

Sawtooth Valley Wildland Fire Collaborative

Strategic Recommendations for Wildfire Hazard Mitigation

August 20, 2013

BACKGROUND

The Sawtooth Valley Wildland Fire Collaborative (SVWFC) was formed after the Halstead Fire burned 179,000 acres north of Stanley and the Salmon River Canyon during July through October 2012. The Collaborative is composed of a broad-based group of stakeholders including city and county government, private land owners, businesses, local organizations interested in land management issues, emergency response organizations, and other concerned citizens. The Collaborative's goal is to identify and recommend the location, type, and scale of fuel treatments and other wildfire risk reduction strategies, such as FIREWISE, that will significantly reduce the risk of a catastrophic wildfire within the Sawtooth Valley, Stanley Basin, and nearby areas. These recommendations are being submitted to the management staff of the Sawtooth National Recreation Area, the State of Idaho, the City of Stanley, and to Custer and Blaine Counties. Although the primary responsibility for reducing hazardous wildland fuels and managing wildfires in the Sawtooth Valley area lies with the U.S. Forest Service, private landowners have the primary responsibility to reduce wildfire risk on their property by following FIREWISE guidelines for building construction and defensible space. The State of Idaho and rural fire districts provide wildland fire protection on some state and private lands. Cities and counties have the ability to support FIREWISE through educational initiatives, funding, and enforcement, and to provide fire protection for structures in the wildland urban interface.

Without immediate large-scale hazard fuel modification there is a high probability of another Halstead-scale wildfire along the northeast and east side of the Sawtooth Mountains, and along the west and north sides of the White Cloud Mountains. These extensive areas of continuous lodgepole pine and spruce/fir forest have extreme accumulations of living and dead fuels due to mountain pine beetle infestations and the absence of significant wildland fire for up to 100 years. A large wildfire in these areas could have catastrophic consequences by destroying homes and structures in areas that currently cannot be effectively defended, damaging power supply and sewer infrastructure forcing long-term evacuations, crippling the tourism-based economy by producing a heavy pall of smoke for weeks at a time, shutting down access to rivers, trails, lodges, and other recreation facilities, and causing significant and negative environmental impacts.

Recommendations:

The area between Banner Summit and Cape Horn on the west, Slate Creek on the east, and Galena Summit on the south should be divided into six protection zones. These zones are depicted on the attached Google Earth images. Within these zones, cost-

effective wildfire hazard mitigation strategies should be employed to break up continuous stands of living and dead fuels. Actions should focus on the strategic placement of fuel modification areas, primarily created through prescribed burns and point protection of structures and other values at risk. This will reduce the probability that fires over 100,000 acres will occur, damaging homes, other structures, scenic vistas, wildlife habitat, recreational opportunities, historic and natural resources, and the local economy. One or more fuel modification areas should be placed strategically within each high-priority protection zone, either surrounding or adjacent to primary values at risk, or in remote areas where they will provide effective barriers to high-intensity crown fires.

Within the six protection zones, the Collaborative recommends three types of actions to create fuel modification areas, and administrative and educational actions to mitigate wildfire risk:

1. **Point protection of structures, infrastructure, and other values.** Create and maintain, on an ongoing basis, defensible space through continued tree thinning, fuel reduction, and implementing FIREWISE guidelines. Fuel modification buffers must reduce fire behavior to the extent that wildland fire suppression efforts are likely to be effective, and that structures have a reasonable probability of surviving a fire if suppression forces are unavailable. Residential communities are encouraged to propose wildfire hazard mitigation actions, and seek professional assistance from counties and the U.S. Forest Service in refining and implementing these actions. The Sawtooth NRA should ensure that homeowners with Forest Service special use permits and leases are permitted to take appropriate actions to make structures and immediate surrounding lands more fire resistant, following FIREWISE guidelines.
2. **Prescribed burns** that are large enough to break up extensive stands of unburned forest and create fuel modification areas that will either stop an intense crown fire or reduce it to a surface fire that has a significant likelihood of being successfully suppressed. The width of these areas should be based on typical spotting distance of crown fires in adjacent untreated fuels, along with modeled fire behavior changes between untreated and treated fuels. Typical spotting distance refers to the area outside the flaming front where most of the spot fires are ignited, not the maximum distance at which a spot fire may occur. Fuel modification areas that are narrower than the typical spotting distance are unlikely to contain a running crown fire or to protect structures from spot-fire ignitions. The typical spotting distance should be determined by Forest Service fire staff, using appropriate fire behavior models. Tree thinning and other mechanical fuel removal may be implemented in order to provide anchor points to secure prescribed burn unit boundaries. Mechanical fuel treatments outside of point protection areas specified in (1) above should be the minimum necessary to support prescribed fire treatments and should not be used to create stand-alone fuel breaks or fuel modification areas. In order to reduce smoke impacts and to allow the likelihood of achieving the objectives, burns should occur during the spring and fall months (outside of the main June 1 – September 30 tourist season).
3. **Management of natural ignitions** through modified suppression strategies to help establish and/or enhance fuel modification areas. During the main

tourist season, these actions must not result in significant smoke impacts to developed areas lasting more than several days.

