PCWA-L-373

United States Department of Agriculture
Forest Service
American River Ranger District
22830 Foresthill Road
Foresthill, CA
95631
530 367-2224
530 367-2226 TDD
530 367-2992 FAX

RECEIVED AUG 19 2005

File Code: 1950-1

Date: August 11, 2005

Dear Interested Party:

The American River Ranger District of the Tahoe National Forest is preparing an Environmental Assessment that will analyze the effects of thinning overcrowded trees in the Dolly Creek area east of French Meadows Reservoir. The interdisciplinary team and Responsible Official are seeking meaningful input during project planning and prior to making a decision. The stand is part of a California Spotted Owl Home Range Core Area (HRCA) and the purpose of the thinning is to provide a study site to evaluate how canopy cover modifications affect the owls. The researchers selected the Dolly HRCA and a brief outline of the study is enclosed for your interest. Timing is critical, as this study is based on the assumption that the planning process and treatments can occur within one year.

The action that is being analyzed is to participate in the study by thinning approximately 300 acres (see attached map) with ground-based equipment. The standards and guidelines identified in the Sierra Nevada Forest Plan Amendment (2004) will be followed. The thinning will retain all live conifers 24 inches in diameter at breast height or larger and 50 percent canopy cover will also be retained. Ladder fuel and tree densities will be reduced by removing understory trees greater than 8 inches in diameter and up to 24 inches in diameter and retaining the largest and healthiest tree roughly every 20 feet. The designated trees will be felled by hand or with mechanized equipment, yarded to a designated landing location and offered under a timber sale contract for removal and utilization. The HRCA will be thinned on slopes less than 25% with ground-based equipment including chainsaws and mechanical harvesters. Short pitches less than 150 feet long and up to 30% in slope will also be included. Trees will be whole tree yarded (limbs and tops attached to the bole) and a borate compound will be applied to cut stumps to avoid the spread of Annosus root disease. Follow-up fuels reduction work, including machine piling and underburning, will occur when the study is complete.

Management requirements that would be built into the project standards include protecting the streams, cultural and historical sites and wildlife habitat. The management requirements are enclosed for your consideration.

TO	DATE	INFO	ACTION
Gnl. Mgr. DP	8-19		
Directors			
Attorney	8.23	X	
Brd. Clerk			
Resource Dev.	8.23	X	
Dept. Heads			
Mgt. Team			
Admin. Serv. Dir.			
Cust. Serv. Dir.			
Field Serv. Dir.			
Finance Dir.			
Pwr. Sys. Mgr.	8.23	X	
Stg. Aff. Dir.	8.23	X	
Tech. Serv. Dir.			
Ed Horton	8.23	X	

The resource specialists are completing their evaluation of the environmental consequences and they have determined that these actions will not have significant environmental effects. The project is located within five sub-watersheds. Past timber harvest activities in and around this project area included harvesting pockets of blown down timber in 1984 with follow-up reforestation and timber stand improvement activities. Also, the French EA and the follow-up French Helicopter timber sale thinned approximately 500 acres in 2002.

The decision maker and interdisciplinary team of resource specialists are seeking meaningful input on this proposal prior to the decision. The opportunity to comment ends 30 days following the publication date of this legal notice in the Auburn Journal. Only those who submit timely and substantive comments will be accepted as appellants. Appeal eligibility also requires each individual or representative from each organization submitting substantive comments to either sign the comments or verify their identity upon request. Comments should be sent to Jan Cutts, District Ranger, 22830 Foresthill Rd., Foresthill, CA 95631, phone: 530-478-6254, facsimile: 530-367-2992, email: jcutts@fs.fed.us. Hand delivered comments will be accepted. District office hours are 8:00 AM to 5:00 PM, Monday through Friday.

