

Gifford Pinchot National Forest
Cowlitz Valley Ranger District
Southwest Washington

RAC Thinning Project
Lodgeberry



Project Location

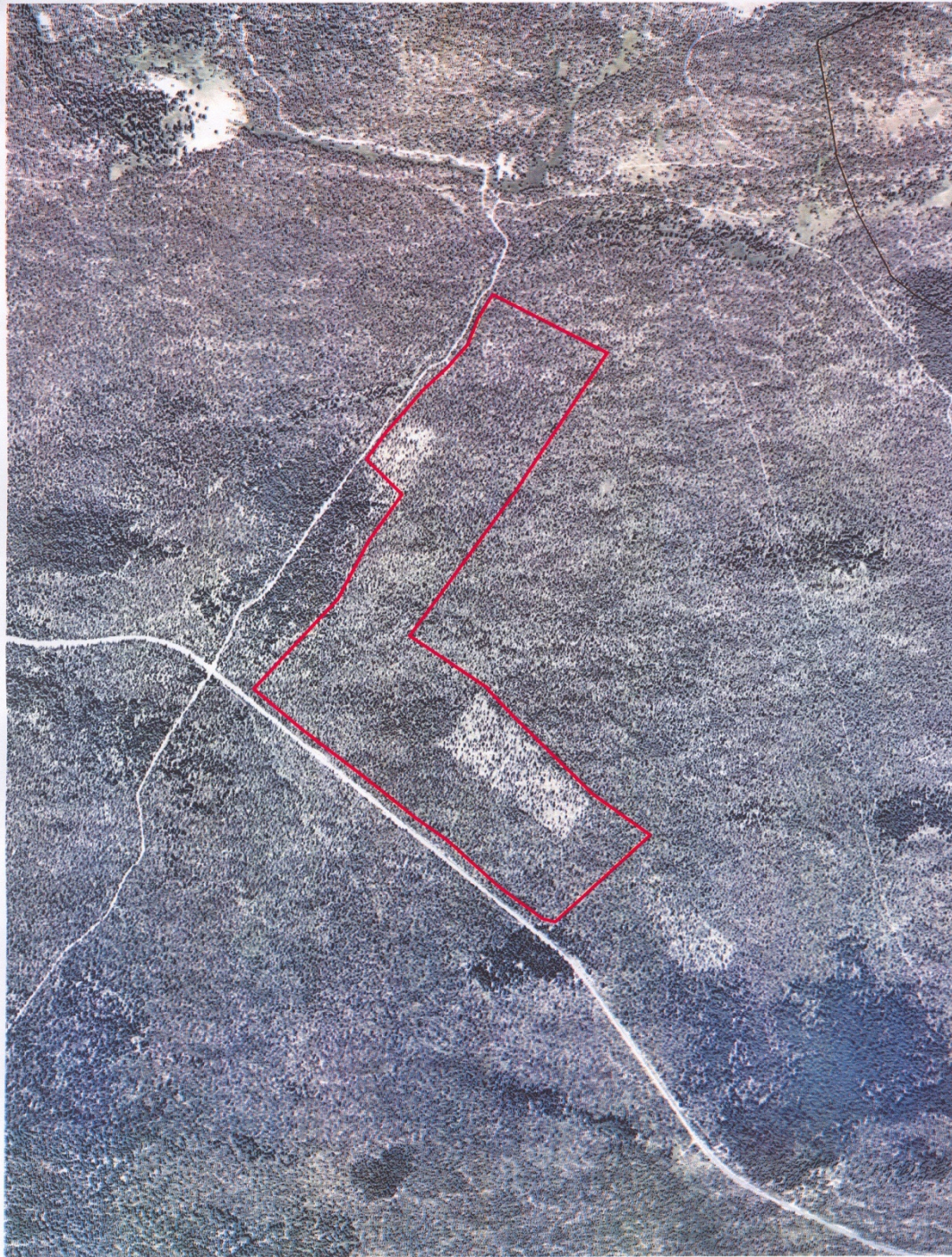
- Volcanic flat 2 ½ miles north of Mt Adams Wilderness and 2 miles east of the Yakima Reservation boundary.
- Cispus Adaptive Management Area, 25 miles southeast of Randle, WA.
- Lodgepole Landscape Design Unit = 8100 acres, elevation ranges 3200 to 4700 feet.
- Vegetation dominated by continuous young stands of LP, SAF, MH naturally regenerated following periodic fires.



