

Practice: 383 - Fuel Break

Scenario: #1 - Grinder

Scenario Description:

Dwelling or structure exists in or adjacent to a overstocked forest standwith higher than normal wildfire threat. Fuel Break installation requires tree thinning, treating woody residue, pruning and mowing to remove wildfire hazard to stand and structure. Treating woody residue (piling/burning, crushing, grinding or off-site removal) and mowing are mostly mechanized with some hand treatment. Resource concerns are degraded plant condition - wildfire hazard, excess biomass accumulation & undesirable productivity and health.

Before Situation:

Stand condition creates conditions conducive to wildfire movement across the landscape. Higher than normal fuel load is created by tree crowns touching, trees retaining limbs down to understory vegetation (creating a "ladder" for fire movement into the overstory), understory vegetation (brush and grasses), and existing woody residue. Slope of terrain increases fire hazard. Existing conditions can be rated as a high to severe fire hazard. Dwelling or structure and forest stand is at risk of loss if a wildfire should occur.

After Situation:

Fuel Break is installed around structure to reduce intensity and rate of spread of a wildfire. Defensible space is provided for the structure. Existing trees should survive a wildfire. Width of fue break can vary from 30' to 250' depending on slope and fuel type. Trees are thinned so as to have at least 20' between the edge of the crowns. Trees are pruned so as not to have any branches within 15' of the ground. All woody residue (thinned trees, branches and brush) are mostly ground up but some is piled/burned, hauled of site or lopped/scattered) understory vegetation is cut down to less than 1 foot in height. Cut stumps have been chemically treated to control sprouting.

Scenario Feature Measure: Area of Treatment

Scenario Unit: Acre

Scenario Typical Size: 4

Scenario Cost: \$3,169.99

Scenario Cost/Unit: \$792.50

Cost Details (by category):

| Component Name | ID | Component Description | Unit | Price (\$/unit) | Quantity | Cost |
|---|------|--|------|-----------------|----------|------------|
| Equipment/Installation | | | | | | |
| Pruning tools, hand tools | 1318 | Pruning tools, hand tools, shears, loppers, pole saw, handsaw. Material costs only. Labor not included. | Hour | \$4.77 | 16 | \$76.32 |
| Chemical, spot treatment, single stem application | 964 | Ground applied chemical to individual plants or group of plants, e.g., backpack sprayer treatment. Equipment and labor cost included. | Hour | \$53.18 | 3 | \$159.54 |
| Mechanical cutter, chopper | 943 | Masticator, flail shredder, hydro axe, brush cutter, etc. Equipment and power unit costs. Labor not included. | Hour | \$120.26 | 16 | \$1,924.16 |
| Labor | | | | | | |
| Equipment Operators, Heavy | 233 | Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons. | Hour | \$22.40 | 16 | \$358.40 |
| General Labor | 231 | Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc. | Hour | \$17.72 | 16 | \$283.52 |
| Materials | | | | | | |
| Herbicide, Glyphosate | 334 | A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only. | Acre | \$15.63 | 4 | \$62.52 |
| Mobilization | | | | | | |
| Mobilization, medium equipment | 1139 | Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds. | Each | \$239.42 | 1 | \$239.42 |
| Mobilization, very small equipment | 1137 | Equipment that is small enough to be transported by a pick-up truck with typical weights less than 3,500 pounds. Can be multiple pieces of equipment if all hauled simultaneously. | Each | \$66.11 | 1 | \$66.11 |