Sincerely,

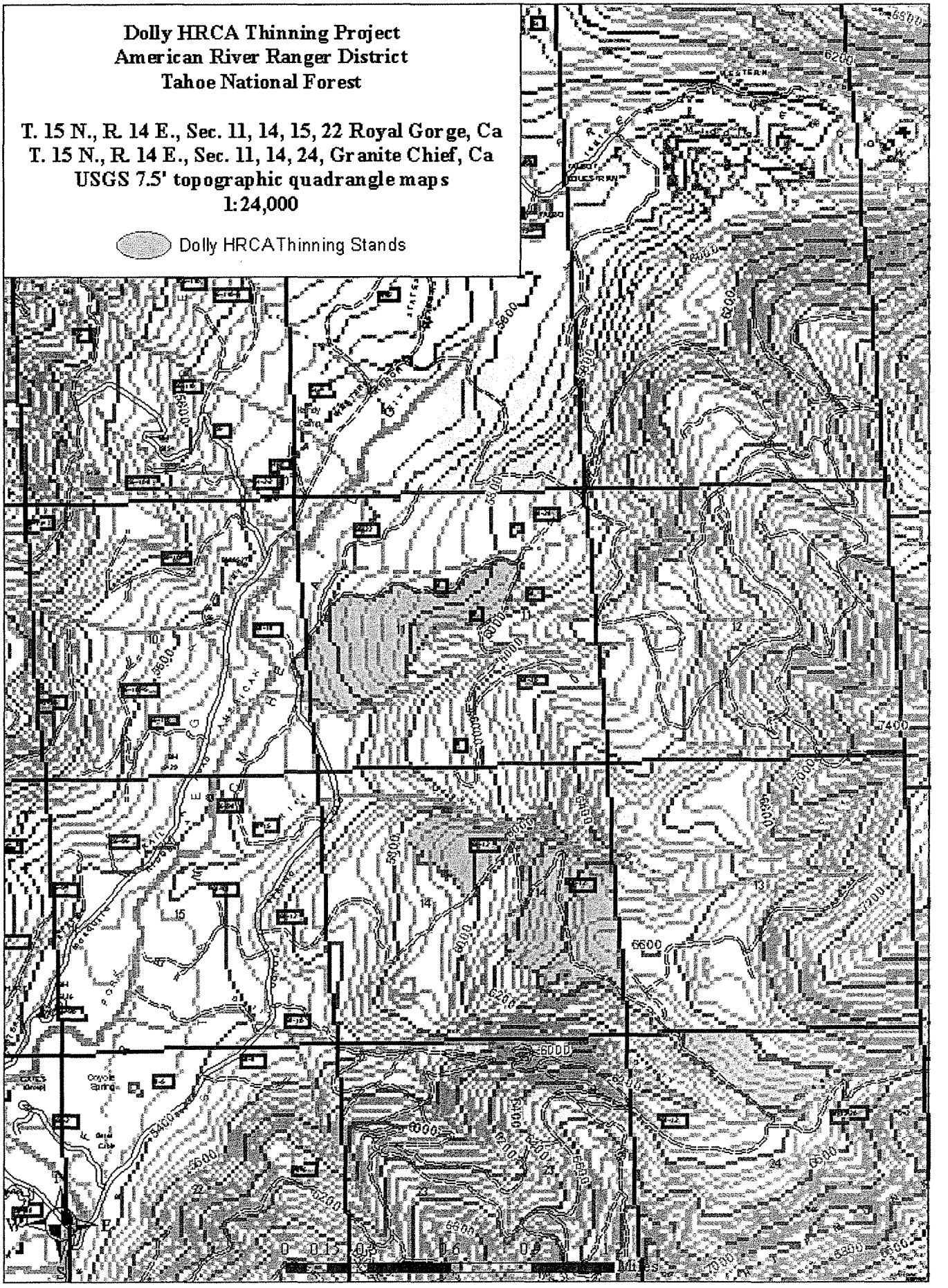
JAN S. CUTTS
District Ranger

Enclosure 1

Dolly HRCA Thinning Project
American River Ranger District
Tahoe National Forest

T. 15 N., R. 14 E., Sec. 11, 14, 15, 22 Royal Gorge, Ca
T. 15 N., R. 14 E., Sec. 11, 14, 24, Granite Chief, Ca
USGS 7.5' topographic quadrangle maps
1:24,000

Dolly HRCA Thinning Stands



Effect of Canopy Cover Reduction on Spotted Owls in the Sierra Nevada
(Proposal presented by Dr. R. Gutierrez, Mark Siemens, and Dr. Peter Stein)

