Statement of
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Chairman Murkowski, Ranking Member Cantwell, and members of the Committee, thank you for the opportunity to provide testimony on the Department of the Interior's (Department) Wildland Fire Management (WFM) program.

The Office of Wildland Fire (OWF) coordinates the Department's WFM policies and budget for the Department's fire bureaus, including the Bureau of Indian Affairs (BIA), the Bureau of Land Management (BLM), Fish and Wildlife Service (FWS), and National Park Service (NPS). OWF is also responsible for coordinating with other Federal agencies, Tribes, states, and external partners to establish effective program performance and oversight and ensure the programmatic efficiency of all aspects of the WFM program. These efforts support a collaborative approach to wildland fire management and promote the broad wildland fire community goals of: 1) restoring and maintaining fire-resilient landscapes; 2) creating fire-adapted communities that will withstand the effects of a wildfire without the loss of life and/or property; and 3) safely and effectively responding to wildfire.

OWF recognizes the absolute importance of collaboration if we are to significantly reduce wildfire risk to wildland firefighters, communities, and landscapes. The success of the WFM program is dependent upon successful collaboration across the program. Partnerships are vital to DOI's broad land stewardship responsibilities, including the implementation of fuels management work that helps reduce fire risk; post-fire rehabilitation work that helps restore landscapes and watersheds; and data, predictive tools, and the use of new technology to provide information needed for fire practitioners and decision makers.

The integration of fire management with resource management planning across the Department is the cornerstone in Secretary Zinke's Wildland Fire Directive and a core principle of the WFM program. Through more active management of our nation's public lands, we can reduce the threat of large and costly catastrophic wildfires. For instance, fuels management – including prescribed fire, chemical treatments, and other applications – and other land management activities that reduce vegetation can equally influence wildfire behavior and promote the safety and effectiveness of wildfire response, safeguard communities and infrastructure, and protect the public and our firefighters. At the same time, these projects enhance wildlife habitat and help watersheds become more resilient to the effects of wildfires.

In advancing the goals of the WFM program, OWF recognizes the importance of developing and adopting advanced or emergent technologies. This is critical to becoming a more efficient,

integrated, and effective wildland fire management organization. The Department continues to be the leader in the research, development, and practical deployment of Unmanned Aircraft Systems (UAS), or drones, on wildland fire management operations. Currently, the Department uses UASs to assist firefighters in gaining a tactical advantage on wildfires by allowing them to improve their surveillance and reconnaissance capabilities. The data collected by UASs is used to detect hotspots, improve mapping, and monitor incidents and operations. These advancements support the safety of our firefighters and the public and allow us to be better positioned to address wildfire. Through an increasingly robust UAS program, we continue to be innovative and improve our operational efficiency.

Summary of the 2017 Fire Year

The 2017 fire year was very challenging. Seattle, Washington and Missoula, Montana, set records for their longest historic periods without measurable rainfall. Hot and extremely dry conditions persisted in California from early Fall to the end of the calendar year. More than 71,000 wildfires burned over 10 million acres of Federal, Tribal, state, and private lands. The Department of the Interior and the USDA Forest Service collectively spent $2.9 billion on suppression operations, the largest amount ever. There were more than 1,400 large or significant wildfires in 2017, compared to 1,251 in 2016.

In 2017, our nation suffered the tragic loss of 53 civilians and 14 firefighters, while an additional 21 persons died in debris flows in the aftermath of wildfires. Published research strongly suggests that smoke impacts from wildfires in 2017 have very likely caused or contributed to even more fatalities. Besides the direct impacts of wildfires, 2017 will be remembered as the "Year of the Smoke" across many communities, some well downwind of any wildfires. Additionally, more than 12,000 structures were destroyed, including nearly 8,100 residences and over 200 commercial structures.

To supplement the Federal wildland firefighting force, in July, the National Guard mobilized C-130 aircraft equipped with modular airborne firefighting systems from Washington, Colorado, Arizona, Nevada, and Wyoming to provide aerial support for nearly two months. In addition, 200 soldiers and 50 support staff from the 23rd Brigade Engineer Battalion, 7th Infantry Division, from Joint Base Lewis-McChord in Washington provided additional ground support for 30 days fighting wildfires in Oregon. The nation also received international support from Canada in 2017.

