see, Mr. Chairman, there have been many important steps to take following upon the B&B Fire Complex, and we will continue to work as efficiently as possible in the interest of restoration and local economies.

Summary

Mr. Chairman, post-catastrophic forest restoration is a complex process which begins almost immediately after an event. Forest Service research works with managers to develop tools and information that these managers need to do their jobs better. Forest Service managers strive to use the best scientific information available in their decision making. We realize there are questions still to be answered about the effects of our restoration activities, and we are working to find these answers. We also know that we would not be

responsible stewards if we waited to satisfy all uncertainties before proceeding with our work.

We appreciate your willingness to listen to us today and look forward to your support for active forest management based on sound principles. This concludes our testimony. We will be glad to answer your questions.