STATEMENT
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WILDLAND FIRE MANAGEMENT

Chairman Wyden, Ranking Member Murkowski, and members of the Committee, thank you for the opportunity to appear before you today to provide the status of the U.S. Forest Service's wildland fire management program.

Around the world, the last two decades have seen fires that are extraordinary in their size, intensity and impacts. In Australia in 2009, the Black Saturday Bushfires killed 170 people. Domestically, Florida, Georgia, Utah, California, Texas, Arizona, New Mexico and Colorado, have all experienced the largest and/or the most destructive fires in their history just in the last six years. On average wildfires burn twice as many acres each year as compared to 40 years ago, and there are on average seven times as many fires over 10,000 acres per year. (Climate Central, 2012)

In 2012 over 9.3 million acres burned in the United States. The fires of 2012 were massive in size, with 51 fires exceeding 40,000 acres. Of these large fires, 14 exceeded 100,000 acres (NICC 2012). The increase in large fires in the west coincides with an increase in temperatures and early snow melt in recent years. This means longer fire seasons. The length of the fire season has increased by over two months since the 1970s (Westerling, 2006).

We estimate that 65 to 82 million acres of National Forest System lands are in need of fuels and forest health treatments—up to 42 percent of the entire system. Part of the problem is severe drought, resulting in extreme fire weather and very large fires. At the same time landscapes are becoming more susceptible to fire impacts, more and more Americans are choosing to build their home in wild lands. The number of housing units within half a mile of a national forest grew from 484,000 in 1940 to 1.8 million in 2000. The number of housing units within national forest boundaries rose from 335,000 in 1940 to 1.2 million in 2000. Forest Service estimates indicate a total of almost 400 million acres of all vegetated lands are at moderate to high risk from uncharacteristically large wildfires, and over 70,000 communities are at risk.

NATIONAL COHESIVE WILDLAND FIRE MANAGEMENT STRATEGY

In 2009, Congress passed the Federal Land Assistance, Management, and Enhancement (FLAME) Act, calling on federal land managers to develop a joint wildland fire management strategy. Working together with the Department of the Interior, we took the opportunity to involve the entire wildland fire community in developing a long-term National Cohesive Wildland Fire Management Strategy. Our strategy has three components:

1. **Restoring fire-adapted ecosystems.** Hundreds of post-fire assessments show that fuels and forest health treatments are effective in reducing wildfire severity. Accordingly, our fuels treatments have grown; from FY 2001 to FY 2011, the Forest Service treated about 27.6 million acres, an area larger than Virginia. We focus our treatments on high-priority areas in the Wildland Urban Interface, particularly communities that are taking steps to become safer from wildfire.

2. **Building fire-adapted human communities.** With more than 70,000 communities in the Wildland Urban Interface (WUI) at risk from wildfire, the Forest Service is working through cross-jurisdictional partnerships to help communities become safer from wildfires, for example by developing community wildfire protection plans. In addition, the Firewise program helps communities with actions to reduce the potential for homes to be ignited from wildfires. This is done through using techniques such as home siting and development, home construction, and home landscaping and maintenance which reduces that potential. Through the Firewise program, the number of designated Firewise communities rose from 400 in 2008 to more than 700 in FY 2012.

3. **Responding appropriately to wildfire.** Most of America's landscapes are adapted to fire; wildland fire plays a natural and beneficial role in many forest types. Where suppression is needed to protect homes, property and resources we focus on deploying the right resources in the right place at the right time. Using improved decision support tools, fire managers are making risk-based assessments to decide when and where to suppress a fire—and when and where to use fire to achieve management goals for long-term ecosystem health and resilience.

FIRE IMPACTS TO NATURAL RESOURCES AND INFRASTRUCTURE

In 2012 over 4,000 structures were destroyed, including 2,216 residences (average annual residences lost is 1,416 from 1999 through 2012, NICC). The greatest loss of structures occurred in Colorado. In addition, these losses have a devastating impact on citizens, communities and economies. Watersheds that supply drinking water for the cities of Fort Collins, Greeley, Colorado Springs, Alamogordo, and Holloman Air Force Base in New Mexico were damaged by wildland fires in 2012. The communities continue to feel the impact with over 20 miles of water delivery systems (pipelines, canals) and several large storage reservoirs still affected by post-fire flooding.

