

Statement
Rick D. Cables
Rocky Mountain Regional Forester
U.S. Forest Service
United States Department of Agriculture

Subcommittee on Forests and Forest Health
Committee on Resources
United States House of Representatives

Concerning

Forest Health Conditions and Forest Management Practices on the Black Hills National Forest

August 31, 2005
Hill City, South Dakota

Mr. Chairman and Members of the Subcommittee,

Thank you for the opportunity to present the Department's views on the forest health conditions and forest management practices on the Black Hills National Forest.

I appreciate this opportunity to testify before you and I am mindful of the concerns that you have for forest health and the long-term sustainability of our national forests including the Black Hills.

The history of the Black Hills National Forest encompasses the interaction of humans who lived in the area, the demand for timber resources, and the role that fire played in defining the vegetation composition that we see today. The Sioux called this very special place *Paha Sapa*, which means "hills that are black." In 1874, General George A. Custer led an Army exploration into the area to evict white trespassers from the Great Sioux Reservation, established by the Treaty of 1868, and discovered gold. The flood gates opened and settlement of the Black Hills rapidly followed the discovery of gold. The need for wood to build mines, railroads, towns and for use as fuel increased demand for timber. As settlement continued, agriculture and livestock grazing added to the area's economic diversity.

A series of large forest fires in 1893 focused attention on the need to protect the timber resource. On February 22, 1897, President Grover Cleveland established the Black Hills Forest Reserve. This designation provided protection against fires, wasteful lumbering practices, and timber fraud. In 1898, the first commercial timber sale on federal forested land in the United States (known as Case Number One) was authorized in the area of Jim and Estes Creeks (near the town of Nemo). Cutting began around Christmas 1899. In 1905, the Black Hills Forest Reserve was transferred to the new Forest Service, an agency of the U.S. Department of Agriculture. Two years later it was renamed the Black Hills National Forest.

For many Americans the Black Hills of South Dakota and Wyoming are their first experience of the real West. Situated on this island in the Great Plains, at the verge of the Rocky Mountains, the Black Hills National Forest is emblematic of many other areas of the West. Like other areas, the Black Hills National Forest is suffering from severe drought, insect infestations, and large wildfires. Insect attacks and large wildfires put our communities and our homes at risk along with our beautiful forests.

2002 was a year of historic drought across the Rocky Mountain West – the driest in recorded history. Since then, precipitation and snow pack in the region have been below normal, and recovery from drought conditions is not anticipated for at least three to five years. Some long-term weather data predict that the Rocky Mountain West is in the beginning years of a two-to-three-decade drought cycle.

In the Black Hills we are well along in the sixth year of drought. We had a very active early fire season this year, following the second driest winter on record. The fire situation has improved somewhat in the past few weeks due to normal frequent summer rains.

Years of drought have exacerbated the principal forest health problem in the Black Hills. As you are well aware, we have seen a dramatic increase in large fires in the Western United States over the last 10 years. There are several reasons for this, including past fire suppression practices and the resulting increases in fuels and insect and disease infestations, as well as the continuing drought. A four-fold increase in populations of ponderosa pine trees in the Black Hills over the past century

has become the single biggest factor influencing forest health conditions. Where there were once 30 to 70 trees per acre, there are now on average more than 500 on each acre.

General Custer saw a mosaic of vegetation consisting of open park-like stands of old ponderosa pine with about 20 percent of the area in patches of dog haired thickets interspersed with pockets of meadows. The forest General Custer saw was created and maintained by frequent wildfire; the Black Hills are a fire adapted ecosystem and ponderosa pines depend upon periodic fire for their overall health. Primarily due to our fire suppression efforts, these open stands evolved into the overcrowded and unsustainable situation we see today. There are four times more trees alive here than in 1897 according to our 1897 forest inventory. Tree densities have created hazardous fuel conditions on many of our forested areas. This problem is the single most significant issue we face today across much of the West.

The weakening effects of drought increases a forest's susceptibility to insect infestation. Bark beetles populations have reached epidemic levels in all major coniferous forest cover types in the Rocky Mountain Region. Mountain pine beetles threaten lodgepole and ponderosa pine forests in Colorado, South Dakota, and Wyoming. Spruce beetles threaten spruce forests in Colorado and Wyoming. Douglas-fir beetles threaten Douglas-fir in Wyoming. We are seeing continuing and increasing losses in South Dakota and Wyoming over the past five years.

