**Position Title:** Fire Advisor - Central and Southern Sierra Nevada

**Position:** The central and southern Sierra Nevada Fire Advisor’s program will focus on education, training, and applied research that supports collaborative, science-based fire management and planning in the central and southern Sierra region, and promotes fire-adapted communities at local, regional, and national scales. The position requires academic expertise in both social and ecological aspects of fire science and management, including a MS or PhD in a related topic. Applicants should have experience in fire-related research using traditional field and survey-based research skills, and / or social science qualitative and quantitative methods. Applicants should have a background in science delivery and extension, excellent written and oral communication skills, and demonstrate experience developing and maintaining networks of collaborators within both research and management circles. The position will be housed in the UCCE-Central Sierra Multi-County Partnership either in the Amador or Calaveras office. The advisor will work with specialists and AES fire and forestry faculty in the UC Berkeley Department of Environmental Science, Policy and Management Department as well as faculty and specialists in range management at UCB and UC Davis. The advisor will work with two new fire advisors in the north state area (Humboldt/Siskiyou and Yuba/Butte/Nevada counties).

**Justification:** The advisor will fill geographical and expertise gaps in programmatic coverage in the central and southern Sierra where fire is one of the most critical issues. One hundred years of fire suppression in California has degraded the health of Sierra Nevada ecosystems by increasing the density of vegetation. Sierra forests and woodlands have become overcrowded and unhealthy leading to an increase in large scale disturbances including wildfire and drought related tree mortality. Of the 129 million trees that died across the state due to drought and bark beetles between 2010 and 2017, 85 percent were in the Sierra. Residents are being increasingly impacted by unhealthy ecosystems. The cost associated with tree removal around critical infrastructure have been astronomical and there are long-term fire risks associated with dead trees that are not removed. Recent large wildfires in this region include the 2013 Rim Fire in Tuolumne County that burned 257,314 acres and 112 structures; the 2014 King Fire in El Dorado County that burned 97,717 and 80 structures; the 2015 Butte Fire in Calaveras and Amador County that burned 70,868 acres, 921 structures and killed 2 people; and the 2017 Detwiler fire in Mariposa County that burned 81,826 acres and 131 structures. In addition to these local effects, these fires degrade watersheds and their capacity to supply to water users throughout the State (the Sierra supplies > 60 percent of California’s water).

The new fire advisor will work with a broad range of clientele to help reduce these risks to communities and the environment by reducing vegetation density and helping communities become fire adapted. There is significant opportunity to expand on UC’s existing programs through partnerships with local community organizations in the region, including local fire safe councils, local forest management collaboratives; federal and state agencies, including the USDA Forest Service, the Forest Service Pacific Southwest Research Station, Yosemite and Sequoia National Parks, CAL FIRE; and regional, state, and national organizations, including the California Fire Science Consortium, the Sierra Nevada Conservancy, the Nature Conservancy’s Fire Learning Network, the Fire Adapted Communities Learning Network, and the Southern Sierra Prescribed Fire Council. The central and southern Sierra region has innovative fire management, collaboration, and training, and this position would provide much-needed capacity to further instigate, coordinate, and bolster fire-risk reduction efforts in the region.

**Extension:** There is a critical need for as well as abundant opportunities to extend research-based information on developing resilience to fire for ecosystems and communities. Extension will take place through meetings, conferences, trainings, newsletters, online publications, and social media. Committed collaborators include the California Fire Science Consortium, the Southern Sierra Prescribed Fire Council, local and national NGOs, fire safe councils, and the six counties (El Dorado, Amador, Calaveras, Tuolumne, Mariposa, Merced) covered by the position, and federal and state agencies throughout the region.

**Research**: There is abundant opportunity for fire-related research in the central and southern Sierra region, to help develop better fire resilience for ecosystems and human communities. The focus of this position will be on promoting healthy ecosystems and mitigating wildfire risks through innovative, science-based planning and management. The Central and Southern Sierra Area Fire Advisor may focus on the role of fire in Sierra forests, woodlands and grasslands including fire effects on vegetation community succession, composition and landscape patterns; prescribed fire use, barriers and best practices; community risk reduction through fuels reduction, structure hardening or land use planning; smoke management and perception; and collaboration. Within ANR, the advisor would coordinate and extend research findings through the Forest, Fire, and Range workgroups. Research findings can be extended through UC California Agriculture and other peer-reviewed journals, including Fire Ecology, Society and Natural Resources, International Journal of Wildland Fire, Journal of Forestry, Forest Ecology and Management, Journal of Range Management, Rangeland Ecology and Management and others.

**ANR Network:** This position will significantly augment the capacity of the ANR network by filling a critical void in programmatic coverage of fire in an area with high risks and extremely high values to the state. There are two new fire advisors in the UCANR footprint, added within the last two years, and one specialist. The new fire advisor will network with AES scientists, non-AES scientists, UCCE Specialists in the UCB College of Natural Resources, and forestry advisors in Eureka, Redding, Ukiah, Quincy, and South Lake Tahoe on fire ecology and fire-adapted community topics. This position would provide data and findings from wildfire-impacted communities that are actively working on adapting to fires as the climate becomes hotter and drier. The position would also bring expertise on southern Sierra conifer and hardwood rangeland environments.

**Network External to ANR:** This position will emerge in an already well-established network of nested partnerships at the local, regional, and national scales. UC participates in these networks through its involvement in the California Fire Science Consortium as well as through relationships with fire safe councils, federal and state agencies, and non-governmental organizations. There is a recognized need for additional leadership and capacity within the region, and UC is ideally situated to strengthen partnerships and elevate the network to a new level. The eXtension Community of Practice and eXtension Wildfire Information Network can also be a collaborative connection with other Cooperative Extension professionals working in wildfire on a national level.

**Support:** Support for this position, including office space, travel, communication (telephone, internet), clerical support, and office supplies are provided from the Central Sierra MCP.

**Other support:** The USDA Forest Service Pacific Southwest Research Station, California Fire Safe Council, Joint Fire Science Program, UC Berkeley McIntire-Stennis, the Nature Conservancy and Wildfire Research Network are all potential sources of support for research and education activities.

**Location:** The advisor would be housed in either Calaveras or Amador counties, which is geographically centered in the region and within 1.5 to 2 hours’ drive from each end of the assigned area.

**Developed and proposed by:** Scott Oneto, UCCE Central Sierra MCP Director with input from Susie Kocher UCCE Forestry Advisor, Lenya Quinn-Davidson UCCE Fire Science Advisor, the Forestry Workgroup and Fire Workgroup.