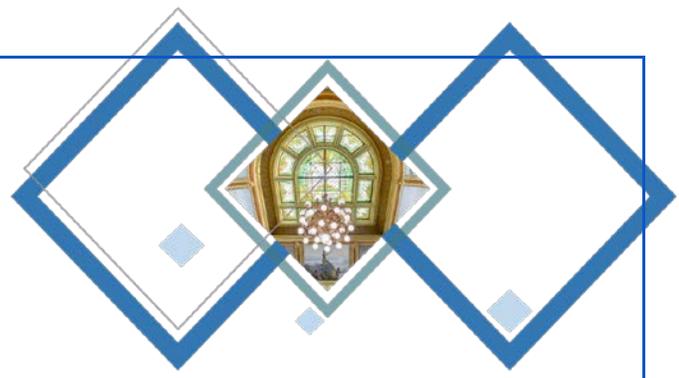


March 22, 2018

Environmental Quality Council  
Joe Kolman, Environmental Analyst



# PRESCRIBED BURNING: FIRES NOT GONE WILD

## INTRODUCTION

The Environmental Quality Council agreed in its work plan to review issues raised during the session by [House Bill No. 587](#), which proposed that the Department of Natural Resources and Conservation establish standards and a process for a nongovernmental representative to conduct a prescribed burn. Under the proposal, a certified prescribed burn would be:

the controlled application of fire under the supervision of a prescribed fire burn boss in accordance with a written prescribed burn plan. A certified prescribed burn is for vegetative fuels under specific environmental conditions. A certified prescribed burn follows appropriate precautionary measures to ensure the fire is confined to a predetermined area. A certified prescribed burn is intended to accomplish certain planned fire or land management objectives.

A person conducting the burn according to standards would not be liable for damages caused, except in the case of negligence. The bill died.

In general, state-based prescribed burning laws in other states that are akin to HB 587 are designed to regulate burning on private land and to address liability if a burn causes unintended damage.

## PRESCRIBED BURNING

### Montana

Montana [fire policy](#) notes that prescribed burning is a sound forest management activity that improves the “the overall diversity and vigor of forested landscapes and improve the condition of related water, wildlife, recreation, and aesthetic resources.”<sup>1</sup>

The policy originated from an Environmental Quality Council [study of wildland fire](#) policy and statutes in 2006. [Senate Bill No. 145](#) passed in 2007 and established the policy as well as made other changes to statute. Other than the state fire policy, prescribed burning as a forest management tool on private land is not specifically addressed in state law.

The term “prescribed wildland open burning” is defined in air quality rules adopted by the Department of Environmental Quality. Such burning is conducted to improve habitat or

---

<sup>1</sup> [76-13-115](#), MCA.

March 22, 2018

Prescribed Burning

Environmental Quality Council

Joe Kolman, Environmental Analyst

range, reduce fire hazards, and control pests. It may be conducted year round, but in the winter months when burning can create poor air quality the burner must get permission from the department.<sup>2</sup>

Major burners need a permit throughout the year. Major burners are those that would emit more than 500 tons of carbon monoxide or 50 tons of any other pollutant in a calendar year. Those emission levels require someone to burn about 4,500 tons of wood. There are [11 permitted major burners](#) in Montana, including the major public landowners and timber companies. Major burners must submit to DEQ proposed burning dates; the location, size, and elevation of each proposed burn site; the method of burning; and tons of fuel to be disposed. Fires may only be burned under good or excellent ventilation conditions. Public notice in the area also is required.<sup>3</sup>

All types of open burning require notification of the local fire control authority.

Under a 2016 federal law, the U.S. Forest Service may not conduct a prescribed burn if there is an extreme fire danger level unless the agency coordinates with the state and the applicable local government.<sup>4</sup>

## Other States

Florida is recognized as a leader in regulating prescribed burning, passing its first law in 1990. Other states followed suit. The regulations acknowledge that all uses of fire are dangerous to some degree, however the benefits of prescribed burning can be realized through regulations and, in some cases, reduced liability for prescribed burns that accidentally get out of control, that is, a fire that despite the burner following established regulations causes unintended damage through no fault of the burner.<sup>5</sup>

Prescribed burning laws are prevalent in the southern United States, where large and often dense stands of forest are more likely to be privately owned. Also, in Florida and other states, a growing number of people living in the wildland urban interface can make fire management difficult.<sup>6</sup>

States with prescribed burning laws tend to address the areas of administrative regulation and reduced liability to the prescribed burner for complying with those regulations.

