COLLEGE OF AGRICULTURAL, CONSUMER AND ENVIRONMENTAL SCIENCES



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Just What the Doctor Ordered - Rx Fire

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In case you have not noticed, which would be difficult between hazy skies and awful pictures and headlines from California, Oregon, and Washington, the West is burning again. Unfortunately, I am not talking about prescribed burning, but rather wildfires. Further, almost as predictable as the fires themselves, is discussion (at best) and rancor (at worst) for who is to blame – climate change or management. Broadly speaking as it relates to fire behavior, by *climate change* we generally mean the weather, and by management, we generally mean the legacy of fire suppression and exclusion and its effects on fuels. Of course, let us not forget topography. Sound familiar? Indeed, the fire behavior triangle comes to mind (see Figure 1). And here, Johnny Cash can provide the perspective we need when thinking about who is to blame:

As it is in nature's plan

No [fuel, weather, topography] gets the upper hand

How I try to keep this fact in mind

-Seasons of My Heart sung by Johnny Cash (song written by George Jones and Darrell Edwards)

The point is, assigning exclusive blame to any one part of the equation is not productive. For example, let us just pretend everybody were to stay at home and not drive to work – to reduce greenhouse gases. If this was the only (climate change) approach, how long would we have to stay at home before we could expect to change the climate? Likewise, let us just pretend we were to slash and burn all the forests. If this was the only (fuels) approach, would we like the outcome? Fortunately, when considering the "reasonable person" theory, most folk fall somewhere in the middle – rationalizing that the perpetual reality of living with fire in the West can best be addressed by taking proactive measures to mitigate climate and fuels.

This multipronged approach continues to be informed by scientific research. However, it should be pointed out that even if both challenges (*i.e.*, climate and fuels) were to be aggressively addressed simultaneously, turning around volatility on millions of acres across the West is a slow and laborious process. It can be argued we arrived at this crossroads over the course of the last 120 years in which both fire suppression (beginning circa 1910 following the "Big Burn") and consumption of fossil fuels began in earnest almost simultaneously (see Figure 2). As such, turning around this complex matrix will take time. Unfortunately, high severity

wildfire (typically as the result of crown fire activity) turning forests into brushlands with little to no signs of conifer regeneration even after 20-years post-fire (on large contiguous high severity sites).

One of the best ways to address fuels, particularly in forests, is through cutting *and* burning. And while there has and continues to be intentional efforts, programs, policy, funding, and shear entrepreneurial fortitude directed toward growing the wood products industry – without which, forest cutting at scale is not economical – there is still much work to be done. However, on the burning side of the equation, there has been relatively little engagement within the state to promote the use of prescribed fire...until now.

When the New Mexico Legislature met in January of 2019, they passed House Memorial 42. This memorial called for a working group of New Mexico stakeholders to gather and to prepare an extensive and actionable report on the impediments of using prescribed fire as well as policy solutions to expand the use of the practice. The scope of this report only pertains to private practitioners and would not apply to state or federal burners. The working group was made up of 38 individuals from across the state with diverse perspectives, experiences, and employers. Over the course of 18 months, these individuals did an exhaustive literature review on the matter, sought out wisdom and perspective from other states either going through the same process or having already done so, worked within breakout groups to write critical sections, and throughout the process, continued to present progress and updates to a wide range of stakeholders for their feedback. This collaborative effort seems to have been successful as the final report has been well received across the state, including by members of the New Mexico Legislature.

In the final report, the working group reported four significant barriers to implementing, not to mention expanding, prescribed fire in New Mexico. They included: 1) undefined New Mexico statutory liability; 2) lack of available and affordable insurance – which is directly tied to undefined liability; 3) lack of prescribed fire training opportunities for private practitioners; and 4) variability across local state governments regarding obtaining permissions to burn. Given these barriers, four reciprocal objectives were fashioned to address these impediments (*i.e.*, define liability; address insurance market; create training opportunities, and examine need for ignition permitting).

Report results and recommendations were broken up into three sections: 1) liability; 2) training; and 3) permitting.

- 1) Liability: Undefined, and therefore uncertain, liability drives insurance costs higher and sometimes makes insurance unavailable due to the inability of the insurance industry to accurately predict risk. Legislation establishing a liability standard either negligence or gross negligence would rectify this uncertainty. The working group also recommended a legislative act include "right-to-burn" language that would establish prescribed fire as an accepted landowner right in New Mexico with the aim of protecting this practice into the future and underpinning additional recommendations (*i.e.*, permitting).
- 2) Training: Currently, there is no training requirement for private burn practitioners in New Mexico. Likewise, there are no appropriately rigorous and comprehensive prescribed fire trainings either. The insurance industry often wants assurance that their coverage holder meets a recognized training standard. The dual limitations of lack of training and undefined liability therefore disincentivize the insurance industry to cover private practitioners. The working group's recommendation was to establish a state-wide voluntary training and certification program that is incentivized through eligibility to a defined liability standard and possible increased access to insurance products.

3) Permitting: There are no state-mandated ignition permits required to conduct a prescribed fire in New Mexico. However, some local governments have adopted their own ordinances and required permits, thereby creating variability across the state regarding ignition permit requirements. This circumstance along with inconsistent restrictions and requirements between jurisdictions, create a barrier to pile and broadcast burning for land management, especially for burn projects planned across jurisdictional lines. The working group provided two options for consideration to establish and maintain consistency in definitions, restrictions, and requirements in ignition permits across state jurisdictions. They include: 1) a statewide ignition permit; or 2) require local governments to issue permits but provide criteria for which burners would follow.

Taken together, these recommendations will expand the potential use of prescribed fire in New Mexico and further contribute to management and resiliency of our natural resources.

To see the final report and read the full analysis of the barriers and recommendations, click on this hyperlink, or alternatively, search for "NM Prescribed Fire Council." From their webpage, a link to the final report can be viewed and downloaded.

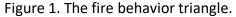




Figure 2. Graph showing the general increase of fossil fuel consumption starting in earnest around 1900 which coincides with policy and actions to suppress fire across the West staring after the 1910 "Big Burn." Graph source from the U.S. Energy Information Administration.

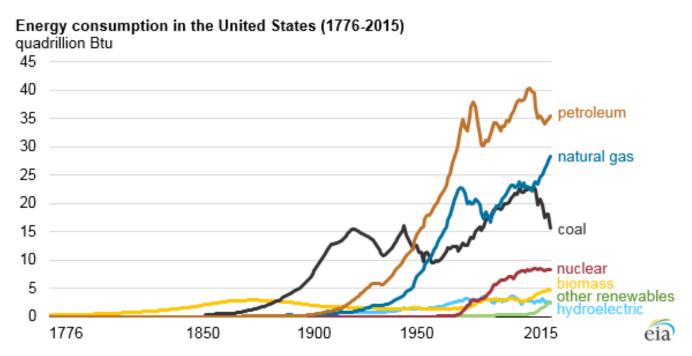




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