



United States  
Department of Agriculture

Forest Service

Shasta-Trinity National Forest  
Headquarters

Forest Health Protection,  
Northern California Shared  
Service Area

3644 Avtech Parkway  
Redding, CA 96002  
(530) 226-2500  
(530) 226-2490 – TDD  
[www.fs.fed.us/r5/shastatrinity](http://www.fs.fed.us/r5/shastatrinity)

File Code: 3420  
Route To:

Date: September 28, 2007

Subject: Biological Evaluation of Scott Bar Mountain Plantation Thinning Project (FHP Report No. N07-12)

To: Peg Boland, Forest Supervisor, Klamath National Forest

On September 12, 2007, in response to a request for proposals for Forest Pest Management Suppression/Prevention projects, Roger Siemers (Klamath National Forest SO) sent me a proposal from Dave Burgess and Carl Varak (Salmon/Scott River Ranger District) to implement 76 acres of precommercial thinning in the Scott Bar Mountains of the Scott River Ranger District of the Klamath National Forest. This project was previously submitted for funding for FY2006, but was turned down because of a lack of sufficient suppression/prevention program funding in the Region. NEPA for the project is complete (a Categorical Exclusion), and it is ready for implementation.

The Scott Bar Mountain plantation area is located approximately 12-15 miles west of Fort Jones, CA. Project plantations are in a Wildland Urban Interface (WUI) area on Matrix land. Entomologist Dave Schultz and I have visited the plantations at least a couple of times, most recently on July 19, 2005. The plantations consist mainly of precommercial sized ponderosa pine, though smaller numbers of seeded-in Douglas-fir, white fir and incense cedar are also present (Figures 1 and 2). Plantation trees are mostly 25-30-years old, though in



Figure 1. Overstocked ponderosa pine plantation at Scott Bar Mountain



Figure 2. Overstocked ponderosa pine plantation at Scott Bar Mountain



many areas, a well-developed understory of younger, smaller trees is also present. The stands are becoming quite dense, and the risk to attack by western and mountain pine beetle (*Dendroctonus brevicomis* and *Dendroctonus ponderosae*, respectively) is increasing fast. The risk to crown fire and mortality from drought is likewise increasing.

To address this problem, the District plans to thin the plantations from below, leaving only the healthiest, most vigorous, defect-free overstory trees. Healthy Douglas-fir, white fir, incense cedar and hardwoods will likewise be retained as much as possible to enhance vegetative species diversity. Underburning will then be done to reduce the amount of fuels left from the treatment.

The proposed treatment, if fully implemented, should be effective in addressing concerns regarding bark beetles, fire and drought. To be most effective, the thinning should be implemented in a manner that is consistent with recent direction from the Regional Forester, that suggests that thinnings should be designed to “ensure that density does not exceed an upper limit (for example: 90% of normal basal area, or 60% of maximum stand density index)” and to “design thinnings to ensure that this level will not be reached again for at least 20 years after thinning.” (Regional Forester letter, “Conifer Forest Density Management for Multiple Objectives”, July 14, 2004). Also, in order to ensure that annosus root disease is not introduced into the stands, any freshly cut conifer stumps larger than 14 inches in diameter should be treated with a registered borate compound, such as Sproax.

In summary, the thinning project proposal at Scott Bar Mountain has my support, and I recommend it for consideration for FPM Suppression/Prevention project funding. The proposed treatment has a good potential to reduce the risk of bark beetle attack, and will provide several additional benefits, including reducing potential impacts of drought and fire in the WUI, and producing more diverse and resilient stand structure. In addition, the Scott River Ranger District and Klamath National Forest have an excellent record of accomplishment in the planning and timely implementation of similar thinning treatments.

Please feel free to call if you have any questions regarding this report.

PETE ANGWIN  
Plant Pathologist  
Forest Health Protection  
Northern California Shared Service Area

CC: ROGER SIEMERS, DAN BLESSING, RAY HAUPT, JOHN BUEHLER, BILL BAILEY, DAVE BURGESS, CARL VARAK, JULIE LYDICK, PHIL CANNON AND SHERI SMITH