



*Intermountain Society of American Foresters
Snake River Chapter*

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To: Idaho Department of Environmental Quality

Subject: Prescribed Fire Rulemaking

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Following are a few thoughts I want to present on behalf of the Snake River Chapter of the Society of American Foresters.

Idaho is in the midst of a slow moving catastrophe – stand replacing wildfire and its associated negative impacts. Without a significant increase in forest management activities including *prescribed fire*; conditions are not likely to change. Today’s meeting is focused on smoke from prescribed fire. We agree that it is both necessary and important to address. As this rulemaking proceeds, it is also important to recognize that smoke from prescribed fire is not an isolated problem that lends itself to a stand-alone set of rules.

I think it is important to first look at the objectives that will be guiding the rulemaking regarding prescribed fire smoke in Idaho. If the objective of this rulemaking effort is to simply minimize smoke from prescribed burning in forested landscapes, this effort will miss the mark. On the other hand if the objective is to minimize the harm to the people of Idaho resulting from smoke from both prescribed fire and wildfire, real success is possible.

Without having the specific numbers in front of me, I am guessing that wildfire accounts for the bulk of smoke problems in Idaho. Obviously, prescribed fire produces smoke as well. Smoke affects human health; it affects the recreating public, and it has a significant impact on Idaho’s economy. It is my opinion that a carefully executed, aggressive, prescribed burning program in concert with other forest management activities will reduce the total amount of smoke we have to endure. Effective management of forested landscapes is key to minimizing wildfire and the associated smoke and is dependent upon a robust set of forest management tools. Prescribed burning is an integral tool in that effort. Again, the more prescribed fire (done properly) we put on the landscape along with other forest management activities, the less overall smoke the public, including our vulnerable populations will have to endure.

Context:

First, trees grow. Absent human intervention, biomass in the form of tree growth accumulates on the landscape until it approaches the carrying capacity of the land. Mother Nature (shorthand for the natural forces at work in a forested landscape) will tend to move the system towards some form of equilibrium. In the west, that can be insect epidemics, wind events and fire either individually or in some combination of the three. Mother Nature frequently uses a meat axe rather than a scalpel as conditions approach the carrying capacity of the land. Wildfire usually bats cleanup and we get what we get! This typically includes large quantities of smoke over long periods of time and at the wrong times. Active management including **prescribed fire** can have a significant positive effect on forested landscapes and the ongoing problems associated with wildfire. As an educated guess, some number less than 5% of the **annual growth** decays and becomes part of the soil profile and the rest either goes out on log trucks or chip vans or goes up in smoke. My estimate is less than 20 % (at least on federal lands) of the annual growth leaves the forest as sawlogs or chips. I will leave the math to you. If one actually does the math, it should be no surprise that stand replacing fires continue to occur at the frequency and scale that they do. It should also be obvious that this is not likely to change in the near future given the pace and scale of current forest management activities.

Back to smoke and prescribed fire:

I can't tell you today that one acre of prescribed fire this year can by itself prevent 1000 acres of wildfire next season; but I believe that over time an aggressive program of commercial harvesting, mechanical fuels treatment and **prescribed fire** together and individually will minimize the amount and negative impact of smoke to the people of Idaho and its neighbors over the long term.

Following are a few examples of the potential effects of prescribed fire rules on the goal of minimizing the negative impacts of smoke from all sources:

- Prescribed fire demands certain conditions if it is to be done safely and efficiently. Requirements that severely limit the weather windows available influence both the amount burning that can be accomplished and the cost of burning. The increased cost of burning in turn further reduces the amount of burning that can be done. If you buy my original premise, reducing burn windows has the net effect of increasing the total amount of smoke endured over time (SEOT.)
- Prescribed fire is usually most efficiently accomplished when natural or human created barriers can be used. Generally the economies of scale suggest that larger burn units are more efficient.
- Planning for and staging additional suppression resources and actually put out prescribed fires when they get even slightly outside of smoke related burn windows can dramatically increase costs. As I noted above, added costs reduce the amount of prescribed fire that can be accomplished which in turn increases SEOT.
- Many areas in Idaho have no option for effective fuels treatment other than prescribed fire so it is unlikely that these can be treated effectively without significantly more prescribed fire. To be effective and efficient wider burn windows and some flexibility may be necessary.

Summary:

I am not at all suggesting that all smoke related rules that govern prescribed burning be eliminated; I am merely suggesting that rules that significantly reduce burning windows will be a significant factor in increasing the likelihood that the people of Idaho will continue to see more smoke and at the worst times.

The agencies and private companies responsible for planning and implementing prescribed fire (as well as other land management activities) certainly have the knowledge and abilities to conduct these activities with the appropriate sensitivities. I hope that DEQ works with the various stakeholders and with the experts to develop rules which are responsive to the goal of minimizing the amount of smoke produced overall. I believe that flexibility is an important element in the rule making effort. If we are willing to look at the big picture of reducing SEOT and make rules accordingly, your efforts will be successful.

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