

FUEL REDUCTION TREATMENTS: **SHADED FUELBREAKS**

A FACT SHEET FOR CLARK COUNTY HOMEOWNERS



Untreated understory fuels in the Mt. Charleston area include white fir, Gambel's oak, and mountain mahogany.

DEFINITIONS:

A **fuel reduction treatment** is a strategically located block of land on which a cover of dense, heavy, or flammable vegetation has been drastically changed to one of reduced flammability or lower fuel volume. Fuel reduction treatments may include mowing grasses, thinning shrubs, pruning or removing trees, and replacing highly flammable vegetation with more fire resistant species.

Shaded fuelbreaks are created by thinning or removing grasses, shrubs, and other surface fuels, and then increasing the distance between the ground and the overstory live tree crowns by removing ladder fuels such as juvenile trees and low tree limbs. Canopy openings are created in the overstory by thinning the remaining mature trees. This type of fuelbreak spans a wide range of understory and overstory prescriptions. Methods of

implementation and maintenance can be mechanical or manual and sometimes include the use of prescribed fires.

GENERAL RULES FOR SHADED FUELBREAKS:

- ❖ Broadcast seed fuelbreak areas prior to fuel removal to enhance soil stabilization, promote the establishment of fire-resistant vegetation, and prevent noxious weed invasions. Consult with your local extension agent to create a pre-suppression seed mixture appropriate for the local climate and soil conditions.
- ❖ Thin ponderosa pine and white fir trees to a minimum spacing of twenty and forty feet between tree boles (equivalent of 80 to 100 sq. ft. basal area) of mature trees. Optimal spacing for reducing fuel loads in the pinyon-juniper vegetation type is a distance between tree crowns equal to twice the height of the trees.



An effective shaded fuelbreak will not have ladder fuels connecting the understory layer with the coniferous overstory.

FUEL REDUCTION TREATMENTS: ***SHADED FUELBREAKS*** *(continued)*

- ❖ Consult with a forester from the Nevada Division of Forestry for assistance regarding technical forestry questions, permitting and carrying out thinning operations on your site.
- ❖ Areas of dense brush will require a thinning so that remaining shrubs have a spacing (canopy to canopy) equal to twice their height. Further reduce the fuel volume by reducing shrubs to a height of eighteen inches or less.
- ❖ For mature large conifers such as ponderosa pine and white fir, prune all branches from six to fifteen feet above the ground, but not more than one-third of the total tree height. For smaller conifers such as pinyon and juniper trees, limb all branches a minimum of four feet from the ground, not to exceed one-third of the total tree height.
- ❖ Prune and remove dead and diseased tree branches and keep the area within fifteen feet of remaining trees free of smaller trees, shrubs, duff, and other ladder fuels.
- ❖ Where trees are removed, cut stumps as close to the ground as possible and leave no stump higher than four inches.



Clear all brush within fifteen feet of tree canopies.

When applying thinning, pruning, and fuel reduction treatments it is essential that all plant biomass (tree branches, shrub trimmings, pine needle litter) be immediately removed to a safe disposal area. This material dries rapidly and can contribute to the fire hazard problem if allowed to remain on the premises.