

Little River AMA – Collaborative Forestry Meeting June 10, 2010

Discussion will focus on the 0-39 years-old age group (LEMONS)

This group constitutes about 37% of the BLM portion of the AMA

This age group contains a wide range of tree sizes and due to high growth potential in this stage of forest development the stand structure changes rapidly over time.

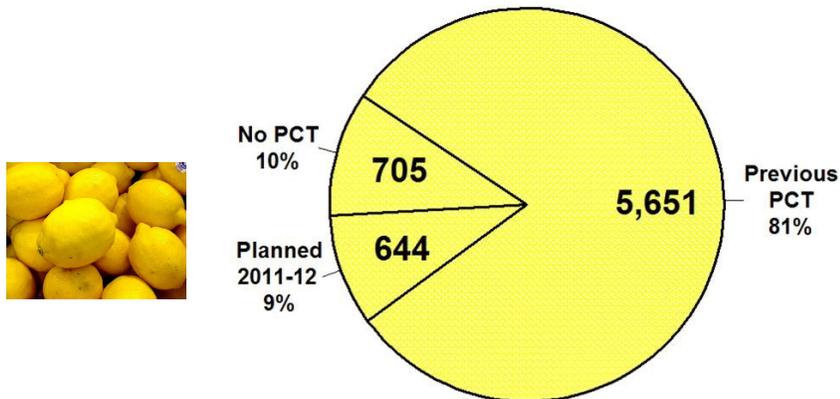


Except during times of very favorable markets economic wood extraction is not usually possible.

The following graphs show the density status (precommercially thinned or not) of stands within the 0-39 years-old age group, and the total acreage breakdown by five year increments.

Little River AMA - Roseburg BLM

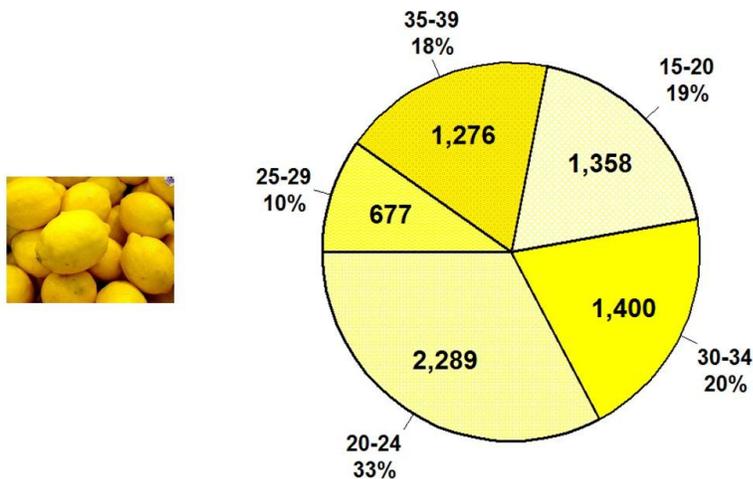
Precommercial Thinning (PCT) Status - 2010



Age Class 0-39 Years-old

Little River AMA - Roseburg BLM

Acres by Age Group - 2010



Age Class 0-39 Years-old

Principal stand management activities commonly done during this stage of stand development include:

- precommercial thinning
- pruning
- fertilization

These activities are funded primarily through Congressionally appropriated funds.

Activity Name: Precommercial Thinning (PCT)

Activity Description & Purpose:

Reduces the density of trees within a stand by manual cutting or girdling to maintain or promote growth increases of desirable tree species. The trees killed are generally *unmerchantable* and retained on the treated area.

Optimum target age for treatment is stands between approximately 10-20 years-old, although older stands may be initially thinned or rethinned for habitat development purposes.



Treatment thresholds and specifications may vary by land use allocation (LUA) objectives. The table below shows common management guidelines.

GUIDELINES FOR PRECOMMERCIAL THINNING TREATMENTS		
STAND CHARACTERISTIC	LAND USE ALLOCATION	
	GENERAL FOREST MANAGEMENT AREA	CONNECTIVITY & LATE-SUCCESSIONAL RESERVES
Pre-thin Density	> 350-400/acre	> 250-300/acre
Pre-thin Conifer Height	10'-30'	10'-30'
Pre-thin Stand Age ¹	8-20 years	8-20 years
Post-thin Conifer Density	250-300/acre	150-220/acre
Post-thin Hardwood Density ²	3-10/acre	10-45/acre
Hardwoods ≥ 8" dbh	Retain	Retain
Post-thin Species Composition	Generally favors faster growing condition for conifers	Generally favors faster growing condition for conifers
Spacing Variation	+/- 20 %	+/- 20 %
Unthinned Clumps & Openings	No unthinned clumps, no increase or enlargement of openings	≤ 5% of area retained unthinned clumps, no increase or enlargement of openings
Conifers ≥ 8" dbh	Retain	Retain
Snags	Retain	Retain
Coarse Woody Debris	Not Applicable	Not Applicable

¹ Shown for reference only. Treatment should be based on average heights of regeneration not age

Treatment Rationale:

Assumption of timely implementation of PCT treatments is a component of the Allowable Sale Quantity (ASQ) calculation on timber base lands. PCT can promote development of specific wildlife habitat attributes on non-ASQ lands.

Density reduction maintains or improves tree vigor and stand stability which contributes to the maintenance of a wider range of future management options.

PCT provides a source of employment for workers in rural areas.

Activity Name: **Pruning**

Activity Description & Purpose:

Live and dead branches are removed from lower bole of suitable trees to enhance future wood quality/value for commodity purposes, usually in precommercially thinned stands over 15-years-old.

Pruning is also done for fire/fuels management objectives and disease mitigation (white pine blister rust).

Treatment Rationale:

While future markets for clear wood are unknown with any degree of certainty, recent economic analysis by the PNW Experiment Station suggests that price premiums are projected to persist for clear wood into the future. BLM could fill a niche market need for clear wood and the enhanced value could result in increase future sales revenue and payments to the counties. Projected forest industry short rotations preclude any substantial provision of clear wood from their harvests.

Pruning provides a source of employment for workers in rural areas



Activity Name: **Fertilization**

Activity Description & Purpose:

Forest stand growth in western Oregon is often limited by the supply of available nutrients, particularly by available nitrogen. The supply of soil nutrients can be augmented through fertilization. Fertilization actions are usually designed to apply 200 pounds of available nitrogen with helicopters in the form of urea based prill (46 percent available nitrogen) or with a mixture of other nutrient elements in addition to nitrogen.



Generally the practice has been confined to ASQ base lands where commodity production is the dominant objective. However, application on non-ASQ lands for wildlife habitat development or riparian management objectives may be appropriate where accelerated tree and stand growth is desired.

Fertilizer is usually applied subsequent to a thinning treatment, either precommercial or commercial.

Treatment Rationale:

Fertilization can result in increased stand volume growth, individual tree growth and decrease “thinning shock”. Application following thinnings in stands less than 70 years-old is incorporated in ASQ calculations. Fertilization can shorten the time to first “merchantability”, i.e. promotes faster diameter growth and stand development that provides for earlier economic commercial harvests.