In the wake of insect mortality, there may be an increased threat of intense and severe wildfires depending on stand conditions. Wildfire can be one of the most complex events that affect forests. For example, it is widely acknowledged that forest fires have both beneficial as well as damaging effects. 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 timber production, wildlife, recreation use, and other resources.

In 2000, the Jasper fire burned over 80,000 acres. We have had active fire seasons and large fires every year since 2000 except 2004. (Only weather and aggressive and coordinated initial attack kept 2004 off the large fire list.) Since the fire season of 2000, more than 187,000 acres have burned in large, uncharacteristically severe and intense (hot) wildfires. This is just over 14 percent of the total Forest area, or about 25,000 acres each year on the average. This compares to an average of around 2,000 acres each year prior to 2000.

We recognized that to really make a difference in reducing the threat of large-scale wildfire we were going to have to step up our performance to restore fire-dependent ecosystems by placing greater emphasis on hazardous fuel reduction and forest management.

In 2004, the Rocky Mountain Region developed the Accelerated Watershed/Vegetation Restoration Plan to strategically focus fuel treatments and other vegetation treatment efforts to protect communities and critical watersheds. As part of that plan, a Region-wide assessment found that 18.2 million acres had vegetation conditions that rated at a high to very high combined fire and insect hazards. The analysis indicated that the Black Hills had 800,000 acres in these categories. The Regional plan identified six national forests, including the Black Hills, to receive additional funding within the Region's allocation to address wildfire risk resulting from forest health problems, insects, and disease. This effort required the Region to make difficult trade-offs and the establishment of priorities, but these choices led to additional funding that enabled the Black Hills National Forest to accelerate restoration and fuels reduction work.

We have been working for several years with the States of South Dakota and Wyoming on an aggressive program of fuels reduction on the Black Hills in partnership with counties and private landowners. A Memorandum of Understanding between the Black Hills National Forest and the State of South Dakota established our mutual interest in treating acres rapidly. The purpose of the MOU is to work together to coordinate priorities across the Black Hills to restore ecological health on an agreed-upon number of acres for FY 2005 and FY 2006. The State has also agreed to prioritize their resources to treat acres on surrounding state and private lands.

Working with our neighbors, we have made significant progress. This accomplishment is significant because the Forest Service is not the steward of every acre in the Black Hills. About 300,000 acres of the 1.5-million-acres within the proclaimed boundary of the Black Hills National Forest is in private ownership. Working with our neighbors is essential.

We are focusing our efforts on public lands to protect adjacent communities. Without everyone pitching in, though, to thin the forest around their own homes, our efforts won't be enough. It is in the wildland urban interface--where trees meet the eaves of houses--that fires pose the greatest threat.

The Black Hills National Forest Advisory Board has been an enormous help to us. The South Dakota delegation helped us establish the Board in 2002 to promote collaboration among many interests. The Board is composed of representatives of state and local government, tribes, and interests ranging from conservation and recreation to mining and timber

production. The Board has been invaluable in helping us understand peoples' desires and concerns, and in finding ways to support efforts such as forest planning. The advisory board unanimously supports active management of the Black Hills National Forest to keep it healthy and productive, and to keep communities safe. Forest Supervisor Craig Bobzien and I welcome their counsel.

Implementing hazardous fuel treatment programs on the ground is not without controversy. Beaver Park illustrates my point. The beetle infestation in Beaver Park started with a couple small spots involving about 200 trees in 1996. In 1998 we began efforts to restore areas in Beaver Park by changing the structure of the forest and removing trees that were under insect attack.

Interest groups litigated proposed projects within the area, with court decisions resulting in a stay of project implementation. In a subsequent settlement agreement, all parties agreed to stay out of Beaver Park—and an additional 4,000 acres around Beaver Park—until after the Forest Plan Phase II decision.