Lodgeberry Stand History

- Fire regenerated stand resulting from the 30,000 acre Two Lakes fire in 1918.
- Stand made up of a variety of species and age classes with lodgepole pine being the dominant species.
- Ground vegetation is primarily beargrass and huckleberry.





Lodgeberry Biological Attributes

- Species LP-63%, SAF-19%, WWP-10%, MH-4%, ES-3%, NF-1%
- 2742 tpa, 265>4", 150>6", 80>8"
- Plant Association = TSME/VAME
- Age: 5-80 years
- WPBR on some western white pine.





Lodgeberry Physical Attributes

- 4400 feet elevation, flat to westerly aspect, 0-10% slopes.
- Soils are shallow to mod deep derived from residuum /glacial till, cold soil temps.
- Up to 4" of tephra present from the 1980 MSH eruption.
- Surface soils are very thin sandy loams or loamy sands.





Previous AMA Treatments

- Lodgepole Fire Hazard Reduction Project initiated in 1998.
- Purpose is to test 4 methods of treating young LP to reduce fire hazard.



LFHR Treatments

- Treatment 1 – thin conifers > 3' tall and < 4 " diameter. BB slash.
- Treatment 2 – thin conifers > 3' tall and < 6" diameter. BB slash.
- Treatment 3 – thin conifers > 3' tall and < 8" diameter. BB slash.
- Treatment 4 – thin conifers > 3' tall and < 8" diameter. HP/Burn slash.



* U.S.