The Sierra Nevada Forest Plan Amendment (SNFPA) sets forth a strategy for vegetation management to reduce the risk of wildfire to communities and change wildfire behavior on the landscape. Management prescriptions include thinning forests surrounding communities and strategically placing fuel breaks throughout the landscape. The SNFPA will modify habitat within and around spotted owl sites. Further, the SNFPA acknowledges there is a risk to spotted owls, and some other species, associated with the proposed strategies. However, there is uncertainty regarding the magnitude of the effect on spotted owls. Moreover, it is unclear how these strategies could be modified to reduce the risk to these species. Monitoring of canopy reduction effects on owls provides the best approach to reducing this risk, and will support the adaptive management approach prescribed in the SNFPA.

California spotted owls are associated with mature forest (Gutiérrez et al. 1992). One of the key uncertainties and a priority management question from the SNFPA (Vol. 1 pg 73):

"How do individuals and/or pairs of California spotted owls respond to reductions in canopy cover over some portion of their home range core area (HRCA)? Mechanical thinning of forests to reduce fuels hazards will address some ladder fuels and crown fuels in order to reduce the fuels condition class to acceptable conditions. This will reduce the number of trees by some amount (depending on pre-treatment stand conditions) with no trees greater than or equal to 30 inches removed and will reduce crown closure by as much as 30% and down to as low as 40% average within a stand."

The SNFPA also notes the uncertainty regarding how spotted owls respond to mechanical treatments within protected activity centers (PACs).

Under SNFPA, canopy reduction within owl habitat is allowed only in wildland-urban interface (WUI) zones and in the land outside of spotted owl PACs. Prescribed fire is the only allowed treatment in PACs. The general rules outside WUIs and PACs will be to maintain all trees <30", strive to maintain >50% canopy cover (but retain >40%), and do not reduce canopy cover >30% per treatment. A third area of

it is the birds that will respond to treatments. In addition, it is possible that we may not be able to capture some owls or some owls or radios may die. Thus, in addition, selection of watersheds as treatments was rejected because of the same problems as well as the complexity of generating sufficient treatments over such a large scale in such a short time frame.

We anticipate loss of birds or transmitters as a result of natural causes or events. Therefore, we will strive for a sample of 10 owl pairs (5 treatments and 5 controls), a sample we feel is large enough to provide useful information. In addition, since the sample unit is the territory, it is possible that we may not be able to capture and radio mark both members of each pair. However, if one member of the pair is marked, we can still achieve an adequate sample except that inferences about differential responses by the sexes will be reduced.

Birds will be captured as above, banded (if not already banded), color-marked (if not already color-marked), and marked with radio transmitters. We will use tail-mounted transmitters (company and model not yet determined) that fall within the specified mass guidelines of the U.S. Fish and Wildlife Service for this species. We anticipate using transmitters that are programed to turn off and on at specified times. It is possible that this transmitter feature will not be available for use due to technical or mass limitations. If programable transmitters are not available we will use standard spotted owl transmitters, but we will have to recapture birds to replace them when necessary.

There are several technical difficulties that we may encounter with spotted owl transmitters. First, transmitters or batteries may fail, which would require replacement. Second, birds may spontaneously molt if transmitters cause irritation. Third, birds may move or die, which would require capturing and marking replacement birds. Fourth, adult birds naturally molt approximately every two years. All of these factors have been encountered and dealt with throughout the history of spotted owl monitoring and research. With the advent of snare poles, it is much easier to capture birds that are wise to previous capture. Historically, once captured with a mist net or noose pole, spotted owls were much more difficult to capture a second time. Snare poles do not seem to invoke the same evasive response by the owls. In addition, backpack-type radio transmitter attachment seemed to make birds much more evasive to recapture. Tail mounts do not invoke the same response. Thus, despite the technical difficulties, advances in telemetry,

to canopy cover reduction treatment to save battery life.

