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Department of Agriculture

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**Route To:**

**Subject:** Biological Evaluation of Refuge LSR Forest Pest Management  
Suppression/Prevention Project (FHP Report No. N07-10)

**To:** Tom Contreras, Forest Supervisor, Mendocino National Forest

In Fiscal Year (FY) 2003, 2004 and 2006, the Upper Lake Ranger District received Forest Pest Management Suppression/Prevention project funds to implement thinning treatments in forest plantations in the Refuge Late Successional Reserve (LSR). In 2003 and 2004, 100 acres per year were successfully thinned. In 2006, the contract bids that were received for 79 acres of new thinning were well over the government estimate of costs, so a contract was not awarded. A request to carry the funds into FY 2007 was made so that the District could offer the contract again, but because there were no carryover funds that year, the request was denied. As a result, Nancy Mulligan and Nancy Gard have submitted a new Suppression/Prevention proposal for FY2008 so the work may again be submitted for bid and the work may be implemented. \$50,000 is being requested to accomplish thinning and mastication on 79 acres.

The Refuge LSR is located approximately 12 miles southwest of Elk Creek, CA in the southern end of the California coastal mountain range. The LSR lies between 2,200 and 6,900 feet in elevation and includes approximately 43,805 acres of Forest Service land. The main management objective for the LSR is to maintain and enhance late seral forest characteristics by addressing wildlife needs, fuels concerns, forest composition and stand structure. The LSR is home to populations of northern spotted owl, which is on the threatened and endangered species list, and northern goshawk, which is on the sensitive species list. In addition, unconfirmed sightings of the American marten and pacific fisher (both on the sensitive species list) have also been reported. Currently, 39% of the land in the LSR is in plantations and young stands that have the potential to develop into late successional habitat. The plantations were established on high productivity sites following salvage logging after the 1987 Mendenhall Fire.

Entomologist Dave Schultz and I have visited the Refuge LSR on several occasions. The plantations are composed mainly of a mix of ponderosa pine (~40-50%) and Douglas-fir (~40%), with smaller amounts of sugar pine (~10-20%). Some reseeded incense cedar and resprouted black oak and madrone are also present. At 20-years-old, the plantations are exceedingly dense, with stocking averaging 400-600 (or more) trees per acre. The crowns are now closing, and thinning has been needed for several years to reduce the risk of western and mountain pine beetle outbreak in the pine and drought/density-caused mortality in all species. In addition, because adequate site preparation was not done following the fire, the plantations are also at high risk of being destroyed by fire. White pine blister rust is relatively uncommon in the sugar pine.



Thinning and mastication to accomplish both stocking and fuels reduction is badly needed in the stands. Without treatment, it is very unlikely that the plantations will achieve the late successional characteristics for which they are currently being managed. In 2003 and 2004, the Upper Lake District treated 100 acres each year, and they believe that they can successfully offer up a new contract to accomplish more. The project is ready for implementation. NEPA was completed in FY06, using NFWF/NFVW funds. Costs of contract preparation, inspection and post-treatment monitoring will continue to be paid for with NFWF and NFVW funds. In addition, all required consultations with the US Fish and Wildlife Service have been completed.

I support the Upper Lake Ranger District's efforts to thin the plantations at the Refuge LSR. The treatments will reduce susceptibility to bark beetle attack and fire, and help to develop critically needed late successional habitat.

Please feel free to call if you have any questions or would like to discuss my recommendation regarding this Forest Pest Management Suppression/Prevention project proposal.

PETE ANGWIN  
Plant Pathologist  
Forest Health Protection  
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cc: Lee Johnson, Nancy Mulligan, Nancy Gard, Sheri Smith, Julie Lydick and Phil Cannon