

SILVICULTURAL SUMMARY PRESCRIPTION

Tree thinning

Stand Description

Forest: Beaverhead-Deerlodge District: Jefferson
Sub-item No.: B1.1 Acres: 66
Unit Name: Saratoga Thinning
Stand No.: 0706070005
Location/legal description:
T.6N, R.7W.; Sections 10, 11, and 14
Elevation Range: 6,800'-7,200' Avg. Slope: 25%
Avg. Stand Age: 35 Avg. Aspect: E-SE
Avg. Tree Height: 25'
Avg. TPA (existing): 1,022: (733 live; 289 dead)

Silvicultural Goal and Desired Condition

The goal of this treatment is to reduce the stocking and density in a unit that is predominantly lodgepole pine. This treatment area is an old clear cut unit that was harvested in the early-mid 1970's. The desired spacing for this unit is 12'x12' (approx. 300 TPA residual). In addition to leaving the best lodgepole pine to satisfy the spacing specification/requirements, leave all existing Douglas-fir and whitebark pine, when/where they occur. When aspen clones are encountered, all conifers less than 6.5" dbh will be dropped within and adjacent to the clone for a distance of approximately 40 feet. This treatment will result in a mixed stand of lodgepole pine and Douglas-fir with smaller, isolated patches of aspen. All activity fuels will be slashed down to within 24 inches of the forest floor and the bole of the trees cut need to be bucked into pieces no longer than 24 inches or 2 feet in length (this is to reduce *Ips* insect potential and to catalyze the drying of the boles). Trees of the best form and vigor will be left as residual (e.g., conical crowns, good crown ratios, straight boles, and trees free of insect and disease). Trees with Western gall rust and mistletoe should be selected to cut out first on the lodgepole pine component within the treatment unit.

End Result- specifics

1. Tree Thinning

Leave tree selection: Select one of these two methods for selecting leave trees (will be considered S1 in the thinning inspection form). These trees are within the range of diameters that are larger than small trees and smaller than the maximum dbh to cut:

A. **NA** "Best Tree in competitive area method" (C.4.2.1.1) is being used in selecting satisfactory leave trees:

B. Spacing method (alternate C.4.2.1.1) is being used in selecting satisfactory leave trees:

The average spacing for leave trees is 12' X 12'. The spacing may be varied by 50% to select the best leave tree(s) based on the prescription and characteristics of desirable leave trees.

Acceptable stocking density:

Trees Per Acre: 250 minimum 400 maximum

Species Preference: Leave all Douglas-fir and whitebark pine; then lodgepole pine, Engelmann spruce, and lastly subalpine fir (is this order of preference). When in aspen clones, all conifers will be cut less than 6.5" dbh and within a tree length and 1/2 of the aspen clones (approximately 40 feet).

Silvicultural Summary Prescription (continued)

Maximum tree diameter at dbh to cut: Maximum cut diameter is 6.5 inches and anything above are considered S2 until maximum allowable is reached. That balance is S3.

Minimum tree height to cut: Minimum tree height to cut is 1 foot (1').

Trees that are to be ignored (not to be cut): Code as S4 trees in inspection; they are surplus trees in the inspection. All aspen are to be left alone.

Small Tree: Maximum height 4 feet (4'). Trees smaller than these trees, but taller than the minimum tree height are required to be cut. However, any that are left are considered Category C deficiencies and a tolerance is allowed for leaving a small quantity on the unit.

Trees that are to be ignored (not to be cut): Code as S4 trees in inspection; they are surplus trees in the inspection. All aspen are to be left alone.

Trees that are not acceptable for leave trees (shall be cut): May be coded as N2 in inspection when cutting it creates an opening on the plot. Western gall rust on the bole of the tree on trees less than 6.5" should be cut out as well as trees infected with mistletoe.

Maximum stump height: 4 inches (4.0")

Insect, Disease, and Animal Damage: Western gall rust on the bole of the tree on trees less than 6.5" should be cut out, as well as trees infected with mistletoe and lodgepole pine trees recently attacked and successfully hit by mountain pine beetle (MPB).

2. Girdling NA

3. Pruning NA

4. Release NA

5. Slash Treatment: All slash will be cut to below 24" (2 feet) of the forest floor and bole lengths will be no longer than 24" (2 feet) in length. This bole length specification is to encourage and catalyze drying, thus helping deter the *Ips* beetles from gaining a foothold post-harvest activities.

6. Special Treatment Areas: Special treatment areas are those aspen clones that all conifer less than 6.5" dbh will be cut out within a tree length and 1/2 of the aspen clone (approximately 40 feet). An aspen clone can be identified by five or more living, overstory aspen that exceed 20 feet in height. Also, leave all Douglas-fir and whitebark pine when encountered across the treatment unit.

7. Salvage: NA

8. Other desired contract results or requirements: NA