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OVERSIGHT HEARING ON:
*Forest Health Conditions and Forest Management Practices
on the Black Hills National Forest*

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There are two distinct opinions on management of our nation's forests.

One theory is to see the forests of this nation protected from any type of exploitation. The belief is that forest lands should be set aside and preserved as sanctuaries to be enjoyed by an elite few.

Another view is that the forests of this nation should be used for whatever goods and services can be derived from them. The forests are there for the benefit of society is their battle cry.

Whether you are a proponent of preservation or a proponent of use, there is one inescapable fact that remains constant. None of these desires are possible if our forests disappear. Therefore, we must manage our forests, not for personal enjoyment or for the products and benefits that are derived from them, but *as a system that must be maintained in a healthy and vibrant condition*. That is what "forest health" means to me.

Our guiding principle should not be to manage our forests simply to maximize the resources derived from them or that we should leave forests alone to exist as best they can under the influences and pressures of mankind. Our emphasis should always be to produce a forest that is healthy and sustainable for an indefinite period of time.

Our forestlands are an important resource for this nation. Forests provide clean and abundant water. They provide renewable wood resources that can be used for many purposes. Forests provide habitat for an infinite variety of flora and fauna. They also provide us with many recreation opportunities and a deep sense of pleasure. However, these benefits and values cannot be guaranteed unless our forests are managed in a way that will maximize the resources and benefits without harming the long-term viability of the forest.

The United States Forest Service provided the following definition of a healthy forest in one of their recent reports –

"A condition wherein a forest has the capacity, across the landscape for renewal, for recovery from a wide range of disturbances, and for retention of its ecological resiliency while meeting current and future needs of people for desired levels of values, uses, products, and services."

This definition is a good starting point for any discussion of forest health issues.

A healthy forest condition can never be reached through the passive management of our forestlands. This concept may work in a landscape devoid of humans; however, humans will always be a part of the landscape for the foreseeable future. Therefore, we must take an active approach to forest management that will utilize the renewable resources and benefits that society demands from them.

A forest is always in a state of change in response to forces exerted upon it and to arrest that change will require direct and conscious management. A good example of this concept is the intentional suppression of forest fires to protect people and property from the ravages of wildfires during the past century. This action eliminated a natural force that cleaned up forest debris and thinned stands through low intensity fires. These fires were healthy for the forest when they were not intense and did not destroy all vegetation and sterilize the soil.

As we started to suppress forest fires, we began to harvest trees from mature forests on a periodic basis. This action, in theory, kept the forests healthy and growing because the removals thinned the forest and kept them healthy just like natural

fires used to do. However, the amount of wood that was cut and removed from our forestlands never kept pace with the capacity of the forest to grow new wood. Consequently, our forests have been growing thicker and thicker until many of them have become overgrown, stagnant and unhealthy. This is true all over the western United States. And, all of these forests are dying from the lack of adequate forest management.

Forest Health Issues in the Black Hills

These overgrown and stagnant forests have created the perfect environment for other natural forces that are starting to become evident throughout our western forests. Forest insects and disease are on the rampage in many areas. Large outbreaks of pine beetle are completely destroying thousands of acres of forest across the west – from California to Alaska and from the coastal forests to the Black Hills. This is nature's way of thinning stagnant overgrown forests. Nature is indiscriminant in its methods and the outcomes can be catastrophic.

In the Black Hills, we are in the second largest beetle infestation in history – soon to become the largest. Mountain pine beetles and pine engraver beetles (Ips beetles) are killing tens of thousands of trees each year. The beetles are thinning the overcrowded forest stands that have been allowed to grow throughout the Black Hills. This is not a pretty process and is a process that does not need to occur.

The result of the beetle infestations is millions of dead and dying trees in our forest. The debris created by these dead trees creates an even larger problem that is even more devastating. The chances of a catastrophic fire increase incrementally with increases in fuel.

The town of Deadwood received its name because of all of the dead trees that covered the slopes around the town when it was first settled. Those trees were killed by the largest beetle epidemic in the known history of the Black Hills. There was also a large catastrophic wildfire that occurred in that area following the beetle epidemic. This is the natural scenario in the northern Black Hills and elsewhere. Forests grow until they reach a point where they are stagnant and overcrowded. This is followed by a period of disease and insect epidemics that thin the forests. This creates massive amounts of debris that is ideal for the occurrence of large devastating wildfires.