In addition, impacts to natural resources can often have long term and sometimes irreversible consequences. In 2012, the Whitewater Baldy fire in New Mexico severely burned critical habitat and holdout areas for relict lineages of Gila Trout (one of the original species listed as endangered under the Endangered Species Act in 1973), significantly setting back recovery

efforts that had successfully resulted in 17 populations occupying over 80 miles of stream. The Gila Trout Recovery Plan requires 39 populations established in roughly 170 miles of stream to justify full delisting. This impact not only has consequences related to the viability of a species, but also severely impacts the ability of the agency or other entities to conduct management activities that could have the potential to impact the population.

IMPACTS OF INCREASED FIRE COSTS

Costs of fire suppression have increased to consume nearly half of the entire Forest Service budget. In FY 1991, fire activities accounted for about 13 percent of the total agency budget; in FY 2012, it was over 40 percent. In the 1980s and 1990s the 10-year average of suppression costs remained relatively stable, as did the number of acres burned nationwide. This was an abnormally wet period in the United States and fire activity was relatively low. However, beginning in the extreme fire season of 2000, which cost $1 billion, this trend started to change. The cost of the FY 2000 fires alone caused the 10-year average to rise by over $80 million – a 16 percent increase. Since FY 2000, the 10-year average has risen almost every year – from a little over $540 million to almost $900 million in just the three years between 2000 and 2003, and then to over $1 billion in 2010 and beyond.

Staffing within the agency has also shifted to reflect an increased focus on fire. Since 1998 fire staffing within the Forest Service has increased 110 percent from over 5,700 in 1998 to over 12,000 in 2012. Over the same time period, National Forest System staffing has decreased by 35 percent from over 17,000 in 1998 to over 11,000 in 2012 and Forest Management staffing has decreased by 49 percent from over 6,000 in 1998 to just over 3,200 in 2012.

Fire transfers occur when the agency has exhausted all available fire resources from the Suppression and FLAME accounts. From FY 2002 to FY 2012, the Forest Service made fire transfers from discretionary, mandatory, and permanent accounts to pay for fire suppression costs six times, ranging from a low of $100 million in FY 2007 to a high of $999 million in FY 2002, and totaling approximately $2.7 billion. Of that total, $2.3 billion was repaid but still led to disruptions within all Forest Service programs. In FY 2012, the Forest Service transferred $440 million to the fire suppression account for emergency fire suppression due to severe burning conditions and increasing fire suppression costs (and was repaid within weeks).

Each time the agency transfers money out of accounts to pay for fire suppression there are significant and lasting impacts across the entire Forest Service. Not only do these impacts affect the ability of the Forest Service to conduct stewardship work on national forests, they also affect our partners, local governments and Tribes.

For example, in California, the Region lacked funding to complete trail work on the Pacific Crest National Scenic Trail or repair many other key trails and trailheads and was not able to leverage that funding by utilizing partners that provide thousands of volunteer hours for trail maintenance. This lack of maintenance work is predicted to cause sedimentation and damage to watersheds. Additionally, agreements with partners such as the California Conservation Corps on the Los Padres National Forest were deferred and relationships impacted.

FIREFIGHTING RESOURCES

The agency has the capability to protect life, property, and natural resources while assuring an appropriate, risk-informed, and effective response to wildfires that is consistent with land and resource management objectives. We do this through not only the resources of the Federal Government, but also with employees from States, Tribal governments, and local governments, contract crews, and emergency/temporary hires. Firefighter and public safety are the primary considerations for all operations. The agency continues to suppress about 98 percent of the fires that require initial attack. However, the few fires that continue to burn after they escape initial attack tend to grow quickly.

