



## RANGELAND FIRE PROTECTION ASSOCIATIONS

INSTITUTIONAL AND SOCIAL DIMENSIONS OF AN ALTERNATIVE MODEL OF WILDFIRE RESPONSE

RESEARCH BRIEF 16 • FALL 2017

**F**ire is a natural component of western rangeland systems such as the sagebrush steppe habitat of the Great Basin. However, a pattern of increasingly frequent and severe wildfires in these systems threatens livestock producers' forage, herds, and built structures as well as habitat for species such as the Greater Sage-grouse, and can exacerbate the spread of invasive species. Fire response in remote rangeland areas is complicated by the speed at which rangeland fires can grow, the mixed-ownership nature of these landscapes, limited physical access, and long distances between federal fire stations and many fire starts. Although ranchers have strong motivation to respond to fires, they have typically been prevented from conducting suppression activities on federal lands, and lacked formal authority to respond to fires on private and state lands. Rangeland Fire Protection Association (RFPAs) programs in Oregon, Idaho, and Nevada are designed to provide rancher volunteers the training, tools, and authority to respond to fires on private and state lands in areas where state or rural fire districts are nonexistent. Through these programs, individual RFPAs can also enter into agreements with the Bureau of Land Management (BLM) and other federal agencies to provide suppression on federal lands.

While the Oregon and Idaho programs are not identical, they share broad similarities in their structure and objectives (see box at right). In this paper, researchers examined the design and outcomes of RFPAs programs in Oregon and Idaho through comparative studies of four established RFPAs. They set out to understand whether and how the design and implementation of state programs and interactions with BLM fire professionals allowed ranchers to participate on the fireline, encouraged adaptive learning, and fostered engagement in proactive fire preparation as well as suppression.

- RFPAs in Oregon and Idaho are nonprofit organizations that operate in areas lacking established state or rural fire protection.
- They function on the basis of volunteers, often using their own equipment, and are authorized to provide fire protection on state and private lands within the association boundaries.
- State agencies (Oregon Department of Forestry and Idaho Department of Lands) can provide training as well as firefighting equipment and other resources.
- Federal agencies, particularly the Bureau of Land Management, can also provide training and can enter into arrangements (cooperative agreements or memoranda of understanding) with RFPAs that allow them to respond to fire on federal lands.



## KEY FINDINGS

- Substantively engaging ranchers in suppression provides opportunities for them to provide valuable local knowledge and fire response in partnership with federal fire professionals.
- Ranchers may be able to develop local solutions to fire-related dilemmas through processes of adaptive learning and creative problem solving via the RFPAs model.
- There is widespread interest among ranchers in engaging in proactive fire preparation activities, but prevailing rules do not always allow them to do so.

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## RESULTS

Researchers found that ranchers possess multiple resources that can be valuable assets for fire response: spatial distribution across the landscape, motivation and willingness to respond aggressively to fires, and intimate knowledge of landscape characteristics. This “local knowledge” includes knowledge of the location and suitability of access routes, presence and condition of areas at low risk of fire (e.g., heavily grazed areas, rock outcroppings, etc.), and location of water resources. RFPA members were able to put this knowledge to use on the fireline through communication with federal firefighters or by applying it in their own operations. The authority to respond that RFPA programs provided allowed ranchers to apply this knowledge in ways that were not previously possible.

RFPA members also showed an ability to creatively adapt to the challenges of wildfire response and learn over repeated experiences on the fireline, including through working with federal firefighters. For example, ranchers in the Jordan Valley region of southeastern Oregon and southwestern Idaho have long used a private “ranch radio” system to communicate in an area with limited cell service; they used this same system for communications on the fireline, including in areas where federal radios had limited reach. Many RFPA members also conducted their own lookout operations during lightning storms and communicated both to BLM fire dispatch and to one another in order to respond as quickly as possible to fire starts. RFPA members reported increasing their knowledge of fire suppression tactics via a combination of professional training and repeated experience on the fireline. These repeated interactions with BLM firefighters also helped build better working relationships and reduced the tension and conflict that had previously characterized fire management on these mixed-ownership landscapes.

Many RFPA members expressed interest in engaging in proactive fire preparation, but were somewhat limited in what they could accomplish given prevailing policies. Mountain Home RFPA members in Idaho collaborated with the BLM on the Paradigm project to install firebreaks that cross both public and private land near the Interstate 84 corridor, a major source of ignitions in this extremely fire-prone area. In 2016, seven Oregon RFPAs conducted prescribed fires on over 5,600 acres of private and state lands. However, RFPA members were generally prohibited from participating in prescribed fires on federal lands, as this requires more fire training than most members possess. Further, the organizational division in the BLM between fire and range management means that the improved relationships between ranchers and BLM firefighters that resulted from the RFPA structure generally did not result in better relationships or new opportunities for fuel management with agency range conservationists.

## MANAGEMENT IMPLICATIONS

This study illustrates the potential of a cooperative and volunteer-based program to leverage the potential of ranchers to contribute to effective fire management and improve their working relationships with agency fire managers in the process. The RFPA programs in Oregon and Idaho provided an organizational structure and resources that allowed ranchers to play more substantive roles and take greater responsibility for fire preparation and response. Fire managers should search for ways to empower rural community members to safely apply their knowledge and leverage their creativity to contribute to more effective and socially acceptable fire management. Further, building trust and familiarity between rural residents and fire professionals can result in opportunities for cross-boundary, proactive fire preparation. Changes may be needed to better allow these rural residents to engage in proactive management, particularly on federal lands. The design of RFPA programs can influence the dynamics of interaction with state and federal agencies and efficacy on the fireline.



## MORE INFORMATION

**This brief is based on the following article:**

Abrams, J., Davis, E.J. & Wollstein, K. 2017. Rangeland Fire Protection Associations in Great Basin Rangelands: A Model for Adaptive Community Relationships with Wildfire? *Human Ecology*.

<https://doi.org/10.1007/s10745-017-9945-y>.

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*This research brief was funded by the Joint Fire Science Program.*

*Photos courtesy of Emily Jane Davis, Oregon State University*