Addendum 1

PUBLIC COMMENTS TO SCOPING FOR THE HOAG PASS PROJECTS ENVIRONMENTAL ASSESSMENT AND FONSI INCLUDING BLM RESPONSES

On April 18 2006, a Scoping Letter along with a copy of the Hoag Pass Projects EA (Environmental Assessment) including Appendices and Finding of No Significant Impact (FONSI) were sent to 15 individuals, organizations and agencies (Project Record Document 55). As a result of this scoping effort, two letters providing comments were received - Project Record Document 58 from Max Merlich at Columbia Helicopter, Inc. and Project Record Document 59 from Doug Heiken at Oregon Natural Resources Council.

The following are comments received and BLM's responses to those comments.

Project Record Document 58

Max Merlich - VP Forest Operations
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Comment # 1 – *"I would encourage you to go through with the project. You might consider taking another look at Alternative 4 a little more".*

BLM Response - Alternative 4 has been analyzed and is being considered along with all of the alternatives contained within the Environmental Assessment.

Comment # 2 – *"You suggest several places that you are proposing density management and small group selections of less than an acre. This is an excellent idea for the big game habitat; we have seen results of this in the Siuslaw National Forest on a similar sale called Bluebird thin. Elk moved in the second winter and began to use the little openings for browse".*

BLM Response - The Hoag Pass Density Management Project contains design features intended to balance the minimization of potential adverse impacts while meeting project objectives for a wide variety of natural processes and species. Overall, as stated within the EA, the basic configurations of the density management treatment units, which are interspersed with stands not proposed for thinning, are expected to result in an improvement in the general habitat quality available for elk and deer. Within portions of the treatment units, the vigor of the herb and shrub understory layers would be greatly increased thereby improving the quality of available browse and/or forage; this response is expected to be most notable in small gaps and in areas of lower canopy closure.

Comment # 3 – "*While some of these things can be done with cable logging, a much better job can be done with helicopters. Less stand damage occurs, no corridors need to be cut and there is much more flexibility in what you mark and what you leave. It can be accomplished without additional road work and soil disturbance. This must we weighed against the extra cost of helicopter logging as well as the extra cost and risk associated with the roads necessary for cable logging."*

BLM Response - The advantages of accomplishing density management with helicopter yarding were considered by the IDT (interdisciplinary team) in designing the alternatives in the Environmental Assessment (EA). Certainly a primary reason for considering helicopter yarding was the desire to reduce road construction. The alternatives in the EA show a range of options for removing harvested trees in the vicinity of the 3-7-36.6 road, where culverts have been removed and the road stabilized and closed. Because helicopter yarding is proposed elsewhere in the project to avoid new road construction in the Jane Creek area, the option of keeping the road closed and helicopter yarding the nearby stands (Alternative 3) is a feasible option and was analyzed in the EA.

Comment # 4 - *"I would encourage you to give as much flexibility as you can to the limited operating periods and to be mindful of opening the canopy enough so it is safe to work."*

BLM Response - As you suggest, the IDT designed the project in order to give as much flexibility to the various operating periods as possible while incorporating those measures necessary to minimize the potential for adverse impacts to a number of resources.

The project was designed with safety in mind. It is our expectation that given the number of leave trees per acre, the resultant canopy closure will be open enough to provide for safe helicopter yarding.

Project Record Document 59

Doug Heiken
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Comment # 1 - *"We remain concerned about road construction, alder removal, and especially the loss of current existing snags and the loss of recruitment of future mortality in the older stands >80 years old. With all the new information on new threats to the spotted owl (barred owl, west Nile virus, sudden oak death, wildfire, fuel reduction logging, and BLM's proposed plan revision), we feel that all the treatment in stands over 80 years should retain mortality in order to realize all the diverse benefits of dead wood (e.g., nutrient storage, nutrient cycling, mechanical thinning due to snag fall, and especially habitat for spotted owls and their prey species.)"*

BLM Response - The project contains design features intended to minimize potential adverse impacts while meeting a number of project objectives. Concerns for processes related to CWD (Coarse Woody Debris) dynamics have been incorporated into the project's design (EA pgs 11-12). The project contains stipulations for the retention of existing CWD, as well as for the augmentation of existing CWD levels, through the creation of additional CWD - both snags and downed logs. Additionally, the basic configurations of the density management treatment units, which are interspersed with stands not proposed for thinning, would be expected to minimize the disruption of

the natural CWD processes throughout the general area; natural suppression related mortality is expected to continue within many areas not being thinned. Within areas being thinned, density mortality would be expected to continue within the following areas: planned leave islands, in un-thinned clumps resulting from variable density patterns and/or thinning by removing only Douglas-firs, and no-harvest buffers on riparian areas.

Additions of CWD result from other processes in addition to density mortality. Endemic levels of insect and disease mortality, blowdown and other disturbance will continue to occur after density management, resulting in continued recruitment of CWD.

In an effort to gain additional information on spotted owls within the project area to be used in the design of the project and the analysis of potential impacts, the entire project area was surveyed to protocol for spotted owls; these surveys resulted in no spotted owl detections.

Comment # 2 – *"BLM must ensure that this project is really good for late successional reserves, critical habitat, key watershed, etc. We don't want a traditional thinning project that is slightly tweaked toward variability. We want a really creative restoration project that addresses ecosystem structures, functions, and processes."*

BLM Response - The primary objective of the proposed Hoag Pass Density Management and Fish and Wildlife Habitat Enhancement Projects is to accelerate the development of late-successional coniferous forest structure, as described in the alternatives section in the EA, resulting in anticipated effects analyzed and described in the effects section. The treatment would promote the processes and functions of late-successional forest structure sooner than without treatment. The IDT interdisciplinary team) has designed the project with this purpose and need in mind. Managing for late-successional habitat is a relatively new management goal, and the methods continue to evolve, but the proposed treatments do represent the sincere, professional efforts of the interdisciplinary team to enhance late successional reserves.

Comment # 3 - *"All activities in "late successional" stands (>80 years old or previously identified in the 15% retention analysis) should not have any commercial removal (or very minimal commercial removal). In an LSR, the "bounty of disturbance" should accrue to the forest and not the timber industry. Treatment in these stands should retain virtually all material as either live trees, snags, or down woody debris. There is a deficit of large snags in the Coast Range and this project should not exacerbate that problem by "capturing mortality" from late successional stands. Treatments will better mimic natural disturbance if they retain trees that "need" to be killed as snags or down woody debris."*

BLM Response - The Hoag Pass Density Management Project is located within both the LSR and AMA land allocation in stands less than 110-years-old. As per the NWFP and Salem District RMP, the maximum age for commercial thinning within the LSRs in the North Coast AMA (Adaptive Management Area) is 110 years.

Please see the response to Comment #1, where applicable design features in the EA are mentioned. Commercial removal is not the goal of treatments, but live trees are in excess of those that will allow good individual tree growth and crown structural development. As you suggest, a portion of the excess live trees are committed to creation of CWD. All treated stands over the age of 80 or greater than 18" quadratic mean diameter will have at least one snag per acre created. