Letting Nature do the Work:

Managing Wildfires for Resource Objectives in New Mexico

CO-MANAGING WILDFIRE RISK FACT SHEET SERIES Project Fact Sheet No. 2 FALL 2019

PHOTO Carson National Forest, Inciweb

n millions of acres of fire-adapted landscapes across the West, the need for forest restoration and wildfire mitigation outpaces capacity to respond, posing risks to homes, communities, and forest health. Land managers are increasingly looking for tools to help address these risks. One approach is to manage naturally ignited wildfires at appropriate intensities and severities to reduce fuel loads and improve forest health. This fact sheet describes managing naturally ignited wildfires for resource objectives and how multiple public, private and nongovernmental entities are working on wildfire mitigation, pre-planning, and suppression in northern New Mexico to foster the necessary conditions for this approach.

Managing naturally ignited wildfires for resource objectives

Managing wildfire for resource objectives had historically been limited to federal wilderness areas, national parks, or other remote areas that met particular parameters, in order to limit potential risk or impacts to other landownerships. In 2009, the Federal Land Assistance and Enhancement Act (FLAME Act) expanded the use of this approach on federally managed lands, explaining that, "managing wildfire for resource objectives and ecological purposes refers to a strategic choice to use unplanned ignitions to achieve resource management objectives". This allowed decision makers who were responsible for managing wildfires to choose a strategy other than full suppression if they determined that the wildfire's conditions could function like a prescribed fire, such as low to moderate severity fires burning the understory in a fire-adapted forest without killing the overstory.

There are risks in allowing any fire to burn, whether it is a prescribed fire or a managed wildfire. Federal land managers ground their decisions about wildfire management in the risk context, including the location and ignition of the wildfire, firefighter and public safety, nearby landownerships, land management plans and resources availability. The policy guidance for the FLAME Act notes that, "risks must be balanced with the potential benefits on an individual incident basis, which requires both pre-incident planning at the landscape scale and sophisticated incident management."1

Although this change in policy guidance has allowed more management of wildfires on federally managed lands, most state and local jurisdictions must still implement full wildfire suppression for the protection of human health and safety, other values and private lands. These risks and statutory constraints on states are noted in the Science Analysis of The National Cohesive Wildland Fire Management Strategy² (which came out of the FLAME Act), which concluded that, "Managing wildfire for resource objectives and ecological purposes is a useful tool for managing fire-adapted ecosystems and achieving fire-resilient landscapes, but has limited potential for broad application throughout the Nation because of its inherent risk and statutory constraints."

What facilitated the management of naturally ignited wildfires in Northern New Mexico?

The ability to manage wildfires for resource 1 objectives depends on landownerships.

Most state and local statutory requirements in northern New Mexico mandate full suppression, making wildfires in areas of intermixed land ownerships more complex to manage. Federal agency decisionmakers may decide to suppress wildfires close to communities, private lands, or other values at risk. In some areas in northern New Mexico with mixed landownerships, agencies have worked with individual state agency or private landowners to understand where they may be willing to have managed wildfire cross their lands, if it were managed by a federal agency on the incident.

Support and appropriate direction for decision makers is key for considering the use of managed wildfire.

The risk aversion or existing culture on a forest or BLM unit could dictate how an individual decision maker responded to the possibility of using managed fire. Some interviewees thought that if more wildfires could be managed effectively for resource benefits, it might increase acceptance for this management response when conditions were appropriate.

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3 Environmental analysis and resource availability helps inform decision making by federal agencies about managing fires.

