

Alternative E - Graded Basal Treatment

The goal of this alternative is to provide a method for meeting all fire hazard reduction needs and improving stand health using a graded basal target beginning around 40 BA at the base of the mountain and increasing to roughly 100 BA at the top of the mountain. This design provides decreasing crown fire risk from the top of the mountain towards town which would improve the likelihood of halting fire spread within the WUI. Within and adjacent to the wildland-urban interface area the maximum basal area target would be 40-50-ft²/acre BA, and target maximum basal areas would increase gradually in ¼ mile wide bands as treatment progressed upslope to a maximum basal area target of 90 - 100 ft²/acre. The project area will be broken into four bands or levels:

- Level 1 - thin to 40-50 BA, approximately 983 acres.
- Level 2 - thin to 50-70 BA, approximately 560 acres.
- Level 3 - thin to 70-90 BA, approximately 397 acres.
- Level 4 - thin to 90-100 BA, approximately 256 acres.

Treatment in all units would initially remove dead/dying, beetle infested trees, and then would thin from below to meet target basal areas. Thinning would include juniper in the total basal area calculations. Leave trees would maintain the pre-treatment proportion of pine, fir, juniper, and hardwood species.

As a result of vegetation treatment, a fuel break would be constructed approximately 0.25 miles wide adjacent to the wildland-urban interface boundary along the west, north and the majority of the east slopes, with the east side extending south and tying into the existing burned areas. This section would be the low-end of the graded basal area target and stands would become more dense the higher the elevation on LCM. The understory vegetation would be piled for burning or removal, and the site would be set for future prescribed burn entries within the natural fire interval cycle of seven to 25 years.

Tree removal would be done using ground based logging (787 acres) and aerial logging (1409 acres). On slopes greater than 35 percent, an aerial yarding system capable of full suspension of logs would be required. On slopes less than 35 percent, yarding would be accomplished by a ground based yarding system capable of one end log suspension.

In this alternative, curl-leaf mountain mahogany (CMM) would be pruned in the Whisky Gulch area at the top of LCM to stimulate growth. This area currently demonstrates a small amount of CMM regeneration, and maintaining a canopy of mature CMM for protection would increase survivorship of seedling CMM. In addition, all pruned material would be left in place to provide protection for seedling CMM. Mahogany on the east slope is not demonstrating any regeneration, very little biomass production, and is too tall and decadent to serve as wildlife forage. These stands would be thinned and pile-burned to reduce continuous fuel loads. Where possible, ground would be disturbed (scarified) around and under CMM to promote regeneration.

The main access road would be hydrologically improved from its junction with the county road to the north, south to the forest boundary, approximately 2.87 miles. Improvement would include rocking, culverts, dips and other hydrologic aides to reduce sediment and improve runoff.