Management Implications in the Black Hills

This process of growth, maturation, stagnation, disease and insects followed by catastrophic wildfires is a natural process. It is as predictable as the sun rising in the east and setting in the west. However, it does not have to occur. Active forest management can and will prevent this process from occurring. Isn't it much better to let a forest grow and thin it as it matures, to maximize the sequestration of carbon (wood) and keep the forest healthy? This process guarantees that our forests can grow and sustain themselves forever. These forests are not governed by catastrophes that could devastate communities interfaced with the forests. They are governed by good forest management.

Healthy forests can be achieved through a natural process or through the active management of the forest to produce prescribed conditions. The best way to proceed may be debated for as long as man survives on this earth. However, I can guarantee you that man will outlive our forests if we do not actively manage them. We can no longer rely on a natural process and a natural order of things to keep our forests healthy. We must manage and create healthy forests through proper forest management. The benefits we derive from our forest lands must be secondary to the management of our forest ecosystems to produce a condition wherein a forest has the capacity, across the landscape for renewal, for recovery from a wide range of disturbances, and for retention of its ecological resiliency while meeting current and future needs of people for desired levels of values, uses, products, and services.

To bring this discussion down to the local level, the Black Hills National Forest has just released an amendment to the Forest Plan that will guide them while they start the process of revising the plan again. We have been given a few weeks to comment on an amendment to the plan that is over 1500 pages long with an appendix that is twice as large.

I want to highlight a few observations:

- The Forest Service has indicated that 25 percent of the trees within the Black Hills National Forest are in a condition, based on size and density, which is ripe for massive mountain pine beetle infestations. What we see happening across the Black Hills right now will continue to build and spread for many years. These thick stands of trees are the real forest health issue facing this area and the entire western United States.
- Forest entomologists have indicated that mountain pine beetle epidemics can be maintained in forest stands that have at least 120 square feet of basal area and an average diameter (at breast height) greater than 7 inches. Basal area is a measurement used by foresters to give us a visual picture of how much wood is present. It is measured at breast height (4.5 feet off the

- ground). If all the trees on an acre were gathered into a huge bundle, they would cover at least 120 square feet of area.
- Congress needs to concentrate its long-term efforts on the root cause of the forest health issue – overcrowded and unmanaged forest conditions.

Resource Issues in the Black Hills

Resources from our nation's forests help provide lumber for our communities. The demand for lumber has not gone down and it will not in the foreseeable future. We find ourselves importing lumber in greater and greater amounts as we decide to passively manage our forests. Yet, that lumber is not materializing. We are becoming increasingly dependent upon foreign sources of lumber. Would we rather see lumber stripped from third world forests without any active management? The "not in my backyard" mentality is not only hypocritical but ensures that we will continue to be dependent upon imported lumber from forests without any active management.

The management of forests requires that we aggressively thin overstocked stands. These stands will have commercial wood in them. Part of that commercial wood will be removed when they are thinned, if we have industries that can use the material.

It is imperative that we have forest industries that can utilize this wood. This helps lower the overall cost of forest management. Since 80% of the forest land in the Black Hills is in federal ownership, our forest industries are dependent on a reliable supply of wood from the federal lands. This supply needs to be available in a steady stream of resources.

It is also imperative that Congress provide funds for the research and development of new uses for wood. At present, only a small portion of the wood cut through thinning projects can be utilized. Most of the thinning debris will remain on the forest floor adding to the accumulation of hazard fuels unless that debris is reduced through very costly hazard reduction measures.

Congress also needs to provide funding for demonstration plants for new wood products and start-up funding for new businesses that utilize wood that is currently a waste product. These investments will do more to lower the cost of healthy forest management than any other effort Congress could support.

Fire Risk in the Black Hills

The current levels of forest fuels and dead trees that will add to the fuel loading is an immediate problem facing the Black Hills. This is exacerbated by private in-holding within the boundaries of the Black Hills National Forests. Twenty percent of the area is in private ownership. And most of these in-holdings have houses and other real property that have considerable value.

Wildland/Urban Interface areas (WUI's) are identified in the Healthy Forest Restoration Act of 2005 as a critical concern. The act directs the Forest Service to concentrate their efforts in WUI areas and to manage fuel loadings in those areas to reduce the chances of catastrophic wildfires. Congress allocated funds to the federal agencies to address these areas on federal lands. However, they did not enact the portions of the original legislation that would have provided funding for addressing these problems on private forest lands surrounded by federal lands. This is an oversight that must be corrected.