- 4. Administrative and educational actions** to strengthen knowledge of and compliance with FIREWISE, expand funding to support FIREWISE, and establish more timely and proactive restrictions on campfires during high fire danger periods. The latter will require enhanced enforcement of campfire regulations, particularly in areas of dispersed camping and unauthorized camping. Any additional funding or modifications to current policy, which is required to accomplish these efforts should identified and communicated. Agencies should also analyze the wildland fire management implications of all land management actions to ensure that they do not increase hazardous fuels or wildfire risk. For example, removal of bark-beetle killed trees should not result in untreated slash piles or increased dead and downed fuel loadings in the forest, and meadow enhancement projects should not create standing dead trees along road corridors or wildfire hazard mitigation areas.

The SVWFC has indicated a general priority category for each fire protection zone rather than a numerical ranking. The intent is that the Sawtooth NRA retains flexibility to identify the locations and sequencing of fuel modification areas, recognizing that actions in some zones will be more important and urgent than in others.

Zone A (Smiley Creek/Sawtooth City). Natural barriers to wildfire spread already exist, such as lakes, meadows, open ridges, and roads. Although this zone is low priority for expanded fuels reduction, existing treatment areas should be maintained, point protection measures around development should be continued, and specific ways to enhance these already in-place efforts should be considered with the local landowners.

Zone B (South Redfish Lake). This area contains few existing barriers to fire spread, and contains many high values to protect, such as the Redfish Lake development, Buckhorn subdivision, other private cabins, a powerline, and scenic vistas along the eastern front of the Sawtooth Mountains. It is a high priority for wildfire hazard mitigation due to immediate threats to high values at risk and high probability that wildfires, under dry and windy conditions, will escape initial attack and exhibit Halstead-like fire behavior. Actions should focus on creating a fuel modification barrier incorporating Redfish Lake and extending eastward to include Little Redfish Lake, Buckhorn subdivision, and across the Salmon River into the White Cloud Mountains. In addition, fuel treatments along Road 210 should be continued to provide an anchor point for possible prescribed fires to reinforce the Redfish fuel modification barrier and for future fire suppression efforts. The 210 Road Fire in 2013, which demonstrated the risk of wildfire jumping Highway 75 near the Redfish Lake junction, should be incorporated into this fuel modification barrier.

Zone C (Stanley). This area contains high values to protect, such as developments in Stanley, Iron Creek and Crooked Creek, scenic vistas, and the Stanley/Lower Stanley business community. Smoke impacts from long-duration wildfires will be severe. It is a high priority for fuel modifications due to immediate threats to these values from wildfires approaching from the northwest and south, combined with low probability of successful initial wildfire attack under severe fire behavior conditions.

Zone D (Cape Horn). This area contains moderate values to protect, but is a high priority for fuel modifications. Under severe fire behavior conditions, wildfires originating within this zone are likely to develop into crown fires with extensive runs similar to that observed on the Halstead Fire. Such fires are likely to threaten Zone D values, but also cross into Zone C threatening high values, and causing long-term and severe smoke impacts. Actions should focus on creating a fuel modification area incorporating Elk Meadows, the ridgeline south from Copper Mountain and prescribed burns anchored by mechanical fuel reduction in the vicinity of Elk Creek and Elk Meadows. In addition, measures should be considered to ensure that Highway 21 can serve as an effective defensive line for wildfire suppression actions. Additional fuel modification areas may be needed in this zone to reduce the risk from wildfires originating east of Elk Meadows/Elk Creek.

Zone E (White Cloud Mountains). This area contains moderate values to protect, especially houses and the powerline in the Salmon River Canyon. Extensive fuel modification areas will be more difficult in this zone, and actions should focus on point protection of the powerline and other structures.

Zone F (North Stanley). This area contains low values to protect compared to other zones, and is highly defensible from intense wildfire due to the Halstead Fire to the North, meadows and roads to the south, and extensive open sagebrush/bitterbrush-covered slopes.

Summary:

While the Collaborative recognizes that it will take several years to plan and implement large-scale fuel modification areas to achieve the desired reduction in wildfire hazard, it recommends that existing point protection actions be expanded as soon as possible, and that planning and implementation of large-scale fuel modification areas begin within the next year. The wildfire hazard is critical, and delay will result in the unacceptable likelihood that another Halstead-like wildfire will occur before the fuel modification program can be effective in changing the risk profile in high-priority wildfire hazard mitigation areas.

The collaborative believes that implementing an aggressive program to reduce wildfire risk will provide land managers more options to manage natural wildland fire ignitions for resource benefits and consequently will reduce the cost and environmental impacts of fire suppression actions. Relatively small and inexpensive investments in fuel modification areas, largely through prescribed fire and point protection, can provide effective barriers to fire spread, protect values at risk, and allow some beneficial fires to burn with minimal suppression and fulfill their natural role in ecosystems. By reducing the need for large, multi-million dollar wildfire suppression actions, and reducing property and business losses, the recommended fuel modification actions will prove to be sound economic investments.