

# Pre-Operations Report 2007 Sale

**Operation Name:** Kennedy Gulch Thin  
**County:** Josephine  
**Management Basin:** Rogue

**Table 1. Operation Areas, Types and Acres**

Area	Type of Operation	Gross Acres	Net Acres
1	Partial Cut	115	110
2	Partial Cut	47	40
Total		162	150

## **I. PHYSICAL DESCRIPTION OF OPERATION AREA:**

The Kennedy Gulch Thin is on the lower slopes and valley bottom of the Kennedy Gulch block of Board of Forestry land. The underlying rock units are of sedimentary and volcanic origin; Jurassic period.

The sale reaches from the mid slopes to the valley bottom. Slopes average from 30-65%. Aspects are primarily north-easterly. Elevations range from 1,500 - 2100 feet.

This area is within the Mixed Evergreen vegetation zone on the east-side of the Siskiyou Mountains. Douglas-fir predominates, with minor inclusions of pine and evergreen hardwoods such as Pacific Madrone, Tanoak, and Canyon Live Oak.

Soils in the sale area consist primarily of the Beekman-Colestine Complex (6F & 7F). These soil units are moderately deep and well drained, though concerns of slope steepness, erosion, and compaction are still present.

## **II. CURRENT STAND CONDITION:**

*Overstory:* Douglas-fir predominates in the overstory, with minor amounts of incense cedar, grand fir, and hardwood species, primarily Madrone, with black oak and some canyon live oak.

*Understory:* Oregon grape, sword fern, and salal are present in the sparse understory.

*Snags:* Area I has 2.3 snags per acre over 12" due to some mortality in Grand fir. Area II has less than 1 snag per acre.

*Down woody debris:* The amount of large down woody debris ranges from 350-644 cu. ft per acre in classes 1-5.

*Current Stand Structure:* The sale area is 100% CSC (closed single canopy). Much of the stand is dense conifer that is shading out the growth of understory vegetation.

*Insects and disease:* The fir engraver (scolidus spp.) has caused mortality among a noticeable portion of the grand fir in Area I.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand ID <sup>1</sup>	Species	Age 05	DBH	BA	TPA	SDI	Acres <sup>2</sup>
1	PC	5216	DF, GF	55	11.8	164	216	47	69
	PC	5217	DF, GF	41	12.5	157	183	44	46
		Target <sup>3</sup>	DF, GF		13	120	170	35	
2	PC	5214	DF	43	10.9	175	270	52	47
		Target <sup>3</sup>			11	120	180	35	

1 The source of stand inventory information is SLI from the year 2002. Trees over 5.6 inches.

2 The acres listed above are the total gross acres based on GIS including roads, and streams buffers.

3 The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

**III. DESIRED FUTURE CONDITION/VISION:**

The stands listed below have areas of dense conifer with Madrone and other hardwoods interspersed. Though they are labeled closed single canopy in our inventory, they have some patchy layering. Currently the arrangement of the Madrone and other hardwoods provides ladder fuels to the canopy. Treatments will reduce the density opening the stand for understory development and will increase structure across the landscape of Kennedy Gulch. Stand treatments will help achieve the goals in the implementation plan by guiding the stand along a trajectory toward the desired future condition as shown in Table 3 below.

**Table 3. Stand Structure Information:**

Area	Stand ID	Current	Post Harvest <sup>2</sup>	Desired Future	Acres
1	5216	CSC	UDS	LYR	69
	5217	CSC	UDS	UDS	46
2	5214	CSC	UDS	OFS	47

1 The forest management plans for these districts do not contain structure strategies.

2 The stand is expected to develop into this condition in the five to ten years after this operation is completed.

## **Vision:**

The portion of stand 5217 that will be thinned is on the lower slopes and is very similar to 5216, though the Conifer is smaller and more dispersed. Both 5216 and 5217 will move from closed single canopy to understory development with treatment. The conifer is patchy and dense. After the treatment, the overstory conifer will have better spacing, where the crowns will no longer touch. Madrone will be thinned, reducing the ladder fuels. Layering is now patchy where it occurs and presents a fire hazard. After treatment structure will be dispersed across the landscape of Kennedy Gulch reducing the risk of fire reaching the crowns of the overstory Douglas-fir. The overstory trees will have less interspecific competition when their crowns are opened to more sunlight and moisture stress is reduced. In perhaps 20-30 years these overstory trees in Area I will increase in diameter enough for the stands to reach a layered structure. Area II (stand 5214) will have the same goals as those above but may be able to reach the OFS designation in the same amount of time due to the larger residual trees.