### Management-Based Regulation

A 2012 study of prescribed burning regulations in southern states finds Florida's prescribed burning [laws and regulations](#) are the most extensive in the region. The state has a program to certify prescribed burners and requires approval of a burn plan.

---

<sup>2</sup> [Title 17, chapter 8, subchapter 6](#), Administrative Rules of Montana.

<sup>3</sup> Ibid.

<sup>4</sup> [Prescribed Burn Act of 2016](#).

<sup>5</sup> Sun, Changyou. (2006). [Liability of Using Prescribed Fires on Forestlands and State Legislation Evolution](#).

<sup>6</sup> Sun, Changyou & Tolver, B. (2012). [Assessing Administrative Laws for Forestry Prescribed Burning in the Southern United States: A Management-Based Regulation Approach](#). International Forestry Review. 14. 337-348.

March 22, 2018

Prescribed Burning  
Environmental Quality Council  
Joe Kolman, Environmental Analyst

Burners are responsible for firebreaks and firefighting equipment. The burn must comply with timing restrictions and smoke-sensitive areas. Smoke may not reduce visibility on roads to less than 1,000 feet without traffic control.<sup>7</sup>

The author of the 2012 study, Mississippi State University Professor [Changyou Sun](#), created Table 1 as a list of potential regulatory choices facing policy makers when dealing with prescribed burning. Of the 28 regulations listed in the table, Florida implements 16. Other highly-regulated states include Texas, Alabama, North Carolina, Virginia, and Mississippi.<sup>8</sup>

Three more states in the study also had statutory burning laws and burner certification. However, Georgia, Louisiana, and South Carolina have fewer regulations. None of them require the prescribed burn plan to be approved. There are no regulations requiring adherence to smoke or weather standards. Nor are there requirements for fire lines and on-site suppression equipment.

Arkansas, Tennessee, Oklahoma, and Kentucky were the least regulated at the time of the study. None have a prescribed burn law, a certification program, or a required prescription.<sup>9</sup>

TABLE 1. POTENTIAL REGULATION CHOICES DESIGNED FOR FORESTRY PRESCRIBED BURNING BY PRODUCTION PROCESS THROUGH A MANAGEMENT-BASED REGULATION APPROACH<sup>10</sup>

Production Process	Regulation Choice	Description
<i>Planning stage</i>		
<b>Personnel</b>	P01. Certified burner	Separate non-certified and certified burners/burning
	P02. Certification	Provide training programs and certify burners
	P03. Experience	Require actual burning experience to be certified
	P04. Recertification	Specify recertification procedures for burners
	P05. Decertification	Specify procedures for decertification or revocation
	P06. Insurance	Require purchase of liability insurance
<b>Prescription</b>	P07. Prescription - prepared	Require a written prescription to be prepared
	P08. Prescription - notarized	Require the prescription to be notarized prior to burn
	P09. Prescription - approved	Require the prescription to be approved by an agency
	P10. Prescription -	Require minimum items for the prescription
	P11. Prescription - smoke	Require smoke management plan in the prescription
	P12. Prescription - weather	Require weather conditions stated in the prescription
	P13. Prescription - urgent	Require emergency treatment plan in the prescription
<b>Record</b>	P14. Record - certification	Maintain the profiles of burner certification
	P15. Record - prescription	Keep the prescription on file by agency

<sup>7</sup> Florida's Forest Fire Laws And Open Burning Regulations, [2014](#).

<sup>8</sup> Texas also requires certified burners to obtain liability insurance.

<sup>9</sup> Study results are in [Table 3](#).

<sup>10</sup> Sun, Changyou & Tolver, B. (2012). [Assessing Administrative Laws for Forestry Prescribed Burning in the Southern United States: A Management-Based Regulation Approach](#). International Forestry Review. 14. 337-348.