In the meantime, beetle activity increased. Much of the expansion of the outbreak was driven by the dense stand conditions in the Beaver Park roadless area. By 2001, beetle activity was prevalent across much of this landscape. Over 100,000 trees were being killed per year, and ground surveys showed that many of the stands had already surpassed 50 to 60 percent mortality.

Because of deteriorating forest health conditions and public concern, we reopened the settlement agreement. We were successful in renegotiating the agreement with a number of parties, but other parties would not agree. In August 2002 legislation was passed which incorporated the negotiated terms and allowed us to combine the projects in the area and use the analysis in the Elk Bugs Environmental Impact Statement. We were able to start work immediately after the legislation was signed and had 99 percent of the work under contract within 18 months. We treated 8700 acres. Over 320,000 trees were killed in this relatively small area between 1996 and 2003. This constitutes about 32 million board feet of timber.

We are continuing to treat areas around Beaver Park using traditional timber and fuels reduction projects but there is still work to do to address the remaining insect infestations in surrounding areas. Bark beetle infestations in Deerfield, Bear Mountain, and other areas of the forest are continuing to expand. Field entomologists estimate that the Deerfield infestation is at least four times bigger than the Beaver Park infestation. You saw some of the results of this epidemic on a field trip yesterday.

The Healthy Forest Initiative and the Healthy Forests Restoration Act of 2003 provided tools to help us expedite restoration and fuels work. In FY 2005, 35 percent of the Region's hazardous fuels project decisions were under HFI and HFRA authorities. In FY 2006, 63 percent of the hazardous fuels project decisions will use HFI and HFRA authorities. In FY 2005 and FY 2006, about 20 percent of treated acres in the Region will be accomplished under these authorities. These figures reflect a projected increase in the total acres treated under these authorities from 17,200 in FY 2005 to 21,400 in FY 2006. The Black Hills National Forest has used HFI categorical exclusions, and the Forest has an on-going large-scale HFRA project on the Hells Canyon Ranger District.

We continue to use every tool at our disposal. An essential tool for cost-effective fuel reduction is a private sector infrastructure for removing and utilizing wood. In the Black Hills area, we have a vibrant integrated industry comprised of three large mills and several smaller ones. Rushmore Forest Products here in Hill City has invested a million dollars in retooling their mill to handle trees down to four inches in diameter.

In 2004, the Rocky Mountain Region led the agency in the number of approved stewardship contracts. Because use of traditional contracting continues to be successful, the Black Hills has not used stewardship contracting as have many of the other Forests in the Rocky Mountain Region. Three contracts have been approved, and the Forest is working with Tribal governments in South Dakota who have expressed interest in stewardship contracting.

We're also looking at opportunities to use biomass for energy production. In fact, we are evaluating the economics, cost efficiency, and practicality of using biomass heating systems for a new ranger station here in Rapid City. The Black Hills National Forest is literally a biomass factory.

We will soon complete the second of two amendments to the 1997 Revised Forest Plan, known locally as the Phase II Amendment. The amendment is being completed in response to the Chief's appeal decision in 1999 that directed the Forest to do more analysis to ensure species viability. Additionally, a lawsuit settlement agreement in 2000 on the Veteran Salvage Sale (to treat areas in and around Beaver Park) required additional protection for certain species and an analysis of candidate areas for research natural area designation. In response to agency concerns and public comments, Phase II is also addressing fire and insect conditions in the Black Hills. After reviewing over 6,000 comments from the public—including detailed comments from the forest products industry and other key interest groups—and after extensive work

with cooperating agencies, the Forest is preparing to release a final environmental impact statement. The purpose of the amendment is to ensure viability of plants and animals, protect their habitat, and provide additional protection to National Forest resources and adjacent private lands. We appreciate the help we have received from interested parties, and we look forward to your support in implementing our final decision, which I expect to sign in late September.

In summary, we have treated about 250,000 acres since our Forest Plan was approved in 1997. Restoration of these ecosystems is achieved through various methods including timber sale projects, thinning and removal of hazardous vegetation. The trend in number of acres treated is up. We are committed to healthy forests through thoughtful and aggressive management while maintaining all of the other important forest values. We will be as aggressive as law, policy and funding allow, consistent with our Black Hills Forest Plan.

Thank you for this opportunity to address the subcommittee. I will be pleased to answer any questions that you may have.