## **IV. PROPOSED MANAGEMENT PRESCRIPTION:**

The purpose of the following stand management treatments is to reduce moisture stress and competition lowering the risk presented by disease and wildfire, and to raise revenue for the Counties by removing a small amount of timber. The thinning prescription will retain structure and horizontal layering in a more evenly distributed pattern across the landscape rather than on every acre. Thinning will help reduce interspecies competition and stress on the trees helping to prevent beetle outbreaks and disease. Removing some of the ladder fuels will help prevent fire from reaching the canopies and killing the dominant overstory trees.

*Desired Silvicultural Results:* See Partial Cut Target Stand in Table 2. The commercial prescription will primarily be a basal area thinning from below to remove the suppressed, intermediate and some of the codominant trees from these stands. Some of the healthy advanced understory will be reserved to promote layering. An upper diameter limit will be established to preserve the largest and healthiest trees in the stands. Density management will increase growth and development of the overstory and understory. Thinning these stands will increase the health and vigor of the residual conifer and hardwood trees as well as reduce the likelihood of insects, disease, wildfire, or other stand replacing events. Approximately 5% of the sale area will remain in unthinned patches at least 1 acre in size. These unthinned patches will be randomly placed throughout the sale area. The largest and healthiest trees will be left throughout the sale, as well any trees that have the Old Growth characteristics of rough bark, large limbs and deformed tops. Hardwood trees or patches will be thinned to create growing space for conifers and to improve the health and vigor of the larger residual hardwoods. Opportunities to create small ¼ to one acre openings will be explored during sale layout. These patch cuts provide an opportunity to leave extra down wood. Openings greater than ½ acre will be interplanted while those less than ½ acre will be left to naturally

develop. This combination of partial cutting and group selection emulates the natural processes behind the development of LYR and OFS stands.

*Snags:* Snag creation will be required. Area I will have an after logging target of 1-2 snags per acre and Area II will have an after logging target of 2-3 snags per acre. An estimated 1 to 1.5 snags per acre will occur as a result of logging and natural mortality. The sale area will be assessed after logging to determine the amount of snags to create. It is likely that an additional 1 snag per 2 acres will be created by tree topping or girdling. All pre-existing snags that are not safety or fire hazards will be retained. Any snags that are felled will be retained for down woody debris.

*Down woody debris:* Approximately 100 cu. ft./acre of class 1 debris will be added through normal logging operations including trees that are damaged and eventually blow down and cull log segments required to be left on the ground. Additionally any time a stand is opened up from management activities the possibility of isolated blow down or top breakage exists. No yarding of down woody debris will be permitted.

*Insects and disease:* The sale will focus on removing the trees that have the smaller, less developed crowns, poor vigor and thus are more susceptible to an insects and disease.

*Fuels Modification:* Residual slash, tree tops and limbs, will be burned if unacceptable accumulations remain after harvest.

*Regeneration:* Regeneration from seed will occur naturally as a result of the thinning, especially in group selection areas.

**V. ESTIMATED TIMBER AND REVENUE OUTPUTS:**

The volume is based on SLI numbers for DF 10"-16" and 150 acres net. Project costs will involve a railcar or large culvert for Coyote Creek (\$30,000) and road construction that should not be excessive (Area I- \$15,000 and Area II- \$25,000).

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	0%		X
Planned Quarter:		2	

	Conifer	Hardwood	Total
Net Volume (MBF)	(150*5M=750M)	(150*.2=30M)	\$780
Stumpage Value (\$/MBF)	\$275	\$50	
Estimated Gross Value	\$206,250	\$6,000	\$212,250
		Project Costs:	\$77,000
		Estimated Net Value:	\$135,250

## **VI. HARVESTING AND ACCESS CONSIDERATIONS:**

**Access:** To enter the Kennedy Gulch block (Area I) the forester must take Coyote Creek Road and a private drive that has a permanent easement. But, before entering the unit, one must pass Coyote Creek through a low water crossing. This will have to be improved by a culvert or bridge (estimated at \$30,000). Just past Coyote Creek is a right of way road above a major gas pipeline. Unfortunately the pipeline uses the best grade for a road in the property, and hauling is not allowed directly over and parallel to the pipeline. For this reason, there will have to be new road construction for the length of the timber sale. There will be approximately 1 mile of new road construction (\$15,000) in the sale area, however this road will utilize old road grades and will have mild side slopes requiring very little end-haul. The new road will cross several seasonal streams requiring about at least seven culverts (\$7,000). Area II will need about a half mile of new road requiring some end-haul (\$25,000). Project costs are estimated at 36% of the gross sale value.

