The Honorable Lisa Murkowski

Chair, Appropriations Subcommittee on Interior, Environment and Related Agencies U.S. Senate Washington, D.C. 20515

The Honorable Tom Udall Ranking Member, Appropriations Subcommittee on Interior, Environment and Related Agencies U.S. Senate Washington, D.C. 20515

Dear Chairman Murkowski and Ranking Member Udall:

The National Association of State Foresters would like to bring your subcommittee's attention to a program many state forestry agencies find tremendously valuable. The Joint Fire Science (JFS) program, which is historically funded through both the Interior Department's fire budget and the Agriculture Department's Forest Service Research and Development budget, provides the data we need to rate fire danger, make seasonal wildfire forecasts, and cost effectively reduce the risk of wildfire through fuels management and prescribed fire.

In addition to helping state forestry agencies prepare for wildfire events, the JFS program also generates scientific data used to manage smoke from wildfires and develop remote sensing tools for wildfire management. The program is administered in conjunction with the Interior Department and Forest Service and routinely allows us to partner across agencies and programs to leverage resources.

The 15 regional Fire Science Exchanges funded by the JFS program provide trusted, sciencebased information to land managers and owners throughout the country, that in turn, enables sound policy and on-the-ground decision-making related to wildfire, ecosystems, and hazard risk reduction. More information on the regional Fire Science Exchanges can be found here:

https://www.frames.gov/afsc/about/fire-exchange-network

The Fire Science Exchange Network distinguishes itself from other federally supported wildfire research programs in its emphasis on direct application. Members of the network convene workshops, field tours, webinars, and conferences, and in many states, work directly with wildfire managers to ensure management needs and questions are met and answered with scientific research.

In the State of Alaska, the JFS program works closely with the University of Alaska via the Alaska Fire Science Consortium (AFSC), one of the 15 regional Fire Science Exchanges. The AFSC provides organized fire science delivery platforms, equipping fire managers with

information which better informs on the ground decision making and bridges the gap between fire science research and application. AFSC has produced a broad range of information that fire suppression agencies utilize such as the Nenana Ridge Experimental Fuels Research Project, designed to quantify the effects of fuels reduction treatments on fire behavior and post-fire vegetation dynamics in Alaska black spruce forests. Fuel treatments are commonly used by Alaska fire managers and agencies for mitigating fire risk; however, there is little documentation of the actual effect of different fuel treatments on fire behavior. Fire-proof digital sensors and video cameras were used to document the experimental burn, in addition to measurements of vegetation, fuelbeds, and fuel moistures, which allowed scientists to compare fire behavior between control plots and fuel treatment plots. This study was the first of its kind testing the effectiveness of fuel treatments on fire intensity in the boreal forests of Alaska. The evidence suggested that all treatments significantly reduced fire intensity, providing valuable confirmation of the effectiveness of fuel treatments.

In New Mexico, the JFS program works with land managers via the Southwest Fire Science Consortium (SWFSC) by demonstrating the benefits of prescribed fire and thinning treatments to promote healthy and resilient stands of ponderosa pine. Although bark beetles are a natural part of the ponderosa pine forest ecosystem, it has been the insect most often associated with widespread tree mortality. Prescribed fires allow managers to control burning and eliminate stressed trees that are susceptible to bark beetles, reducing the chance of a bark beetle outbreak. Tree thinning changes air temperature and light exposure, hinders bark beetle ability to locate host trees, and reduces tree competition which yields more robust individual trees, all contributing to a more resilient stand. The leaders of the SWFSC know that simply delivering fire science to managers is not sufficient. Through videos, working papers, and fact sheets, the SWFSC has documented first-hand manager accounts of the successes they have had in implementing science-based management and the factors that have led to success.

The JFS program has been subject to significant budget cuts in recent years (including no USFS funding in FY18), and the FY2020 President's Budget does not propose any program funding. The nation's 59 state and territorial foresters support robust funding at historical levels for this program, coming from within the Forest Service Research and Development and Interior Department Wildland Fire budgets. The association also recommends that the JFS program's priorities be driven by state and federal line officer requests as part of a feedback loop that responds to their management needs.

With these caveats, I'd like to reiterate the tremendous value the JFS program provides the wildfire suppression and management community and urge you and your colleagues to ensure robust funding for this program.

Sincerely,

Lisa Allen

NASF President

Missouri State Forester

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