Wildland fire response requirements are unpredictable. This requires a management strategy that can increase and decrease the workforce based on fire activity levels. The Forest Service employs both permanent firefighting assets, which also conduct fuels treatments, and seasonal assets to support suppression activities during peak fire season. Call When Needed (CWN) assets are important in meeting fire response requirements when activities exceed our standard asset capability. Firefighting assets are employed in a cost effective way when they are justified within our preparedness and suppression strategies. We evaluate each asset's cost effectiveness relative to the need they meet.

Under the President's budget for FY 2014, suppression capability will be comparable to previous years. However, we recognize that given limited budgets, maintaining this capability will present challenges. With greater mobility and with agreement to focus assets on high risk areas, it is likely that high levels of initial attack success will continue. For the 2013 fire season, the available firefighting forces – firefighters, equipment, and aircraft – are reduced to those available in 2012. Nonetheless, we will have close to 13,000 firefighters available from the Department of Agriculture and the Department of the Interior with approximately 70% coming from the Forest Service. The reduction resulted in fewer firefighters and engines, but the level of highly-trained smokejumpers, Type 1 national interagency incident management teams (the most experienced and skilled teams) available for complex fires or incidents, and Type 2 incident management teams available for geographical or national incidents, are comparable to those available in 2012. Depending on how the 2013 fire season develops, we are prepared to bring on additional CWN resources (engines and aircraft) to offset the reduction in firefighters and engines. However these additional resources will increase suppression costs since the cost of CWN resources averages 1.5 to 2 times the cost of exclusive use resources.

Additionally, the Federal wildland firefighting community works with State and local fire departments, which serve a critical role in our initial attack and, in many cases, our extended attack success. The Forest Service uses its authority to provide State Fire Assistance funds to State partners to support State fire management capacity. We could not achieve the successes we have without these key partners.

Nationally, the wildland firefighting agencies continue to employ a mix of fixed and rotor wing aircraft. The number of these aircraft may fluctuate depending on contractual and other agreements. Key components of the Forest Service 2013 aviation resources include:

- Up to 26 large air tankers under contract or agreement;
- 420 helicopters;
- 15 leased Aerial Supervision fixed-wing aircraft;
- Up to 12 Smokejumper aircraft;
- 2 heat detecting infrared aircraft;
- 3 water scoopers including 1 CL-415.

An additional key component is the organized network of 295 federal, state, and local government dispatch and coordination centers which provide tactical, logistical, and decision support to the federal wildland fire agencies.

FIRE ADAPTED COMMUNITIES

The spread of homes and communities into areas prone to wildfire is an increasing management challenge. From 2000 to 2030, we expect to see substantial increases in housing density on 44 million acres of private forest land nationwide, an area larger than North and South Carolina combined (USDA Forest Service, 2005). Currently, more than 70,000 communities are now at risk from wildfire, and less than 15,000 have a community wildfire protection plan or an equivalent plan. (USDA Forest Service, 2012) Federal engagement with State and local fire agencies and other partners is central to our collective success in assisting communities at risk from wildfires. Wildfires know no boundaries and we must work within an all-lands context to prevent human caused fires, mitigate risk to communities, and manage for and respond to wildfires. According to studies cited in the 2013 USDA Forest Service General Technical Report (RMRS-GTR-299), more than one-third of all housing units in the continental U.S. are located within the WUI, and the trends suggest that these numbers will continue to grow.

To help address the risk faced by communities in the WUI, the Forest Service began developing the Fire Adapted Communities program in 2009, with a 2012 launch (including the website www.fireadapted.org and an Ad Council national public awareness campaign). This program assists communities to become fire adapted and is critical to protecting residents, firefighters, property, infrastructure, natural resources, and cultural values from wildfires. The strategy emphasizes that mitigation is a shared responsibility by Federal, State, local, and private stakeholders and that pre-fire mitigation is part of the solution to escalating wildfire suppression costs in the WUI.