The 2018 Fire Season

Secretary Zinke and Secretary Perdue have affirmed in a joint letter to agency managers that was released in early May of 2018 that firefighter and public safety remains paramount in all firefighting operations. Before engaging in any wildland fire activity, we fully evaluate risks with a broad perspective and consider the people we serve and the resources we protect. Given predicted weather trends and vegetative conditions across many areas, we can expect another challenging wildfire season.

The National Significant Wildfire Potential Outlook, issued by the Predictive Services Unit at the National Interagency Coordination Center, shows the Western fire season continued to increase in activity across the Southwest in May, while conditions across the central and southern Great Plains gradually improved. Concerns across southern California will remain high due to existing drought conditions; the Southwest's Four Corners region also remains in extreme or exceptional drought. Conditions in Alaska this spring suggest a normal seasonal transition. While some areas of abnormally dry conditions exist across portions of the southwestern interior of Alaska, large fire potential has remained near normal.

Wildfire activity across the Southwest is expected to peak in May and June. Above normal significant large fire potential is expected across the southern tier of the region during this period as drought conditions intensify. Similar conditions will continue to promote above normal potential across southern California, because fine dead fuels have persisted from rains early last year, and because of an extended drought that continues to cause shrub mortality. In Alaska, above average temperatures and near average precipitation across the state's interior is expected to lead to significant large fire potential in June.

Wildland Firefighting Assets

The Department plans to deploy over 4,000 firefighting personnel this year, including 155 smokejumpers, 16 interagency hotshot crews, 4 Tribal hotshot crews, 3 other Tribal crews, and 6 Veteran hand crews. In addition, the Department will provide nearly 1,200 support personnel (for example, members of Incident Management Teams, dispatchers, and fire cache staff) and will have nearly 750 pieces of specialized heavy equipment available for use, including 631 engines, and other assets such as water tenders and dozers.

The Department will have access to 89 single engine air tankers, 14 water scoopers, 300 helicopters on call-when-needed contracts, and 36 additional helicopters on exclusive use contracts. These aviation resources are deployed in synergy with the large air tankers and lead planes on contract with USDA Forest Service.

We want to emphasize that these resources complement other Federal, Tribal, state and local resources, as well as those specifically made available by rural fire districts. Together, these assets form the foundation of an interoperable, collaborative approach to joint wildland firefighting. As you all know, the "fire season" has become extended in many parts of the country, and collectively is now often referred to as the "fire year." This has become increasingly challenging to the Department and nearly all our wildland fire management partners.

Active Management/Fuels Management

As referenced earlier, the Secretary's Wildland Fire Directive sets the vision for the Department's strategy for advancing a more active management approach to the stewardship of the nation's public lands. It is critical that all available tools, including the use of fuels management, be fully integrated into our Fire Management Plans and resource management plans. Some of the forest management provisions included in the 2018 Omnibus support these

efforts by authorizing certain activities that promote more active management. The Department would like to continue working with the Committee to explore opportunities for providing additional authorities that expand our toolbox to yield greater flexibility to more effectively mitigate wildfire behavior, improve forest and rangeland health, and safeguard communities, people, and firefighters.

The management of fuels also plays a central role in mitigating wildfire behavior, enhancing wildfire response, and increasing the resiliency of Department and Tribal lands. The active management approach is also a strategy of adaptive management that includes monitoring, assessments, evaluations and adjustments based upon each treatment's level of success in reaching management goals. This feedback loop informs land managers of treatment effectiveness and facilitates any necessary changes to maximize benefits. It also affords the Department the opportunity to strategically target areas for fuel management work.

For example, in 2017 a mowing treatment in the BLM Nevada Elko District protected homes north of Elko, Nevada, when a wildfire stopped once it intersected with this treatment. The use of engines, bulldozers, and hand lines was not necessary to control the wildfire because of the strategic placement of the fuel treatment. As a result, a community was protected, suppression funds were saved, and no firefighters were placed in harm's way. Equally important, this treatment helped spotlight an effective active management strategy to safeguard people and communities that could potentially be utilized in other similar areas or situations.

