

**Written Public Testimony of Joseph A. Duda
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on Behalf of the State of Colorado**

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Subcommittee on Public Lands and Environmental Regulation**

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Thank you, Chairman Bishop, Ranking Member Grijalva, and members of the Subcommittee for the opportunity to provide written and public testimony on challenges and opportunities related to wildfire and forest management. I also want to thank Colorado Representatives Lamborn and Tipton, and the other members of the Colorado congressional delegation for the time they have devoted to addressing important natural resources issues in Colorado.

My name is Joseph Duda and I am the Deputy State Forester for the Colorado State Forest Service at Colorado State University.

The Colorado State Forest Service is a service, outreach and technical assistance agency within the Warner College of Natural Resources at Colorado State University; we also provide staff support to the Division of Forestry in the Colorado Department of Natural Resources.

With more than 37 years of forestry experience, I have extensive knowledge of forest management, National Forest management, the forest products industry, and the US Forest Service land management planning process.

A Firsthand Look at the Impacts of Unwanted Wildfire

Sixty-eight percent of Colorado's 24.4 million acres of forestland are in federal ownership, and the majority is US Forest Service land. Colorado's national forests are being negatively impacted by bark beetle epidemics and catastrophic forest fires. Over 6.6 million acres of forestland have been severely impacted by bark beetles since 1996. Drought and climate change have contributed to this scenario, but the condition of the forests is the primary underlying factor, with nearly homogenous landscapes of mature, single-age stands that are overly dense and stressed from competing for nutrients and water. In other words, they are ripe for insect attacks and destructive wildfires.

The West Fork Complex Fire that is currently burning in south central Colorado is an example of what can occur as a result of these conditions.

As of July 8, the West Fork Complex Fire had burned more than 110,000 acres and was only 25 percent contained. The burn area of the West Fork Complex lies predominantly in the Rio

Grande watershed. In one area, the fire burned within a few feet of the Rio Grande River. The watershed – along with wildlife and people – will be impacted by this fire for decades to come. The fire started on the west side of the continental divide, jumped over the divide, and made a seven-mile run in high-elevation spruce/fir timber in one day, forcing the evacuation of the entire town of South Fork.

Unfortunately, this story is similar to other stories that Coloradans have heard many times over the past decade. This year marks the second consecutive year that Colorado has experienced record-setting fires in terms of property lost in a single wildfire. Last year, the Waldo Canyon Fire destroyed 347 homes and killed two people; this year, the Black Forest Fire claimed 511 homes and two lives.

I also have firsthand experience with the disruptive impacts of wildfires, as my family and I were recently evacuated from our home in South Fork during the West Fork Fire.

A Predictable Scenario

The scenario in Colorado described earlier was predicted, as the following statement from the 1992 US Forest Service Rocky Mountain Region Annual Report illustrates:

“Following decades of suppressed natural fire, many forested ecosystems – their age, density, and species composition – have reached a mature stage where insect infestation and catastrophic fire are the next likely events. Timber harvest offers a controllable alternative to this succession while providing a source of needed wood products. Where appropriate, harvesting can improve long term health and productivity of the forest, simultaneously contributing to other multiple-uses and forest values.”

Poor forest condition is one of the primary factors that have led to destructive wildfires and catastrophic insect and disease outbreaks. The response has been to deal with the impacts (i.e. unwanted wildland fire), rather than improve the health of our forests through thinning and other management activities. For example, this year, we will remove less than one-half of the biomass in the form of forest products than we did in 1990. Without adequate resources and an efficient process for thinning our forests to achieve age class and species diversity, the US Forest Service, and Coloradans, will continue to lose ground in our collective attempts to address the mountain of dead timber and declining forest health. In simple terms, we are managing the disturbance, rather than addressing the entire system, which is the only real solution to our current situation.

Comprehensive Forest Management is Essential

As I watched news coverage of the Black Forest Fire, I considered what level of forest management has been accomplished in the past to promote forest health and address wildfire, and what needs to be done in the future. Clearly, defensible space around homes is important and the Colorado State Forest Service is actively engaged in implementing several programs and grants to help landowners implement fuels reduction projects, including defensible space. These programs include several US Forest Service cooperative grant programs, such as State and Private Forestry Redesign, State Fire Assistance, and Volunteer Fire Assistance grants. The Colorado State Forest Service also is the state lead for the Firewise Communities/USA and Fire Adapted Communities programs. Finally, the State of Colorado has funded a Forest Restoration Grant Program at \$1 million annually since 2007, and in 2013 authorized and funded the Wildfire Risk Reduction Grant Program at \$9.6 million. With the match these grants require of participants, these programs will result in approximately \$29 million of management on the ground.