The Forest Service's Fire Adapted Communities effort brings together a wide array of government and non-government partners to educate the public about the full suite of mitigation tools that can help communities adapt to wildfire. Fire Adapted Communities messaging is delivered by partners including the National Fire Protection Association International Association of Fire Chiefs, The Nature Conservancy Ad Council, National Volunteer Fire Council, and the National Association of State Foresters, who leverage federal dollars with their own program dollars for maximum effect. Fire Adapted Communities create a safer place for firefighters, give response teams more decision space, reduce the need for additional suppression in the community, and reduce large fire suppression costs.

RESTORING ECOSYSTEMS

The Forest Service is restoring the ability of forest and grassland ecosystems to resist climate-related stresses, recover from climate-related disturbances, and continue to deliver important values and benefits. By restoration, we mean restoring the functions and processes characteristic of healthier, more resistant, more resilient ecosystems, even if they are not exactly the same systems as before. Restoring and maintaining fire resilient landscapes is critical and essential to our stewardship responsibilities for the national forests. Factors including human activities and land development, loss of indigenous burning practices, and fire suppression have all led to changes in forests that historically had frequent fires. Some forests have experienced a buildup of trees and brush due to a lack of fire. In some areas fuel loads on the forest floor have increased where low intensity fires were historically the norm. These forest types are now seeing high severity fires under even moderate weather conditions.

Approaches to restoring fire-adapted ecosystems often require treatment or removal of excess fuels (e.g. through mechanical thinning, prescribed fire, or a combination of the two), reducing tree densities in uncharacteristically crowded forests, and application of fire to promote the growth of native plants and reestablish desired vegetation and fuel conditions. Excess fuels are those that support higher intensity fires than those under which the ecosystem evolved, and can include leaf litter and debris on the forest floor as well as the branches and foliage of small trees that provide ladder fuels allowing surface fires to transition to crown fires. Fuel treatments result in better outcomes on the land, more resilient and healthier ecosystems that provide the many benefits society wants and needs, including water, scenic and recreational values, wood products, and biodiversity; communities that are better able to withstand wildfire; and safer conditions and more options for firefighters. Fuel treatments change fire behavior and provide more options to engage a fire. This can decrease fire size, intensity, divert fire away from high value resources, and can result in reduced suppression costs.

When a wildfire starts within or burns into a fuel treatment area, an assessment is conducted to evaluate the resulting impacts on fire behavior and fire suppression actions. Of over 1,600 assessments conducted to date, over 90% of the fuel treatments were effective in changing fire behavior and/or helping with control of the wildfire (USFS, 2012).

In FY 2012, the Forest Service accomplished 1.2 million acres of prescribed fire, 662,475 acres of mechanical treatment to reduce hazardous fuels and managed 141,314 acres of wildfires to benefit natural resources as well as reduce hazardous fuels for a total accomplishment of over 2 million acres. The WUI remains the highest priority and nearly 1.3 million acres of the total treated acres were in the WUI. Of these treatments, 93 percent of the acres accomplished were identified as a treatment priority in a community wildfire protection plan or an equivalent collaborative plan. Hazardous fuels treatments also produced 2.8 million green tons used for energy and nearly 1 million CCF of wood products. In FY 2012, 20 biomass grant awards from the Woody Biomass Utilization Grant program totaling approximately $3 million were made to small business and community groups across the country. This $3 million dollar investment leveraged over $400 million dollars of Rural Development Grants and Loan Guarantees for woody biomass facilities. The Woody Biomass Utilization Grant program has contributed to the treatment of over 500,000 acres and removed and utilized nearly 5 million green tons of biomass

at an average cost of just $66 per acre. Grantees also reported a combined 1,470 jobs created or retained as a result of our grant awards.

ISSUES FOR THE FUTURE

The largest issue is how we adapt our management to anticipate climate change impacts and begin to mitigate their potential effects. Additionally, the agency needs to continue to advance the Cohesive Strategy and treatment of landscapes collaboratively through our Accelerated Restoration Strategy to increase the number of acres and watersheds restored across the system, while supporting jobs and increasing annual forest products sales. Finally, we must discuss and find ways to fund programs while minimizing the effect on all Forest Service operations.

This concludes my statement. I would be happy to answer any questions that you may have.