SUCCESS STORIES

Western Bark Beetle Initiative **Region 5**

STRIVING FOR HEALTHY FORESTS

A Partnership between Forest Health Protection and the Klamath National Forest

Figure 1. Pre-treatment tree density, March 2009.

From 2006 to 2009 the Goosenest Ranger District, Klamath National Forest, used Forest Health Protection funds from the Western Bark Beetle Initiative (WBBI) to thin over 1,900 acres of over-crowded ponderosa pine plantations in the Tennant, La Honda, and Thompson Ranch Wildland Urban Interfaces (WUIs), located east of the rural community of Tennant, California. The plantations were planted in the early 1980s and 1990s and were densely overstocked with ponderosa pine and a thick understory of older rabbit brush, bitterbrush, and manzanita. Trees were stressed due to high densities (350 to 500 trees per acre) and the competing understory woody vegetation (Figure 1). Recent drought conditions further decreased trees' resistance to western and mountain pine beetle attacks and increased their susceptibility to annosus root disease.

WBBI funds were used to thin (Figure 2), stack, and pile trees at a treatment cost of $150 per acre, and met the desired stand density objective of 100 to 150 trees per acre. The project was developed using an interdisciplinary approach with involvement from the NEPA coordinator, wildlife biologist, fire and fuels specialist, and silviculturist. Thinning treatments resulted in reduced susceptibility to insects and diseases and improved and protected habitat for several important wildlife species including prairie falcon, Cooper's hawk, flammulated owl and white headed woodpecker. Thinned plantations will also contribute to long-term habitat improvement for big game species by increasing new understory growth of plants and grasses for forage. Natural pockets of larger trees were also left as wildlife islands to provide summer and winter cover.

Figure 2. ASV Posi-track equipped with a Dymax 14-inch tree sheer.

Figure 3. Post-treatment stand, same location as Figure 1, March 2009.

Goosenest Ranger District projects have been effective at reducing wildfire risk and stand susceptibility to insects and diseases. Prior to this treatment these plantations had high levels of fuels and posed a threat to several rural communities within the area. Post-treatment, trees are healthier and less susceptible to bark beetle attacks, root disease, and drought. In addition, reductions were achieved in surface and ladder fuels and the overall stand density index. Doodle piles (Figure 3) will soon be chipped (bio-mass) for use as fuel in co-regeneration power plants in California and Oregon. An end result of this project is a decreased risk from catastrophic wildfire to communities in and around the treated plantations, making these areas a safer place to live, work, and play.

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