The Department's WFM program works collaboratively across jurisdictions with other Federal agencies, Tribes, states, and local governments, and private landowners to provide a framework for sharing costs, resources, tools, products, lessons learned, and innovations. For example, the Mid-Columbia National Wildlife Refuge Complex in Washington State collaborates with the nearby Gifford Pinchot National Forest to implement prescribed fire projects. This joint effort increases capacity and strengthens efficiencies to safely reduce hazardous fuels and restore fire resiliency. This pooling of resources to manage areas where some of the greatest concerns exist allows us to focus our fuels management efforts. In FY 2018, the Department is focusing some of its efforts in helping the Department of Homeland Security secure the border by assisting with targeted fuels management work that will allow Border Patrol to more effectively carry out its border security operations. This work will have the added benefit of reducing the threat of wildfires and restoring and enhancing important wildlife habitat.

So far in FY 2018, the Department has completed fuels treatments on 773,786 acres, of which 397,219 acres are located within the wildland-urban interface. The Department's total target level this fiscal year is 980,000 acres of treatments. Examples of fuels treatments include the use of prescribed fire, thinning of unnaturally overstocked forest stands and removal of encroaching trees onto grasslands, and targeting control of invasive species, such as Phragmites in coastal watersheds or cheat grass within the western interior. Fuels management also includes creating or enhancing defensible space around homes that meet fire safe standards to increase the chance for homes or other structures to survive when a wildfire moves through the community. Across the country, active management on Department lands and across our boundaries with our neighbors is critical to enhancing the safety and effectiveness of wildfire response, reducing wildfire risk, and safeguarding communities.

Coordination & Partnerships

Planning, active management, and coordinated operations are cornerstones of wildland fire management partnerships. OWF cultivates partnerships to foster collaboration with Federal partners, Tribes, state and local governments, and other stakeholders to significantly reduce fire risk to wildland firefighters, communities, and landscapes. Partnerships are key to the Department's land stewardship responsibilities, including the application of fuels management work that helps reduce fire risk; post-fire rehabilitation work that helps restore landscapes and watersheds; and fire science that provides information needed for fire practitioners and decision makers.

One such example is a partnership between the Conboy Lake National Wildlife Refuge and the Mount Adams Resource Stewards in southern Washington. Beginning in 2017, and again this year, refuge staff and the local Resource Stewards have worked together to develop prescribed fire treatments for hundreds of acres that benefit both the Refuge and the adjacent Mt. Adams Community Forest. This collaborative approach means that projects on the Refuge and the Community Forest are more effective at making communities safer, restoring forest health, and supplying sustainable local wood products and jobs.

Community wildfire protection plans (CWPP) are a powerful tool for helping communities to prepare for and reduce the risks of wildfire. CWPPs help identify the local threats of wildfire and establish a plan for protecting public safety, community sustainability, and natural resources. All plans require collaboration between stakeholders, including Federal agencies, Tribes, and state and local agencies. CWPPs establish priorities for fire protection looking at where fire risk is greatest due to the buildup of burnable vegetation. Based on community input, the plans provide recommendations for making structures less likely to catch fire and to reduce impacts to other resources valued by communities. From southern California to some of the newer plans in eastern Tennessee that were created in response to the devastating Chimney Tops 2 wildfire in 2016, CWPPs provide a way for communities to increase safety and manage wildfire risk.

The Wildland Fire Leadership Council (WFLC) – an intergovernmental group comprised of Federal, Tribal, state, county, and municipal officials – provides a forum for partners to communicate and improve collaboration on a broad range of wildland fire management issues. WFLC is most effective at bringing together diverse stakeholders to develop integrated and collaborative responses to wildland fire management policies and strategies that affect local communities across the country. Most recently, the WFLC partners are working together to find opportunities to better identify wildfire risk; address air quality issues by working collaboratively with the states to promote fuels management; and leverage advancement in technology to improve firefighting capabilities.