The materials used in home construction also are an important component in our efforts to reduce wildfire risk. However, after watching the damage caused by wildfire in Colorado over the past several years, it is clear that the issue is much broader than home construction and clearing the vegetation 100 feet around the home. Managing the broader landscape is critical to reducing the impacts of wildfire on communities and resources. When wildfires travel several miles in one burning period and throw embers that start spot fires a mile ahead of the fire, it is clear that we need a different management approach. In 2013, the Ecological Restoration Institute stated that “WUI [wildland-urban interface]-only treatments result in areas of unchanged crown fire potential across the untreated landscape, therefore leaving it vulnerable to large, severe, and expensive (mega) landscape-scale fire”.

Social, Environmental, and Economic Values

Over the past several decades, management activity on federal lands in Colorado has declined. Currently, more than twice as much tree volume on US Forest Service lands in Colorado is lost to insects, disease, and fire as is removed through forest management activities. This has resulted in a significant decrease in our forest products infrastructure.

Colorado has a small but diversified forest products infrastructure, which depends on a steady, predictable supply of sawlog-quality timber generated from forest management activities on federal lands that can be economically processed into marketable finished products. Forest product markets are essential if we are to economically manage state and private forestlands. However, we cannot produce enough forest products from state and private land to sustain an industry without a contribution from federal lands. These forest products companies are vitally important to many small communities in rural Colorado, and to Colorado’s economy.

Decreasing levels of forest management has resulted in reduced markets for forest products, less resilient forest conditions, and increased risk of insects, disease, and fire. Additionally, a Colorado State University study, *Wood Use at the Turn of the Century* (Lynch and Mackes) in 2001 showed that more than 90 percent of the forest products Coloradans use comes from other states, as well as Canada and Mexico. We have the opportunity to improve our forest age-class diversity and resilience, provide the forest outcomes that Coloradans expect, including first class recreation opportunities and clean water, and produce forest products for use in Colorado. This represents a balanced approach to the social, environmental, and economic values of forest management.

Clearly, this trend in declining forest health and increased wildfire risk demands that we take immediate action to determine how to most effectively implement the National Cohesive Wildland Fire Management Strategy. The strategy identifies three primary factors that present the greatest challenges and opportunities for addressing wildland fire - restore and maintain landscapes, create fire adapted communities, and improve wildfire response. We support restoring and maintaining landscapes as goal one because proactively managing our forests will provide the greatest benefit to our forest ecosystems. Similarly, the US Forest Service Restoration Strategy outlines the need for, and a pathway to, increasing the pace and scale of restoration.

A Colorado State University study released in 2007 projected that the wildland-urban interface in Colorado will increase from 715,000 acres in 2005 to 2.1 million acres in 2030. Creating fire-adapted communities and improving wildfire response are important components of the Cohesive Strategy. However, the single component that will provide the greatest long-term benefit is to restore and maintain landscapes. Active forest management in Colorado has been sorely lacking over the past several decades. We must significantly increase the pace of landscape-scale restoration if we want to have a meaningful impact on improving forest health and increasing resilience to insects, disease, and wildfire.

In addition to the three primary factors identified in the National Cohesive Wildland Fire Management Strategy, the Western Cohesive Strategy has adopted the following vision for this century: *“Safely and effectively extinguish fire, when needed; use fire where allowable; manage our natural resources; and as a Nation, live with wildland fire.”* Realizing this vision will take the collective will of public land managers, private landowners, industry, and many others.

In Colorado, the US Forest Service, Colorado State Forest Service, Colorado Department of Natural Resources, place-based forestry collaboratives, and other stakeholders are working together to determine how best to implement forest management projects in areas identified as being at high risk to wildfire – both on public and private land. Guiding these efforts is the Colorado Forest Action Plan, which states that “a comprehensive approach to

forest management that capitalizes on our collective knowledge and resources is imperative to ensure that Colorado's forests remain productive and resilient for present and future generations." The plan will provide the state with a roadmap for implementing forest management in Colorado over the next decade to conserve working forest landscapes, protect forests from harm, and enhance public benefit from Colorado's trees and forests.