150' buffer / Ken Meyer



4r
 ① 2-4" 2-6" 2-8" 1-HP ≈ 700
 ② 2-4" 2-6" 2-8" 7-HP ≈ 900
 ③ 2-4" 2-6" 2-8" 2-HP ≈ 800
 240

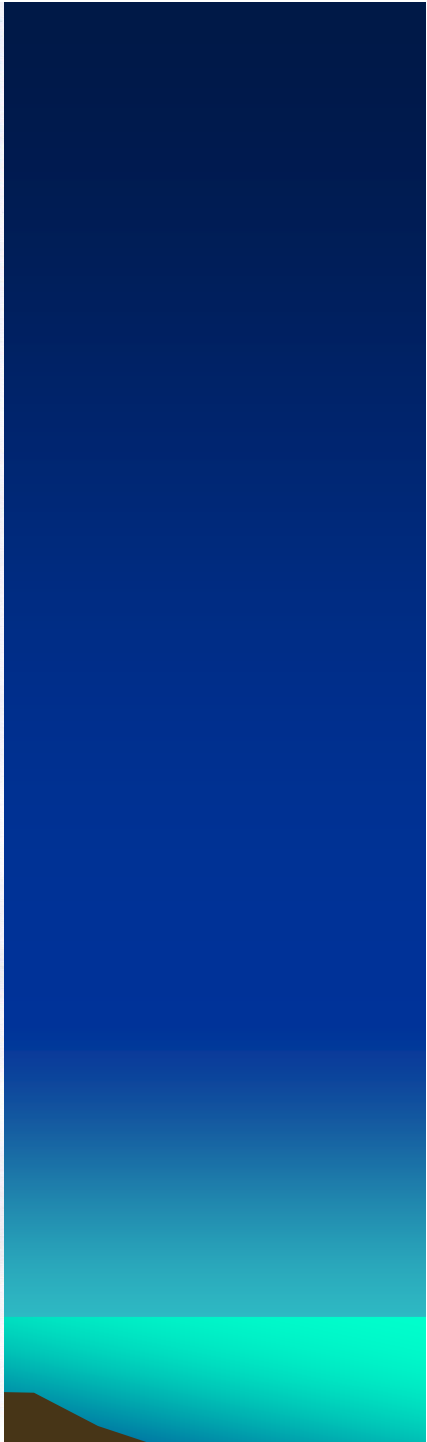
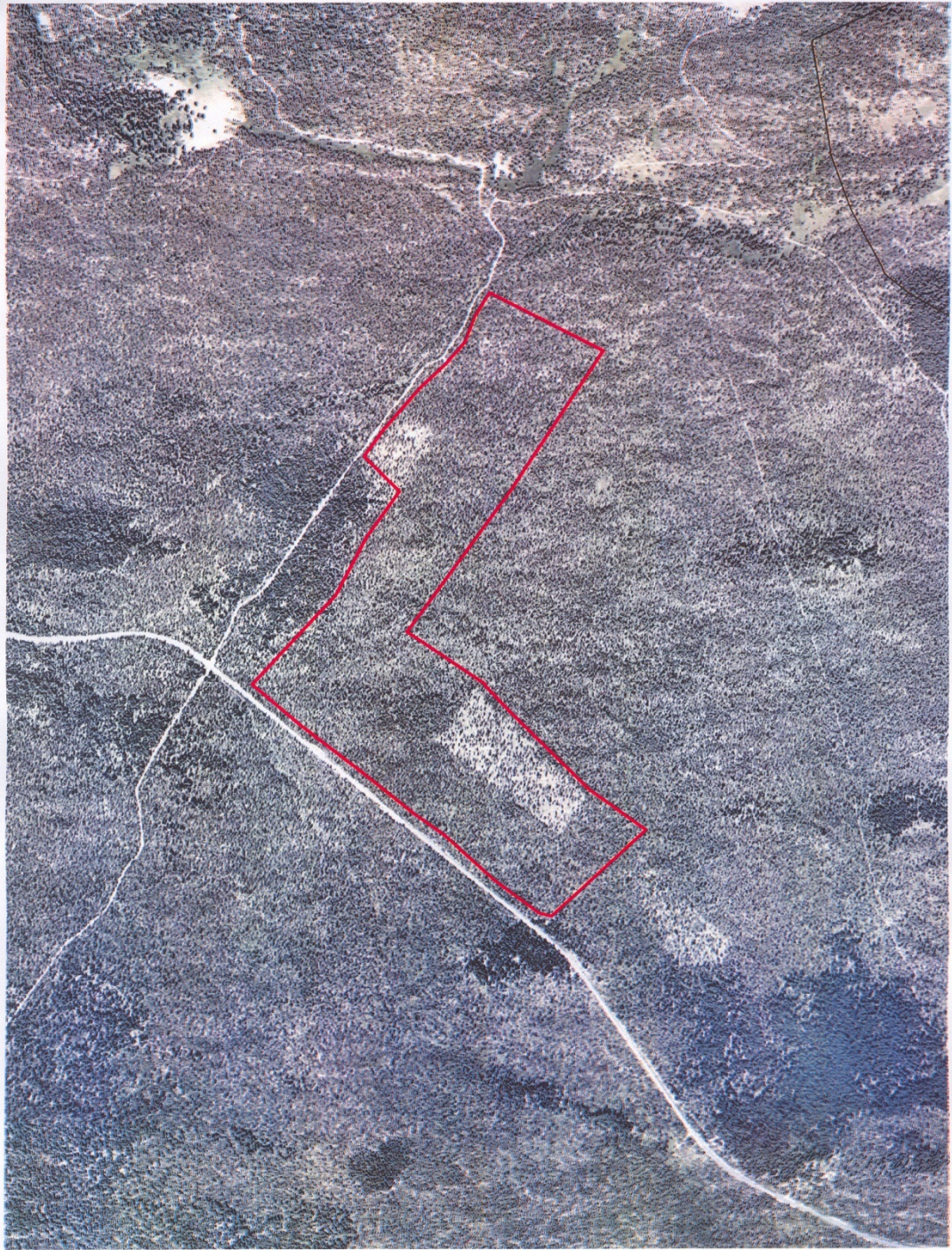
HP
 4"
 6"
 8"

Post-Treatment Monitoring

November 2007

- Determined cutting material $< 8''$ effective for fire hazard reduction and potential huckleberry production.
- Some release of huckleberry noted though vigorous response observed in bear grass.
- **Note:** broadcast burning attempted in 1999 and determined too risky due to short burn window with fire season (late June or July).









1997 LFHR Rx

- Non-commercially thin trees > 3' tall and < 8" diameter to a 20' spacing between tree crowns or 30' spacing between trees. 50 tpa.
- Leave all deciduous hardwoods and whitebark pine.
- Broadcast burn thinning slash.
- Variable 25-50' buffer along FR 2329 & 5603.



2008 Lodgeberry Rx change to original Rx

- No broadcast burning.
- Lop thinning slash to a 24" height.
- Cut five-needle pine infected with WPBR.



Potential Opportunity described in the 1997 Rx

- Special forest products are abundant in lodgepole pine forests, including beargrass and huckleberries.
- This area is a traditional hunting and gathering place.
- Learning opportunities exist to determine natural production levels of special forest products.



Huckleberry Production Monitoring

- Install post treatment transects or fixed plots in thinned areas to compare with untreated areas.
- Looking for some ideas from this workshop.



