

DETAILED PRESCRIPTION SUMMARY

(Reference FSH 2409.26d)

Data Base: 10 05

Compartment(s): 5142

Stand(s): 5142-0200(16), 5142-0400(2), 5142-0500(3)
5142-0600(69), 5142-0700(7), 5142-0800(35)
5142-0900(1) (ACRES)

Acreage: 133

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Date: 01-31-2007

Certified By:

Date: 9/20/2007

Project Name: La Cueva Fuelbreak - Block E

Stand Objectives:

Flame length is < 4ft., and torching index is >35 mph

(If Changed from

Stand structure and density will not support crown fire.

Diagnosis)**Silvicultural Treatments & Timing (This Entry):**

<u>Activity</u>	<u>Type</u>	<u>FY</u>	<u>Fund</u>	<u>Wk. Force</u>	<u>Method</u>	<u>Card Type Prepared</u>
1180	fuel break construction	06	WFHF	FA	200	
1253	piling	06	WFHF	FA	100	
1230	Burn of activity fuels piles	08	WFHF	FA	300	

Narrative:**Existing Conditions**

The treatment area is a pinyon/juniper stand with scattered individuals, small pockets and stringers of ponderosa pine throughout the stand. Douglas fir is rare. Stand data collected indicates about 520 trees per acre and the average basal area is 64 sqft/ac. Ninety percent of these trees are less than 9 inches dbh/drc. The average tree is less than 20 feet tall. The vegetative structure is a young forest to mid-aged forest. Oak brush is heavy at over 2400 stems per acre and averages 2-3 feet in height. There is some pinon ips mortality but no recent attacks were found. In the northwest corner, dwarf mistletoe is common in ponderosa pine. Dwarf mistletoe is present in juniper. Site productivity is low to moderate. Surface boulders and rock outcrops are dominate physical features, especially in the northern portion of the treatment area. The slopes are generally gentle to moderate. The aspect is mostly south to southeast.

Desired Conditions:

In the portions of the stands that will be included in the fuelbreak the stand basal area will be 20-30 sq ft/ac or 30 to 35 trees per acre. Five percent of the treatment area will be in denser leave tree clumps.

This open stand will have trees represented in all diameter classes. The mid size diameter classes will have the most cohorts. This will increase the average stand diameter. Fuels generated by treatment will be reduced. The areas treated will have improvements in forest health through the removal of mistletoe infected trees and reduced basal area. There will be an increase in the amounts of oak and herbaceous plants. The remainder of these stands not in the treatment area will be untreated.

Treatment:

Construct a shaded fuel break along County Road 63-A (see map). The treatment will be a thinning across all diameters. There is 24" diameter limit. Leave 5% of the area in denser clumps. Slash will be lopped and scattered and/or piled. Slash will be kept away from residual trees. Broadcast burning and/or pile-burning will follow after the needles have fallen.

IMPLEMENTATION GUIDE
Project Name: La Cueva Fuelbreak Block E

Method of Cut: Intermediate cut - commercial thinning

Thinning Guide: (Stocking, spacing, insects, disease, species preference, snags, seed potential, etc.)

The target basal area is 20-30 sq ft/ac or 30 to 35 trees per acre. The order of species preference for leave trees is as follows: ponderosa pine, Douglas fir, pinyon pine, juniper. The next criterion for selecting leave trees is forest health. Look for trees with the least amount of pathogens, specifically dwarf mistletoe found in ponderosa pine and Douglas-fir. Select trees with good form and vigorous crowns and are free of natural or artificial damage. Remember the objective of this project is to prevent torching and crown fires, so trees with higher crown base heights are preferred.

Thin trees across all diameter classes. All diameter classes should be present in the residual stand. The largest diameter class (18"+) is poorly represented in this stand, so cutting in this class should be very rare. Most of the trees removed are from the smaller and middle diameter class. The spacing between residual trees is 20 to 90 feet depending on its diameter. Spacing may vary as much as 50% to select the best leave tree. Table 1 illustrates general spacing guideline for various diameter size classes.

Table 1: Thinning Guidelines for La Cueva Block E

Area Thinning to 25 Basal Area

Diameter Class	Removal Percent Cut	Residual Conditions		Spacing (ft)
		Trees/Ac	Basal Area	
2-8	95-100	5-10	1-3	20-30
10-16	50-80	20-25	15-20	40-45
18+	0-5	3-5	5-7	50-90
Total		30-35	20-30	Average 42'

When dwarf mistletoe infections are present follow these guidelines. Avoid leaving trees with a dwarf mistletoe rating (DMR) of 3 or higher. Spacing may be increased up to 50% of regular spacing to reduce or eliminate mistletoe. Create up to ¼ acre openings to eliminate areas of heavy mistletoe infection. Leave an even-aged structure in mistletoe infected areas.

Leave 5 % of the area in leave tree clumps ranging from a few trees to 1/10 acre in size. Clumps can be left unthinned or lightly thinned. Clumps may have interlocking crowns, but should be void of ladder fuels. See Table 2 for information on sizes and spacing of clumps. Clumps should have irregular distribution and spatial arrangement. The markers (thinning crew) are not limited to the sizes and shapes in the table below, it is merely a guide. The more irregular the shape and size of the clumps, the more natural the treatment will appear.

Table 2: Clump sizes, frequencies, and shapes to reach 5% of an area.

Size (acre)	Frequency	Circle Radius (ft)	Narrow Oval (feet)	Wide Oval (feet)	Spacing between Group
1/10	1 group/2 acres	37.2	33' x 132'	50' x 87'	295'
1/20	1 group/acre	26.3	20' x 109'	33' x 73'	209'
1/50	2-3 groups/acre	16.7		20' x 44'	132'

Slash Disposal