Using all the Tools in the Toolbox

Colorado now has more than 200 Community Wildfire Protection Plans, which are being used to identify opportunities to implement large-scale, cross-boundary projects that will help reduce wildfire risk to communities and restore forest health. However, lack of adequate funding and commitment on the part of individual landowners can be barriers to comprehensive and successful implementation of these plans.

Many communities have successfully competed for federal grants that help fund fuels treatments. As noted earlier, the Colorado General Assembly and Governor Hickenlooper have passed legislation making millions of dollars in state funding available through a competitive grant process for forest restoration projects that demonstrate a community-based approach. In addition, legislation was passed this year that will make additional funds available on a competitive basis for fuels reduction projects on state and private land through the Wildfire Risk Reduction Grant Program.

These programs and several others, such as the Front Range Fuels Treatment Partnership, which was formed after the devastating fire season of 2002, have resulted in treatment on thousands of acres of land, reducing wildfire risk to communities and important natural resources. Despite these efforts, more resources are needed to implement management projects on a scale that will allow us to get ahead of the next insect epidemic, disease outbreak, or wildfire that threatens not only human lives and communities, but the watersheds that supply drinking water to Colorado and 17 other states.

Another tool that has been effective on a somewhat limited basis in Colorado is the Good Neighbor Authority, which will expire on September 30, 2013. We strongly urge reauthorization and use of the Good Neighbor Authority on a broader scale in Colorado.

Region 2 of the US Forest Service continues to focus much of its work on restoring and maintaining landscapes, but new approaches and additional resources are critical if we are to be successful in creating forests that are resilient and provide all the benefits Coloradans and visitors to our magnificent state have come to expect. Failure to achieve this outcome will result in further loss of lives, communities, critical watersheds and other natural resources, as well as revenue. It also will result in further damage and losses to our iconic western forests – forests that are renowned throughout the world for their scenic beauty

and recreational opportunities. Loss of such opportunities will have lasting and devastating effects on Colorado and the West.

The 2002 Hayman Fire, the largest in Colorado history in terms of acres burned, demonstrated the potential impacts of fire on the Colorado's water supply. That fire dumped thousands of cubic yards of sediment and debris into Strontia Springs Reservoir, which has cost Denver Water millions of dollars to restore over several years. In addition, the 2012 High Park Fire west of Fort Collins resulted in mud slides on a major highway and dumped ash into the Poudre River, which supplies drinking water to several Front Range cities. More recently, heavy rain over the Waldo Canyon burn area in Colorado Springs resulted in a mudslide that destroyed or damaged several homes and businesses in Manitou Springs.

In 2010, the Western Forestry Leadership Coalition published "The True Cost of Wildfire in the Western U.S." While enormous, the suppression costs of the two fires examined in the report – the Hayman and Missionary Ridge fires – constituted only 20 percent and 25 percent, respectively, of the total costs associated with the fire. The remaining costs were associated with recovery and rehabilitation of lands and water supply infrastructure.

Colorado and other states cannot afford to continue absorbing the enormous costs associated with these fires, most of which have burned on federal land, primarily in areas where trees are far too old and dense, and often have been affected by insects or disease.

Conclusion

From a Colorado perspective, we must explore all options to improve forest conditions across Colorado. These include full funding for fire suppression so the US Forest Service is not required to disrupt ongoing programs to fund fire. Forest management funding also should be increased to allow treatment on more lands. In addition, we must utilize and expand use of the Good Neighbor Authority in Colorado to assist in management where practical. We also must take a comprehensive look at all opportunities and authorities necessary to reduce US Forest Service costs, including the use of existing authorities such as the Healthy Forests Restoration Act, which should be aggressively implemented. More effective management of Colorado's forested lands will set a course for more resilient future forests that provide the benefits and outcomes we expect.

Thank you for the opportunity to be here today. I look forward to working with our partners to develop an approach to forest management in Colorado that integrates social, environmental, and economic values. It is our best hope for a future that includes healthy and productive forests for present and future generations.