**Harvesting:** Area I will be 60-75% tractor loggable and/or cable loggable with short corridors of 500 feet or less. Some portions of the sale have slopes of up to 50%. Area II is primarily a cable logging area with slopes from 35-60%. At this point the sale will be logged in the summer. The road specialist will be looking for veins of quarry rock along the new construction to place on the road.

**Table 5. Transportation Management Summary (Miles)**

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct				2.0
Improve				
Maintain				
Close/Block				
Vacate				

\* For determination of road class, either use results of the Harvest and Habitat roads classifications, or if this information is not available then low use roads are spurs, medium use roads are collectors and high use roads are mainlines. Use these same criteria when comparing the total for all AOP sales to the IP.

## **VII. AQUATIC RESOURCES AND WATER QUALITY:**

A tributary of Coyote Creek runs 60% of the length of Area I. This fish-bearing stream will be buffered according to the southwest riparian strategies as outlined in the Management Plan. Several seasonal draws lead toward the stream. For the most part they only flow during heavy rains in the winter. To the extent that harvesting will be occurring in the "inner" and "outer" RMA zones, live tree and snag retention will exceed the requirement standards in the SWO FMP. Area II has no streams.

## **VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:**

*Northern Spotted Owl:* The SOA Wildlife Biologist has determined that the sale area may be suitable for Northern Spotted Owls due to the age and size of the trees. Surveys for NSO's have taken place in 2004-2005 and will continue in 2006. As a result of these surveys, 1 northern spotted owl site has been identified within 1.3 miles of this sale.

A biological assessment will be prepared by the ODF SOA Biologist to assure that the appropriate measures are taken to provide sufficient habitat on the landscape consistent with ODF's policy on Northern Spotted Owls. Seasonal restrictions may be necessary to prevent disturbance during the nesting season.

*Marbled Murrelet:* This sale is outside the known inland range of the marbled murrelet and will not require surveys.

*Threatened and Endangered Fish:* A tributary to Coyote Creek, a small fish-bearing stream borders the eastern portion of Area I. This stream may be seasonal, and it is not known if it is used by Coho salmon. The stream will be posted according to the Southwest Oregon Forest Management Plan riparian management area rules. For additional protection measures to prevent sediment from entering perennial streams see Section VI – Harvesting and Access Considerations, Section VII – Aquatic Resources and Water Quality, and Section IX – Slope Stability and Geotechnical Issues.

*Threatened and Endangered Plants:* The sale area was checked against District knowledge for any listed plant location as well as the Oregon Natural Heritage Program (ONHP) database of known listed plant locations. No records were found.

## **IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:**

Slopes are fairly tame on this sale. Area II has steeper slopes up to 60%. A hazard assessment of slope stability will be conducted by a Geotechnical Specialist.

## **X. RECREATION RESOURCES:**

There are no developed trails or facilities in close proximity to the sale. The Windy Creek Campground is the nearest recreation facility to the timber sale.

## **XI. CULTURAL RESOURCES:**

A pre-sale reconnaissance revealed no cultural resources in the sale area.

## **XII. SCENIC RESOURCES:**

The Visual Classification is rated as Level III – Low Sensitivity.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

There are no other resource considerations within or adjacent to the sale area.

**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

The table below shows the land classification of our stream and recreation acres within the sale area. The stream types will be verified on the ground during the sale layout process, by determining the end of the stream channels within the sale area.

**Table 6. Land Management Classification Summary**

Area	LMCS Subclass	Focused Stewardship	Special Stewardship
1	Aquatic & Riparian	38	29
2	Aquatic & Riparian	18	0

This table summarizes the acres of Focused and Special Stewardship within the operations. The acres each operational area in this table do not necessarily add up to its gross or net acres, because of overlapping classifications under the Land Management Classification System. For example, a particular acre can be classified as Focused Stewardship for Aquatic and Riparian, Recreation, and Scenic resources.

**ATTACH Biologic Assessments (where necessary)**

ATTACH MAP