Development and Use of Technology

The UAS program is a perfect example of leveraging technology to fight fires in safer and more efficient ways to ensure that the Department is protecting communities, the public, and

firefighters. Coupled with more aggressive fuels management, this technology is helping prevent and manage catastrophic wildfires.

Technology, especially UAS or drone technology, helps fire managers get better data to manage fires faster and safer than ever. The Department's Office of Aviation Services, working with the Department's bureaus and offices, uses drone flights to support natural resource management across the country. Drones are highly versatile and configured to work with a wide array of sensors. The Department's drone program is widely recognized as the largest, most diverse, and successful domestic drone program. In 2013, the Federal Aviation Administration granted the Department's OAS-developed drone training curriculum FAA Pilot Written Exam equivalency and the Department's test questions served as a foundation of the FAA regulations for commercial use of small drones.

OAS leveraged approximately $25 million in excess military drone equipment to conduct hundreds of test and evaluation flights. Following rigorous testing, the Department now manages a fleet of 393 aircraft, flown by more than 300 certified pilots including 80 fire-qualified pilots. In May, the Department awarded a contract for four fire-specific, call-when-needed vendors with 5 different airplanes. This means that there are aircraft and pilots available to support the fire community across the country.

This past fire year, the Department conducted 707 drone missions on 71 individual wildfires. Drones were used by firefighters to gain a tactical advantage on wildfires by allowing them to improve their surveillance and reconnaissance capabilities. A great example of that is the North Umpqua Fire in Oregon in 2017, when a drone operator wrapping up a reconnaissance flight noticed an undetected hotspot. They were able to contain the hotspot right away, thus preventing a fire escape having the potential for more than $50 million in resource and property damages.

Drone flights, including support to firefighters suppressing wildfires, increased 82 percent from 2016 to 2017. In the first quarter of 2018, we have seen a ten-fold increase compared to the first quarter from 2017: a jump from 175 flights to 1,753 flights. The Department's drones flew on every hurricane impacting the U.S. in 2017 and are currently operating in Hawaii to support the volcano emergency. Interior drones have worked on wildfires, conducted wildlife and habitat surveys, assisted with dam inspections, and supported search and rescue efforts.

OWF is constantly looking at new technologies including cell phone-based applications and alert systems that improve firefighter safety. In conjunction with the Department of the Defense, we are looking at UAS-based command and control systems that provide cost effective monitoring and planning support for fire operations. This approach could make novel use of existing technology. In the near future we could see tactical drones providing real time information for the duration of suppression operations using applications downloaded to cell phones that are already in the pockets of every firefighter.

Veterans

United States military veterans are an invaluable segment of the Department's labor force. While they offer their remarkable work ethic, leadership, and integrity at all levels of the Department,

veterans' contributions are most apparent in the ranks of our wildland firefighting forces. We feel a deep responsibility and commitment to continue hiring veterans to fill these positions.

The Department recognizes that our veterans have unique challenges after separating from the military. That sentiment is shared by Team Rubicon, a partner organization which was founded by military veterans in search of a way to continue their service. Through collaboration with Team Rubicon, the BLM has provided Wildland Firefighter Type I and II training and certification, along with a refresher course, for over 700 veterans. The immense success of this partnership has necessitated additional and advanced courses, such as helicopter crew member training, basic timber faller training, and expanded dispatch training, as well as an added training location to make certification more accessible. Since the partnership's inception in 2015, over $1.8 million has been provided for training and fire assignments, and in 2017 alone, veterans were dispatched on over 120 incidents.

In addition to the Department's partnership with Team Rubicon, the BLM has constructed fire crews specifically to employ veterans. The BLM currently hosts eight Veteran Fire Crews operating out of seven states: Arizona, California, Montana, Nevada, Oregon, Washington, and Wyoming. We are grateful to have these dedicated men and women in our wildland fire community, and we remain committed to our partnership with Team Rubicon.

Conclusion

This concludes my statement. Thank you for your support of the Department's WFM program and for the opportunity to testify before this Committee. I welcome any questions you may have.