Wildland Fire-Use Decisions: Ecological, Social, and Political Consequences

By Steve Ellis



The lightning-caused Granite Gulch Fire burned 5,555-acres in the Eagle Cap Wilderness in the Wallowa-Whitman National Forest in of 2019. Image: InciWeb, inciweb.nwcg.gov.

I once was asked what the more-trying and -consequential decisions I had made during my natural-resources career had been. What immediately came to mind was not a volatile and emotional issue such as wild horse and burro management, but rather the many

decisions I had made quietly and out of the public eye associated with allowing fire to play its natural role on the landscape.

These were the many go/no-go decisions I made about what was then called "wildland-fire use" on both general na-

tional forest lands and within congressionally designated wildernesses—the sort of decisions that can have tremendous ecological, social, and political consequences. They were decisions that, for the most part, had to be made in a relatively short period of time, sometimes at home on a weekend afternoon, and once while on horseback in the Elkhorn Mountains of Baker County, Oregon. During six rewarding years as forest supervisor of the Wallowa-Whitman National Forest, I made many such calls.

Variables I took into consideration included how many days before a season-ending weather event could be expected; distance of the ignition from management-unit boundaries; what other fires were burning on the forest and in the region; firefighting resource availability in the event more-active suppression action became necessary; fuel types and the locations of previous burns; and distance to nearby communities and private lands. My goal was to always have both ecological and sociopolitical successes, so that we would keep wild-land-fire use in our toolbox.

During my tenure on the Wallowa-Whitman, I was fortunate to have a talented and experienced fire organization and a solid bench of district rangers who had experience dealing with wildfire. Fortunately, we never had a "go" decision get "out the door," so to speak, but we did have a few fire-use situations that necessitated more than simply a watchful eye from an aircraft and by our fire lookouts.

For the majority of these "use fires," the primary action we took was monitoring them once or twice a day from fixed-wing aircraft as they crept through the wilderness or general forest-area landscapes, sometimes flaring up during the peak of the daily burn period or when they moved into a patch of subalpine fir. Ecologically, they reduced fuel loading as they created a mosaic pattern on the landscape. The more such fires we had, the more we could use this tool and the resulting natural fuel breaks. "More holes in the canopy" we sometimes called it. As a result, future wildfires would theoretically be less of a threat to private land and communities outside the wilderness and national-forest boundary.

There was a handful of times we were forced to take more-aggressive suppression action to keep a fire within the prescribed fire-use management area. I recall an instance when we had two early-September lightning ignitions several miles inside the Eagle Cap Wilderness boundary. Both "go" decision fires crept slowly around for several days, with one eventually going out. The other start became quite active one mid-September day when the

humidity dropped to an unseasonably low level and a very strong surface wind started blowing from the south. The fire moved several miles in a long, linear pattern, and actually breached the wilderness boundary before a fast-moving cold front came in and winds shifted out of the north to lay the fire back on itself. This cold front was accompanied by a season-ending moisture event. On the day this fire made that long linear run, aerial retardant and helicopter bucket drops proved mostly ineffective at knocking down the head of the fire. Spotting was an issue, especially in subalpine fir. This "nail biter" for a day ultimately never breached the national-forest boundary, and essentially, produced a long, linear fuel break for management of future fires.

A late-August multiple-lightning ignition in Hells Canyon necessitated engagement of an experienced wildland fire-use team, and eventually, of a Type-2 incident-management organization based in Riggins, Idaho, to keep this natural fire within the intended management zone. It's when naturally caused fires burn onto lands on which use is not intended that sociopolitical failures can occur. When this happens, the potential of losing fire-use authority may well become reality. This never happened to me in the six years I made extensive use of this tool in designated wilderness, primarily because I carefully considered the variables listed earlier. It also helps to have wildland-fire experience during one's career, a basic understanding of meteorology, and knowledge of what fire does in various fuel types and topography. On this fire, I authorized both chainsaw and retardant use in a few parts of the Hells Canyon Wilderness to successfully keep the fire within the intended fire-use management area. Helicopter bucket dips from the nearby Snake River also helped. We used this burn to minimize the spread of another fire in the same area a few years later.

With all the development that continues to occur in the wildland-urban interface, use of this tool can become a riskier venture. I found during my career that forest-management practices that reduce stand density and ladder fuels, combined with controlled underburning, are very helpful in reducing the wildfire threat to communities. The wise use of all these tools will help ensure healthy, sustainable forests—and the communities that depend on them—for the many uses the public values.

Steve Ellis was supervisor of the Wallowa-Whitman National Forest between 2004 and 2010; he is now retired. He serves on the board of directors and is president-elect of the Pacific Northwest Forest Service Retirees Association.

14 The Forestry Source