Once incident decision makers determined that managing a wildfire for resource benefits might be possible from a risk context, they then assessed internal policies, plans and resources. Often, determining if there has been an analysis of planned forest management projects required by the National Environmental Policy Act (NEPA) was key to knowing where and how a fire can be managed, what resources it might affect or enhance, and other information that could help managers prepare to oversee a naturally ignited wildfire. If a wildfire occurred in an area that had already undergone NEPA analysis, managers had information about how the fire may affect the resource objectives of the area, which aided their incident decision making. Decision makers then had to assess the availability of resources (e.g., equipment, personnel) to manage the wildfire rather than fully suppress. This challenge is similar to what managers experience when conducting prescribed burning: having the right resource available when needed can be challenging. However, incident management of a wildfire triggers the availability and dispatch of fire suppression resources, which can be used for suppression or managing for resource benefits. In addition, budgetary restrictions on wildfires are not as limiting as they are for planning prescribed fire or other restoration work.

Pre-season planning creates relationships and articulation of shared values, which improves wildfire preparation and response.

By working together between fire seasons, land managers and other stakeholders in the area have identified their shared values and mapped opportunities on the landscape to prioritize where and how natural ignitions might be managed for resource benefits. Nongovernmental and other organizations served important roles in convening these planning conversations in northern New Mexico. A recent formalized process for doing this shared planning through use of local knowledge, spatial analysis, and fire modeling is the *potential operational delineations*³, or PODs method. PODs have been used on the Santa Fe and Carson National Forests in New Mexico to create information, such as spatial data uploaded into wildfire decision support tools and planning maps that guide specific options for wildfire response. PODs have also been an opportunity for interaction between different resource disciplines within the Forest Service. Such collaborative processes and efforts to convene stakeholders have built relationships, and assigned values and plans to the landscape, which can improve shared understanding and support for fire management options when a fire occurs. In addition, this has developed latent capacity and networks that could be built upon and/or activated during wildfire incidents or other land use decision points.

5 Partners are creating networks of capacity and support, and building opportunities through prescribed fire.

Northern New Mexico managers and partners are working together through networks and partnerships to address forested land challenges, including fire management. Partners have recognized that managing natural ignitions might help address forest needs at notable scales. The Rio Grande Water Fund⁴, developed in part due to New Mexico's Collaborative Forest Restoration Program, is one such effort to collectively address needs around forest restoration and returning fire to the landscape. The All Hands, All Lands Burn Team⁵ is another key effort in the area, focused on capacity building for insured and qualified burn bosses and personnel as well as training for new personnel. Both of these efforts are using prescribed burning to build partnerships and capacity in northern New Mexico. Prescribed fire use reduces the uncertainty around when, where, and how a possible unplanned ignition would be managed for resource benefits. Also, prescribed fire has provided opportunities for agencies, partners, and landowners to familiarize themselves with fire behavior, observe fire effects, and improve coordination of fire management resources. In some areas in northern New Mexico where managing naturally ignited fire is not a viable option due to public opposition and conditions on the ground, managers are collaboratively implementing prescribed fire to build understanding of the role of fire as a tool. Prescribed fire has also provided opportunities for stakeholders to plan and prepare for the potential effects of smoke in communities, including community engagement and communication on the topic. Smoke resources, such as HEPA filter loan programs and smoke alert systems, have served both prescribed burning as well as wildfires.

- ¹ https://cohesivefire.nemac.org/option/2
- ² https://cohesivefire.nemac.org
- ³ https://fireadaptednetwork.org/collaborative-spatial-fire-managementgetting-ahead-fire-using-potential-operational-delineations/
- ⁴ http://riograndewaterfund.org
- ⁵ https://facnm.org/our-projects/all-hands-all-lands-burn-team

Information in this fact sheet is derived from interviews, document analysis, and member checking conducted through an applied research project: *Co-Managing Risk or 'Parallel Play'? Examining Connectivity Across Wildfire Risk Mitigation and Fire Response in the Intermountain West.* LEAD AUTHORS: Heidi Huber-Stearns (University of Oregon), Emily Jane Davis (Oregon State University), Zander Evans (Forest Stewards Guild), and Mike Caggiano (Colorado State University) PROJECT PARTNERS: Tony Cheng (Colorado State University), and Darren McAvoy (Utah State University). FUNDER: Joint Fire Science Program | LAYOUT/DESIGN: Casey Davis (caseydavisdesign.com)