

Brief Discussion of Fuel Reduction within The Meadows

The property is relatively flat averaging 5,800 feet in elevation. The forest structure is an eastside pine type dominated by ponderosa pine and appears very healthy. The forest is mature with pockets of younger trees intermixed. The understory generally consists of grasses, sagebrush, bitterbrush, and scattered Greenleaf manzanita. The largest fire issue is with the sagebrush/bitterbrush understory. The soil productivity is rated from good to fair and can be identified by areas of brush 18 inches in height and mature trees compared to areas of low growing brush and poor tree growth.

I would rate the fire danger of the area as moderate as the homes are not located adjacent to one another and the vegetation varies throughout the development by either being treated for fuel reduction or soil productivity.

Fuel reduction possibilities:

- 1) Individual property owners maintain 100 feet of defensible space around their structures. See <https://www.truckee-fire.org/dspace?rq=defensible%20space> for requirements. Place emphasis on Zone 0, remove all flammable items within 5 feet of the structures.
- 2) Improve the fuel reduction along roadways. The roads are constructed within a 60-foot-wide road common area. The roads are 22 feet wide leaving 38 feet of common area not under asphalt. This gives 19 feet on either side of the road. However, as with most road construction it is impossible to keep the middle of the road located in the middle of the 60-foot strip. I did measure a few property corners at 17 feet off the road edge. If treating vegetation along the road, it would probably be safe to treat a 15-foot area on either side of the road. Within the 15-foot strip I would:
 - A) Remove all brush within 10 feet of the edge of the road and reduce the brush in the remaining 5 feet. Remove 70 to 80 percent of brush under the dripline of trees left along the roadside.
 - B) Heavily thin the young ponderosa pines in the 15-foot zone. These young trees developed in the disturbed soil when the roads were originally constructed. They are not much of an issue currently but as they continue to grow will create issues with roots breaking the roadway and tree limbs encroaching over the road.
 - C) Remove lower limbs from trees left with 15 feet of the road.
 - D) Remove all trees within 15 feet of the road edge that have been topped by the power company.
 - E) The vegetation thinning mentioned above would be for the native trees and vegetation. Planted landscaping would not be removed.
 - F) Blow chips created from cut material within the 15 foot area.
 - G) Leave cut stems 10" in diameter and larger in the 15 foot strip for firewood gatherers.

- H) My best guess is 8.4 acres @ \$2,500/acre or \$21,000 for the project. The plan is to apply for Measure T funds that would cover 75%, leaving the HOA cost at \$5250. I am scheduling a contractor to look at the project later this week or early next week for a better estimate.
- 3) If individual property owners wish to work outside their 100-foot defensible space zone from structures, I would:
- A) In mature timber stands, removal of suppressed trees, usually < 10" in diameter, which are in direct competition with larger healthy trees.
 - B) Thinning pockets of young timber to improve health and create spacing between trees.
 - C) Removal of lower branches up to a maximum height of 10 feet from the ground. For smaller trees removing lower branches 1/3 to 1/2 the height of the tree.
 - D) Removal of dead and down material from the forest floor. Scattered old logs on the ground may be left in place. Branches should be removed from the logs.
 - E) Either through mastication or hand cutting the removal of 40 to 70 percent of the brush species. Remove all brush from under the tree canopy out to 10 feet from the drip line of the tree. Where there are no trees, you can leave 20 to 25 foot diameter areas of brush.
 - F) Small material will either be chipped and blown over the project areas or removed from the property.
 - G) Larger material, > 4" in diameter, will be removed from the project site to keep the fuel loading on the ground at a minimum.
 - H) Stumps of trees cut should be as low as possible with larger diameter stumps being 6 inches in height or less.

These are guidelines and it is not necessary to complete all this work on the entire property. As a forester, I believe it is good to leave some areas untreated for wildlife. If you wish to save the trees on your property from wildland fire you should remove lower branches from trees and reduce the amount of brush under the dripline.

- 4) There is a possibility to create a fuel reduction zone between Glenshire and The Meadows. With fire generally traveling in a northeasterly direction the homes in Glenshire could become an issue if one was to catch on fire and the fire travel into the vegetation near the structure. A zone 50 to 100 feet from the property line extending into The Meadows properties could be created. This project would take individual property owners' willingness and cooperation to complete.
- 5) I did not look closely at the second entrance, but you may want to ensure access for residents to evacuate if a fire is near the main entrance.