Habitat Assessment: Concomitant to telemetry monitoring and treatment layout, we will sample each treatment area with respect to structural features known to be important to owls. That is, we will sample percent canopy closure, shrub cover, coarse woody debris, tree density and sizes, diameter distribution etc. before and after treatments at the each site in order to evaluate the degree to which the habitat was modified. This will allow us to examine if a treatment effect only occurs at or beyond some threshold value of canopy closure in relation to other habitat metrics. Sampling will follow standard protocols for spotted owls except that canopy closure will be sample in several ways (spherical densimeter, densitometer, moose horn, aerial photography, and digital photographs) because this is the central theme of the treatment.

Potential owl response to treatments: Response parameters of interest in the acute phase of the study would be the owl behavioral response to treatment (avoidance or attraction to treatment), change in home range shape, change in home range size, and intensity of use of treatment or alternative areas, and mortality. In addition, we will use night vision goggles in an exploratory sampling manner to observe owl behavior during harvest. We will also collect fecal samples before, during, and after harvest to assess their response to a major disturbance stimulus in their territories.

Data Analysis: Data will be analyzed in a model selection framework, with the above response parameters. A model selection approach will allow us to examine multiple responses related to treatment. However, we will also test treatment effects in a more classical manner such as *F* tests or by examining the breadth of confidence intervals around treatment coefficients use standard statistical models.

Planning and Coordination: This aspect of the canopy reduction monitoring project will be critical to its success. The biological responses of the owl are dependent on treatments occurring in a time frame and manner consistent with the objectives of observing the response of the owls to the treatment. Thus, we envision at least 3 major planning workshops with the ranger districts cooperating in the project. We would begin our planning with a conference call in early January to organize the timing of workshops as well as to evaluate the feasibility of completing the entire project by October or November. The first workshop would occur in February,

Enclosure 3
Management Requirements
Dolly HRCA Thinning Project

The thinning proposal is designed to include these Management Requirements:

Potential Undesirable Effects	Measures Designed to reduce or Prevent Undesirable Effects	Responsible Person
Watershed, Soils, and Aquatic Resources	Establish a 100-foot "riparian buffer" zone along each side of perennial streams, 50-foot "riparian buffer" along each side of intermittent streams and establish a 25-foot "riparian buffer" zone along each side of ephemeral streams. These zones provide for coarse large woody debris (CWD) to the stream channel and adjacent land and provide shading.	Planning Forester, Prep Forester, Sale Administrator
Watershed	Fall and leave safety hazard trees within 50' or 100' "riparian buffer", unless otherwise agreed by a hydrologist or aquatic biologist.	Sale Administrator and Hydrologist
Watershed, Soils, and Aquatic Resources	Limit ground-based equipment (tractors and masticators) to slopes generally less than 25% outside of RCAs. Field review tractor unit boundaries by a hydrologist or soil scientist. Limit low ground pressure equipment to slopes less than 20% within all RCAs.	Planning and Prep Forester, Hydrologist, Soil Scientist.
Watershed, Soils, and Aquatic Resources	Locate skid trails at least 75 feet apart except where they converge near a landing. Trees would be directionally felled in tractor units to minimize the number of skid trails and associated ground disturbance. Use end-lining to designated skid trails. No end-lining within RCAs.	Planning Forester, Prep Forester, Sale Administrator.
Watershed, Soils, and Aquatic Resources	Allow skidding operations only when soil moisture conditions are such that compaction, gulling, and/or rutting will be minimal. Equipment may operate on designated skid trails when soils are dry to a minimum of 4 inches. Low-ground-pressure equipment may operate off of designated skid trails when soils are dry to a depth of 4 inches. High-ground-	Planning Forester, Prep Forester, Sale Administrator, Soil Scientist, CORs, Hydrologist.

