



SFE Fact Sheet 2020-2

Recent Research on Perceived Risks, Legal Liabilities, and Insurance Coverage Associated with Prescribed Burning on Private Lands

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Introduction

Prescribed burning is a proven land management practice used in forests, rangelands, and other woody plant ecosystems. Despite the many benefits of prescribed burning, including habitat management and wildfire risk reduction, there are still many impediments to its implementation, due primarily to concerns about legal liabilities, weather, capacity and air quality and smoke management (Kobziar et al., 2015). In the Southern U.S., a majority of the forest land is privately owned, and many of the liability concerns are from private landowners. Liability with respect to prescribed fire refers to “legal responsibility for one’s acts or omissions. Failure of a person (e.g., landowners or burn boss) to meet those responsibilities leaves them vulnerable to the possibility of a lawsuit” (Weir et al., 2020). Laws governing liability associated with prescribed burning vary by state, both in the amount of protection for burners and the types of activities that are protected. These legal liabilities are found to have a significant influence in prescribed fire applications in private lands (Wonkka et al., 2015). In order to cover possible injuries or costs due to lawsuits and determinations of liability, some prescribed burners choose to purchase prescribed fire insurance policies. This fact sheet summarizes four recently published articles that examine landowner perceptions of legal liabilities, perceived risks, and insurance coverage associated with prescribed burning.

Landowners who perceive higher levels of legal liability associated with fire are less likely to apply prescribed fire to the land.

Based on a survey of landowners in Texas and Oklahoma, Kreuter et al. (2019) explored the factors affecting perceptions of landowners in the Southern Plains about prescribed fire liability and their willingness to apply prescribed burning as a land management tool. This study reported that landowners who perceived higher levels of legal liability associated with fire were 26% less likely to apply prescribed burning to their own land and 38% less likely to assist with the application of prescribed burning on another person’s land. It implies that



Alabama Learn and Burn 2017 - Jennifer Fawcett



Prescribed burner in Georgia - Jennifer Fawcett

respondents' perceived benefits of burning one's own land are greater than those of assisting burn another person's land. Similarly, landowners who were Prescribed Burn Association (PBA) members were found to be 281% more willing to apply fire on their own property. Oklahoma respondents were found to be 60% more likely to apply prescribed burning than the landowners in Texas, mainly due to more active PBAs in Oklahoma. Moreover, landowners who perceived prescribed burning to be an affordable woody plant management tool were found to be about 31% more willing to apply prescribed fire than those who felt otherwise. This paper recommended to: (a) modify language in stringent prescribed fire liability standards to reduce landowner concerns over legal liability; (b) establish more PBAs; and (c) place public cost-sharing funds for woody plant management prioritizing prescribed fire.

Landowners having higher levels of concerns related to safety and weather are more likely to have higher perceived risk associated with prescribed burning.

Joshi et al. (2019) evaluated the factors affecting perceptions of landowners and fire professionals toward the risks associated with prescribed burning activities. Through a survey of fire professionals engaged in PBA activities in 14 Southern and Mid-western states, this study first developed a combined index of risk perception related to property damage and bodily injury from prescribed burning, and explored the

factors affecting the risk perception of stakeholders such as land use objectives, past experiences, insurance coverage availability, and ownership patterns. Results suggested that respondents with higher levels of concern related to safety and weather perceived a higher risk associated with prescribed burning. More experienced fire professionals were found to perceive lower risk related to property damage and bodily injury from prescribed burning. This study highlighted that a PBA member's burn objectives, perceived fear of safety issues, and familiarity of the role of weather are crucial factors in shaping risk perceptions of fire professionals.

The decision to acquire prescribe burning insurance coverage is found to be driven more by cognitive variables than the demographic profiles of burners.

Using the same survey of PBA members that Joshi et al. (2019) utilized from 14 Southern and Mid-western states, Parajuli et al. (2019) investigated the factors influencing prescribed fire practitioners' decisions regarding the acquisition of insurance coverage for prescribed burning. Results from this study suggested that prescribed fire practitioners are more likely to acquire insurance coverage if they are landowners themselves, which indicates that landowners feel a greater sense of risk while applying prescribed fire on their own land than other practitioners do. Similarly, practitioners who placed high importance on compliance with environmental laws were more likely to obtain prescribed fire insurance than others. Furthermore, respondents having a written burn plan were found to be 218% more likely to purchase insurance than those who did not have a burn plan. This study also highlighted that preference for insurance coverage varied by the uses of prescribed burning for various land management objectives. Practitioners who valued the use of prescribed fire as an effective range or pasture management tool were found to be more likely to obtain insurance. This study recommended to link insurance coverage with PBA membership for affordable prescribed fire insurance policies.

The empirical risk of liability from escape of a prescribed fire is minimal, and PBAs have a role in addressing perceived risks associated with prescribed burning.

Through an extensive review of the history and current legal liability standards used in the U.S. for prescribed fire, Weir et

al. (2019) emphasized three strategies for increasing the use of prescribed burning by private landowners: a) differentiate the risks of applying prescribed fire from those of catastrophic wildfire damages; b) reduce legal liability for escaped fire by changing state statutes; and c) increase landowner membership in PBAs. While previous research demonstrated that the fear of liability is the primary hindrance of many landowners to apply prescribed fire, authors concluded that the empirical risk of liability from escapes fires is quite small (<1%). Authors also presented two case studies to highlight the fact that liability insurance may not be an effective solution to reduce burner's liability. This study concluded that prescribed fire is a low risk land management tool and PBAs should work to help clearly differentiate the risks between wildfire and applying prescribed fire.



Alabama Learn and Burn 2018 - Leslie Bobby

Summary

Four recently published studies highlighted the roles of PBAs in addressing landowners' perceived concerns on risks and legal liabilities, and in promoting insurance coverage associated with prescribed burning. Some of the other highlighted points in these articles include:

- Liability and perception of risk continues to be a major impediment to private landowners in applying prescribed fire.
- A number of factors influence perception of risk and associated likelihood to purchase insurance coverage, including land ownership and land management objectives.
- For private landowners, attitudes and other cognitive factors are more likely than demographics to

influence the decision to purchase prescribed burning insurance coverage.

- Strategies to increase the use prescribed burning on private lands include:
 - Educate landowners about the actual level of risk and liability involved in prescribed fire, and clearly differentiate between the risks of applying prescribed fire and wildfire risks
 - Modify state liability laws to minimize legal liabilities and/or modify language to reduce landowner concerns
 - Expand PBA memberships throughout the region.

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