March 22, 2018

Prescribed Burning  
Environmental Quality Council  
Joe Kolman, Environmental Analyst

Production Process	Regulation Choice	Description	
<i>Implementation stage</i>			
<b>Pre-burn preparation</b>	M01. Fire line	Inspect fire control lines by agency	
	M02. Equipment	Inspect equipment preparation by agency	
<b>Burn execution</b>	M03. Permit	Issue burn permit or require notification prior to burn	
	M04. Time	Specify burning hours or bans	
	M05. Site - burner	Require a certified prescribed burn manager on site	
	M06. Site - prescription	Require a written prescription on site at all times	
	M07. Site - agency	Inspect and supervise burning on site by agency	
	<b>Post-burn evaluation</b>	M08. Evaluation - now	Require evaluation on burn immediately by burner
	M09. Evaluation - postfire	Require evaluation during 1st postfire season by burner	
	M10. Evaluation - agency	Perform post-burn evaluation by agency	
<b>Record</b>	M11. Record - permit	Record issued permits and application information	
	M12. Record - accident	Record accidents/injuries and the causes	
	M13. Record - evaluation	Record the burn evaluation by burner or agency	

House Bill No. 587, sponsored by Rep. Ray Shaw, was based on Oregon's statute. It allowed the Department of Natural Resources and Conservation to establish rules. It said the rules could include:

- prescribed burn standards, requirements, and procedures;
- certification requirements, standards, and procedures to revoke certification for prescribed fire managers and prescribed fire burn bosses;
- actions and activities that a prescribed fire manager and a prescribed fire burn boss must perform;
- actions and activities that a prescribed fire manager and a prescribed fire burn boss may not allow or perform;
- limitations on the use of a prescribed fire burn boss; or
- any other standard, requirement, or procedure that the department considers necessary.

### Liability

While there may be benefits to prescribed burning as a form of effective and less costly forest management, fire does not always do what the guy with the match intends. With any fire, there is risk of unintended damage. States handle liability and damages in relation to prescribed burning in different ways. Intentionally causing damage with fire is arson, a crime. But prescribed burns are not set with the intention of harm, so the results of a prescribed fire gone wrong are often treated under civil law.

March 22, 2018

Prescribed Burning

Environmental Quality Council

Joe Kolman, Environmental Analyst

Strict liability laws hold the burner responsible, no matter the circumstances. If the burn causes damage, the defendant will be held liable, regardless of precautions. According to a 2006 study of state prescribed burn laws, Delaware, Hawaii, Minnesota, Pennsylvania, Rhode Island, and Wisconsin use this standard.<sup>11</sup>

More states use a simple negligence standard. This allows the burner to assert that an accident occurred despite the applicable standards of care. In other words, the fire got out of control through no fault, or negligence, of the burner. Negligence is viewed as carelessness in the opinion of a reasonable, prudent person. The 2006 study found 18 states use this standard in relation to prescribed burning, including the western states of Alaska, California, Oregon, and Washington. House Bill No. 587 from 2017 used this standard.



Four states use a standard of gross negligence. This means the prescribed burner failed to show even the slightest amount of care toward others or their property and behaved with reckless disregard for the consequences of the prescribed burn. This standard reduces the burden on the prescribed burner. These states include Florida, Georgia, Michigan, and Nevada.<sup>12</sup>

The study author listed Montana and other states as uncertain, meaning that based on common law, they are most likely to fall into an area between strict liability and simple negligence.<sup>13</sup>

## Liability for Burning in Montana

While Montana does not have laws that address prescribed burning specifically, there are a number of laws that apply. For most of the last century, Montana law leaned more toward strict liability, meaning a person is liable even if the burner was not careless. There is a civil penalty of not less than \$50 or more than \$500 for a person who sets or leaves a fire that damages another person's property.<sup>14</sup>

As for damages, another law states:<sup>15</sup>

“... a person who sets or leaves a fire that spreads and damages or destroys property of any kind not belonging to the person is liable for all damages caused by the fire, and an owner of property damaged or destroyed by the fire may maintain a civil suit for the purpose of recovering damages. A person who sets or leaves a fire that threatens to spread and damage or destroy property is liable for all costs and expenses incurred, including but not limited to expenses

---

<sup>11</sup> Sun, Changyou. (2006). [Liability of Using Prescribed Fires on Forestlands and State Legislation Evolution](#).

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> [50-63-102, MCA](#). Two other laws address arson and negligent arson as felony crimes. Negligent arson, [45-6-102, MCA](#), is when a person sets a fire and through that person's negligence, life or property is put at risk. Arson, [45-6-103, MCA](#), is when a person knowingly or purposefully sets out to inflict injury or damage.

<sup>15</sup> [50-63-103, MCA](#).