<table>
<tr><th>Potential Undesirable Effects</th><th>Measures Designed to reduce or Prevent Undesirable Effects</th><th>Responsible Person</th></tr>
<tr><td>Resources</td><td>activities within RCAs. Only low-ground-pressure equipment may enter the RCA unless otherwise agreed by a hydrologist, soil scientist, or aquatic biologist. The RCA widths are as follows:
<table>
<tr><th>Stream Type</th><th>Width of the Riparian Conservation Area</th></tr>
<tr><td>Perennial Streams</td><td>300 feet each side, measured from bank full edge</td></tr>
<tr><td>Seasonal Flowing Streams</td><td>150 feet each side, measured from bank full edge</td></tr>
<tr><td>Streams In Inner Gorge</td><td>Top of inner gorge</td></tr>
<tr><td>Meadows, Lakes, and Springs</td><td>300 feet from edge of feature or riparian vegetation, whichever is greater</td></tr>
</table></td><td>Scientist, Aquatic Biologist.</td></tr>
<tr><td>Recreation and Public Use</td><td>Keep open all major roads (level 5, 4 and 3).</td><td>Layout/contract Specialist, Sale Administrator and Fuels Implementation Team</td></tr>
<tr><td>Scenery Resources</td><td>Emphasize varying the spacing guidelines so the thinning treatment has natural diversity rather</td><td>Silviculturist, Landscape</td></tr>
</table>

Potential Undesirable Effects	Measures Designed to reduce or Prevent Undesirable Effects	Responsible Person
	propagative parts such as seed).	Fuels Implementation Team
Forest Vegetation	Protect residual live trees from damage during falling, masticating, and underburn operations. Silviculturist to prepare input for Burn Plan identifying short and long-term objectives, acceptable mortality, condition of the desired vegetation. (Crown base height, etc.)	Silviculturist, Layout/contract Specialist and Fuels Implementation Team
Heritage Resources	Management of Sites: Protect heritage resources with posted and/or flagged control areas. Utilize directional felling methods as appropriate to protect resources. Designate control areas on the ground prior to work. Sale Administrator and/or Archaeologist will walk all sites with purchaser prior to start of felling activities.	District Archaeologist, Layout/contract Specialist, Sale Administrator and Fuels Implementation Team
Heritage Resources	Felling and removal of trees within sites: Only hazard or wind throw trees will be removed from sites. Implement on-site tree removal only upon written approval of the Forest Heritage Resource Manager (HRM). All trees will be directionally felled and fully suspended during removal from site. Removal of trees will follow the guidelines established in the First Amended Regional Programmatic Agreement Regarding Compliance with Section 106 of the National Historic Preservation Act. An Archaeologist will be present during felling and removal of trees.	District Archaeologist, Layout/contract Specialist, Sale Administrator and Fuels Implementation Team
Transportation System, Road Maintenance and Safety	Abate dust caused by commercial vehicle traffic on native and aggregate surfaced roads. Use dust palliatives such as lignin sulfonate or magnesium chloride to reduce the need for	Maintenance Engineer, Layout/contract Specialist, Sale

Potential Undesirable Effects	Measures Designed to reduce or Prevent Undesirable Effects	Responsible Person
		Fuels Implementation Team
Wildlife/ rare plants	Protect threatened, endangered and sensitive (TES) plants encountered during project implementation by flagging and avoiding the occurrence. If any sensitive animals, plants, newly listed TES species or noxious weeds are discovered, notify the Biologist.	Biologist, Layout/contract Specialist and Fuels Implementation Team
Fuels	Place all handpiles at least 10 feet away from the boles of retention trees to avoid damage. Utilize openings where they exist.	Layout/contract Specialist, Sale Administrator, Fuels Implementation Team
Fuels	Yard unutilized material (YUM) developed by purchaser's operations and deck for subsequent removal or burning	Layout/contract Specialist, Sale Administrator, Fuels Implementation Team
Fuels	Handpile activity generated slash within 100 feet of primary roads (#68) and within 50 feet of secondary roads (#60-12).	Layout/contract Specialist, Sale Administrator, Fuels Implementation Team
Fuels	Locate landing Piles near the center of landings to reduce damage to residual trees during burn operations.	Layout/contract Specialist, Sale Administrator, Fuels Implementation Team
Fuels	Lop and scatter activity generated slash to a depth no greater than 18 inches.	Layout/contract Specialist, Sale

Enclosure 3
Management Requirements
Dolly HRCA Thinning Project

Potential Undesirable Effects	Measures Designed to reduce or Prevent Undesirable Effects	Responsible Person
		Administrator, Fuels Implementation Team