We need funding to help landowners implement forest management actions that will create healthy forest stands and reduce fuel loadings. We need funding to help communities develop meaningful Community Wildfire Protection Plans (CWPP's). These plans allow the local community to identify the areas surrounding their community that are at risk and to define how those areas should be managed. The federal agencies are required to work with the local community when they have approved CWPP's. These plans, if done properly, are costly and require a high level of expertise. It is imperative that Congress provide funding to help communities prepare and implement these plans in consultation with State and local agencies.

Wildland Fire Readiness

One of the aspects of forest management is the suppression of wildfires. It is important, especially in the Black Hills, that we suppress wildfires when they are small as the Black Hills National Forest has one of the most interspersed urban interfaces in the nation. In many areas a fire can quickly threaten homes.

A rapid and sustained initial attack on a wildland fire reduces loss to life and property and helps keep fire costs to a minimum. Conversely, slow mobilization efforts contribute to larger fires and greater chances for loss to life and property.

Currently, all federal, state, local, and volunteer fire departments in the Black Hills have a good working relationship with one another. This collaborative approach to fighting fires allows us to have favorable outcomes on Black Hills fires. The "closest forces" concept, regardless of agency, is used very effectively in the Black Hills.

The Forest Service manages about 200 million acres of land in approximately 160 national forests and grasslands, while the BLM manages about 270 million acres. These agencies both provide fire protection on their lands.

In order for us to sustain our firefighting capabilities in the Black Hills, we will have to rely on a stable fire force. Today this is being compromised by a continued reliance on a militia type fire work force that is being used by federal land management agencies. In addition, many states also use this model. The model, however, has many drawbacks.

For years, federal fire agencies have relied upon a concept whereby employees who did not normally perform firefighting duties as a primary job function would respond to wildfires. These militia resources come from a variety of areas within the federal workforce, such as Forestry Technicians, Range Technicians, and Biological Science Technicians.

This situation fails to produce a good nexus between firefighting and what the federal employee does throughout the year. During the non-fire season, the militia type employees go back to their normal assigned job activities, while individuals dedicated solely as fire personnel prepare for the next fire season. This preparation involves fire training, fuels mitigation work, fire planning, the development of qualified fire staff, fire prevention activities, fire and vehicle equipment maintenance, training outreach programs to volunteer departments, and physical training. These off season activities develop a better and safer fire workforce.

Reliance on a militia type fire force has its drawbacks, as previously stated. People who take on firefighting as a collateral duty are not always available or willing to fight wildfires. In addition, an August 1999 Government Accounting Office (GAO) report entitled "Federal Wildfire Activities – Current Strategy and Issues Needing Attention", it is noted that the federal agencies' firefighting workforce is shrinking because some workers are no longer willing to take on firefighting as a collateral duty and some with expertise in fire management are nearing retirement age.

Much discussion has taken place on this issue, and numerous recommendations have been proposed by land management agencies to provide a fire force dedicated to fighting fires. These efforts have not been supported. This lack of a dedicated fire work force is a hindrance to fire agencies in meeting the goal of suppressing fires before they become large.

We are more fortunate than most areas of the country in that our federal partners in the Black Hills National Forest have some dedicated fire staff and a good fire program. Together we are usually able to meet the goal of keeping fires small.

It is my hope that Congress moves toward the enactment of rules that will allow the federal fire agencies to have more permanent fire fighters and devote funds to that end.

Summary

The current management strategies on the Black Hills National Forest have placed both the forest and the citizens living in and around the forest at risk. The overcrowded conditions have compromised the health of the trees, leading to insect infestation and disease. We now are dealing with a virtual powder keg – the possibility of catastrophic fire and accompanying devastation to the natural resources, the economy and the citizens of the area. It is imperative that proper management of the resources be made a priority. As was stated earlier, a healthy forest is a *system that must be maintained in a healthy and vibrant condition*.

When dealing with a forest littered with dead and dying trees, wildfire is a certainty. In order to address the threat of wildfire, it is vital that we have dedicated, experienced, well trained fire fighters. The federal, state and local agencies have been working together successfully to keep the fires small. However, the number of trained firefighters in the federal ranks is shrinking, which could compromise the ability to adequately fight fire in the future.

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