



### SMART PRACTICES AND ARCHITECTURE FOR PRESCRIBED FIRE

## Research Brief for Resource Managers

Release: Contact: Phone: Emai

June 2020 Hunter Noble hunternoble@berkeley.edu
Stacey Frederick (510) 642-4934 ssfrederick@berkeley.edu

Rob York (530) 333-4475 sspreach text@sernetey.ea

Central and Southern California Team, USGS Sequoia and Kings Canyon Field Station, Three Rivers, CA 93271

# Easing Prescribed Fire Liability Laws Increases its Use as a Management Tool

Wonkka, Carissa & Rogers, William & Kreuter, Urs. (2015). Legal barriers to effective ecosystem management: Exploring linkages between liability, regulations, and prescribed fire. Ecological Applications. 10.1890/14-1791.1.

This study compares the outcomes of different liability laws and regulations on prescribed fire use across states and regions. Overall, the average percentage of land area burned (forest, range, and pasture) and the average number of prescribed fires was greater for states with gross negligence laws (the most lenient).

Despite its operational, cost, and ecological benefits, many managers are hesitant to use prescribed fire because of risk perceptions and liability. To address this, several states have enacted "right to burn" laws to promote the safe use of prescribe fire and to limit liability concerns. By reasonably reducing liability, lowering financial risk of mistakes, and including additional safety regulations, states hope to encourage managers to utilize more prescribed fire.

There are three different categories of civil liability for prescribed fire in the US:

- 1) Strict liability holds the burner liable for any damage caused by an escaped prescribed fire, regardless of the level of negligence while conducting the fire (e.g. even if un-forecasted wind caused an escape beyond the burner's control, they still may be held liable).
- **2) Simple negligence -** requires the burner to take reasonable precautions, and that negligence

## **Management Implications**

- States with gross negligence prescribed burning liability laws burned significantly more than those with more stringent laws.
- To date, there is no evidence that gross negligence leads to greater damage or suppression costs.
- Additional regulations such as requiring a burn plan did not reduce burns for gross negligence liability states.
- A trend toward gross negligence liability laws coupled with some key additional regulations would likely result in prescribed fire being more available to managers while also providing safety assurance to the public.

be proved in court (e.g. burner continues to burn despite the arrival of a high wind event). Currently, California has simple negligence laws.

3) Gross negligence - if a burner follows a set of codified regulations and general safety protocols during burning, reckless disregard must be proven to hold the burner liable (e.g. a burn is conducted without any containment lines during dry conditions).

In states with gross negligence laws, negligence often applies if regulatory requirements are not fulfilled. Examples of the types of additional regulations that this study evaluated include a certified prescribed burn manager (CPBM) being present during the burn, having a written burn prescription, and/or having adequate personnel and firebreaks.

To compare the influence of liability laws on burning, the authors paired adjacent counties in southeastern states (Alabama, Florida, Georgia, North Carolina, South Carolina) that had different liability laws (Fig 1.). Presumably, adjacent burns were similar in terms of vegetation type, topography, etc. Additionally, the authors ensured there were no major differences in population density, education, or income levels.

On average, nearly 10% more area was burned in gross negligence counties compared to simple negligence counties. However, an important caveat is that the burn acreage and number of burns was based on approved permits, not on actual burns conducted or actual burn acreage. This could mean that many acres burned are not accounted for in this comparison, especially in states where permits are not necessarily required for prescribed burning (as is the case for California).

The authors also compare Georgia and Florida, two states with similar gross negligence laws but different levels of regulatory requirements. Both states require a burn permit, but Florida also requires a CPBM, a written prescription, adequate personal and sufficient firebreaks to be covered under gross negligence laws. Despite the additional requirements, there was no significant difference in the number of burns or area burned between the two states. This indicates that even with stricter regulations, prescribed fire may be more utilized as long as gross negligence liability laws are present.

Similarly, certain states allow prescribed or ecological burns to continue during general burn bans (bans generally occur for California in the summer), and no difference was found in area burned or number of burns between the states that have burn ban exemptions or those that do not. Thus, allowing prescribed burning during a burn ban was not important in managers' overall decision to conduct burns.

Based on their findings, the authors suggest that states struggling to determine the legal framework to promote prescribed burning should consider lowering liability standards, even though there may be resistance. Tennessee, for example, opted for simple negligence in 2012 even though gross negligent liability laws were considered. In support of limiting liability standards, a study by Yoder (2008) found there was no difference in the cost of suppression or damage from escaped prescribed fires in gross negligence states compared to simple negligence states. Based on findings of this and others' studies, the authors suggest that lower liability laws can make prescribed fire more available to landowners and managers while also providing some safety assurance to the neighbors and the public. Nevertheless, the authors discuss that in the absence of gross negligence laws, prescribed burn associations may provide a non-legislative mechanism to make burning easier from both an operations and liability standpoint.

#### **Further Reading:**

Quinn-Davidson, Lenya & Stackhouse, Jeffery. 2019. Prescribed Fire Liability in California. University of California Cooperative Extension. <a href="http://www.cafiresci.org/research-publications-source/category/rxfireliability">http://www.cafiresci.org/research-publications-source/category/rxfireliability</a>



**FIGURE 1.** Map of United States with states colored based on their prescribed burn negligence laws.