JFSP COMPLETED PROJECT OVERVIEW

Title: Fire-Adapted Communities on the Range: Alternative Models of Wildfire Response

JF\$PProjectNumber: 14-2-01-29 February 2018

Emily Jane Davis
Oregon State University
EmilyJane.Davis@Oregonstate.edu

Jesse Abrams
University of Oregon
jabrams@uoregon.edu

James E. Meacham University of Oregon jmeacham@uoregon.edu "The RFPA model harnessed advantages of local ranchers for more effective fire suppression across landownerships while addressing many historical challenges and barriers to their participation."

Problem Statement/Research Motivation

Rangelands in the American West have experienced increased frequency of wildfire over the past several decades. The Bureau of Land Management (BLM) provides fire protection for a large proportion of these mixed-ownership landscapes, but its response capacity is typically centralized and a pattern of ranchers' unauthorized involvement in fire response has led to conflict. A new model for rangeland wildfire protection has emerged to address these issues. Rangeland Fire Protection Associations (RFPAs) are volunteer non-profit groups of landowners trained and authorized to respond to area wildfires, a model that has proliferated recently in Oregon and Idaho. At the time of our proposal, there was no existing study of RFPAs. RFPAs represent an innovation in community-based wildfire response that is relevant to scientific, practitioner, and policy audiences as they expand the concept of fire-adapted communities and suggest new models for agency-community partnerships.

Narrative Describing Project Objectives – What did the project accomplish?

Our research documented how RFPAs are structured in Oregon and Idaho, including legal, administrative, and organizational arrangements that supported them; the opportunities and challenges of the model in each state; and circumstances under which RFPA-BLM partnerships were enhanced or challenged. It contributed to a better understanding of both institutional design features of shared wildfire governance among researchers and practical opportunities and challenges of the RFPA model to help inform program and policy design among practitioners. We used ongoing, interactive science delivery practices in multiple formats to respond to the broad interest in our research and results.

Narrative Describing Key Results/Findings

First, we found that the RFPA model successfully harnessed advantages of local ranchers for more effective fire suppression across landownerships while addressing many historical challenges and barriers to their participation. Formalizing and authorizing ranchers' roles on the fireline largely clarified liability and responsibility concerns, and provided increased local capacity. However, differing

interpretations of RFPA authority and roles in Oregon meant that the RFPA-BLM relationship retained some conflict and confusion. Our research addressed the hypothesis that RFPAs provide community-based wildfire response capacity, but as emergent and devolved organizations, they also present distinct challenges and uncertainties in safety, coordination, and integration with formalized fire suppression agencies. Second, we examined spatial variation in response capacity and variation between RFPA and agency understandings of risks, values, and capacities. Density mapping of results showed a fairly high degree of agreement about community values at risk, but differing perspectives about when and where fire was desirable or where it posed risks, which met our second objective. Third, we found that RFPAs are active primarily in fire response, but have growing interest in local pre-fire preparedness if barriers to expanded roles could be overcome.

Summary Conclusions/Applications to Management/Policy

This project contributed new knowledge about a model of community-based fire management that is growing in popularity and increasingly viewed as a front-line strategy for protecting sage-grouse habitat and the ranching industry. We successfully helped characterize and identify the strengths and weaknesses of the RFPA model such that existing programs may be improved and future programs may benefit from lessons learned. Other community-based fire management strategies are also growing across the country, including prescribed burn councils and associations, and public interest in better wildfire suppression is at an historic high following the 2017 wildfire season. The primary implication for management and practice is that such community-based approaches can offer significant assets to mitigation and suppression efforts, particularly in "working lands" communities, but challenges to the integration of informal and formal organizations must be proactively recognized and managed. Policy makers and managers should also consider how statutory basis, program design, and state agency roles shape community participation and community-agency relationships.



Future Direction, Noteworthy Partnerships, Human Interest/Social Science Aspects

This project is situated within a suite of broader research interests focused on questions such as institutional design for sustainable resource management, the dynamics of multi-level governance arrangements, and the social foundation of emergency response. Given that the RFPA model is still evolving in both Oregon and Idaho and has recently been adopted in Nevada, there is a continued need to track the evolution of the RFPA model over time and across state contexts. RFPAs may also be compared to other community-based fire management approaches models wherein managers work directly with diverse non-government partners.