March 22, 2018

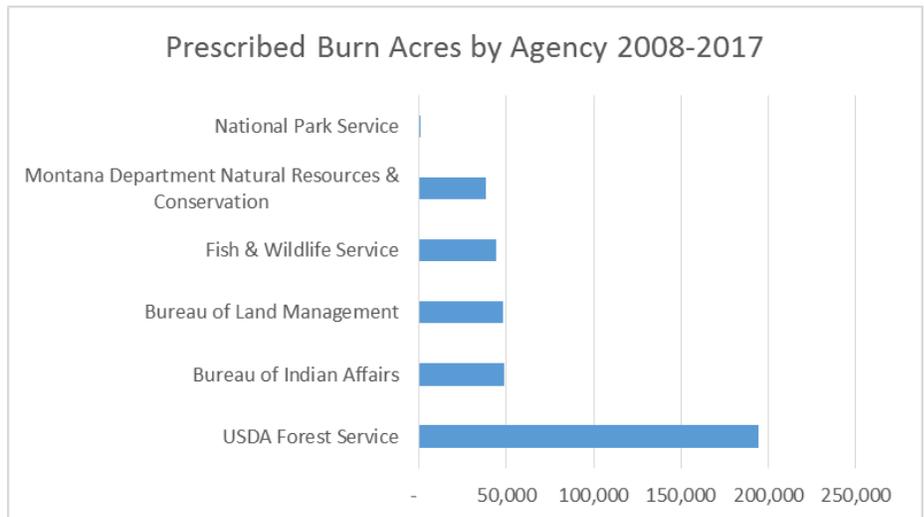
Prescribed Burning  
Environmental Quality Council  
Joe Kolman, Environmental Analyst

incurred in investigation of the fire and administration of fire suppression, by the state of Montana, by any forestry association, or by any person extinguishing or preventing the spread of the fire.”

However, the 2013 Legislature limited the damages that could be recovered if the forest or range fire is “caused by a negligent or unintentional act or omission that is not willful or wanton.” Sponsored by Sen. Chas Vincent, the bill limited damages in those cases to reasonable costs for controlling the fire, economic damages, and either the diminution of the fair market value of the property caused by the fire or the actual and tangible costs of restoration.<sup>16</sup>

Another law limits liability to the state as well as any federal or locally recognized fire protection agencies for the burning of timber slash and debris. The agencies are not liable for any damage to the land, product, improvement, or other things of value on the land provided the agencies abide by law and rule and exercise “reasonable care and caution.”<sup>17</sup>

The state is not immune to lawsuits resulting from damage caused by prescribed burning.



## Federal Prescribed Burning

Montana is home to vast amounts of federal land and most prescribed burning is done by federal agencies. In 2017, more than 19,000 acres of federal lands were treated with prescribed fire.<sup>18</sup>

When a federal prescribed burn causes unintended damage, the claim is filed in federal court. A 2015 federal court case against the U.S. Forest Service explains that claims against the federal government are filed under the Federal Tort Claims Act. In 2010, a 500-acre prescribed fire in the Lincoln Ranger District of

## Trends in USFS Prescribed Fire Program – 1996 to 2014

Year Range	1996 to 2001	2003 to 2007	2008 to 2014
Prescribed Fires	24,133	19,468	33,677
Annual Average	4,022	3,980	4,811
Acres Treated	6,406,217	7,079,427	9,812,690
Annual Average	1,067,703	1,415,885	1,401,813
Escapes	235	50	45
Annual Average	39	10	6
Reliability Rate	99.03%	99.75%	99.87%

Note: data for 2002 was omitted as unreliable

<sup>16</sup> [50-63-104, MCA.](#)

<sup>17</sup> [76-13-406, MCA.](#)

<sup>18</sup> [2017 Prescribed Fires by State and Agency.](#)

March 22, 2018

Prescribed Burning  
Environmental Quality Council  
Joe Kolman, Environmental Analyst

the Helena Natural Forest grew to a 2,000-acre wildfire, burning timberland owned by Kent Taylor.<sup>19</sup>

While federal law allows claims against the government for damages, Senior U.S. District Court Judge Charles Lovell found against Taylor in several areas. Federal law does not allow claims under strict liability such as 50-63-103, MCA, because burning is an “ultra-hazardous” activity. The government is also exempt from suit because prescribed burning is a discretionary act, even if the action is negligently performed. However, Lovell also found that the escaped fire was not caused by any violation of federal regulation or policy.

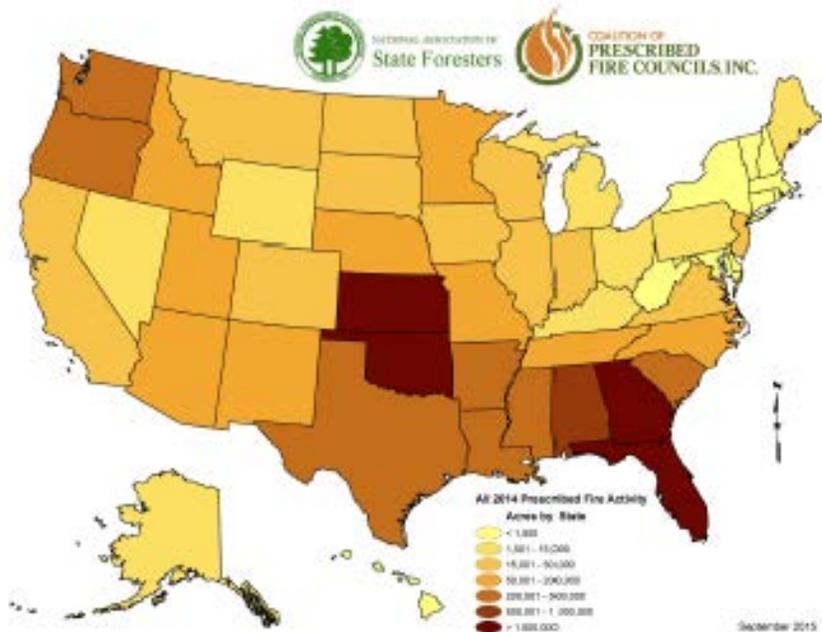
## Conclusion & Options

State policy and forest managers acknowledge that prescribed burning can improve forest and rangeland environments and lessen the effects of wildfire. However, fire is inherently risky, with the largest risk being the unintended spread of a prescribed burn and ensuing damages.

Prescribed fires treated about 11.7 million acres nationwide in 2017. About three-quarters of those fires were set for forestry objectives, with agricultural burning making up the rest. A nationwide survey found that the top impediments to prescribed burning are weather conditions, limited personnel and equipment, air quality, and liability.<sup>20</sup>

State-based burn laws may address air quality as well as liability. Academic studies of prescribed burn laws examine management and certification programs for burners as well as the liability burners face for fires that get out of control. One study found fewer escaped fires in states where prescribed burners may be deterred by strict liability, regulations, and criminal penalties. However, the author adds:

It is crucial to recognize that these results, which suggest that higher incidence and severity of escaped prescribed fires occur under less stringent laws, is in no way an indication that more stringent laws are better. As recognized by a number of state



<sup>19</sup> Taylor v. United States, CV 12-59-H-CCL.

<sup>20</sup> [2015 Prescribed Fire Use Survey Report](#). Coalition of Prescribed Fire Councils.

March 22, 2018

Prescribed Burning

Environmental Quality Council

Joe Kolman, Environmental Analyst

statutes in the southern states, prescribed fires can provide public goods in the form of wildfire risk mitigation and other vegetation management goals. It is entirely plausible that the additional costs of increased prescribed fire use are more than compensated by the benefits of increased prescribed fire use.<sup>21</sup>

The study of prescribed burn laws in the southern states found that regulations such as some of those included in Table 1 attempt to assure the public that appropriate measures are taken to reduce risk before the fire is set.<sup>22</sup>

Current Montana law could be seen as putting most of the burden on the prescribed burner. House Bill No. 587 would have lessened that burden by providing standards and certification prior to burning. A certified burner who followed the law and regulations would only be liable for damages in the case of negligence.

Additional study options for the EQC on this topic include no further action. The Council also could discuss in more detail HB 587, examine the regulatory options in Table 1, or delve deeper into liability law.

---

<sup>21</sup> Yoder, Jonathan. 2008. [Effects of liability and regulation on prescribed fire risk in the United States](#). Pages 639-649.

<sup>22</sup> Sun, Changyou & Tolver, B. (2012). [Assessing Administrative Laws for Forestry Prescribed Burning in the Southern United States: A Management-Based Regulation Approach](#). *International Forestry Review*. 14. 337-348.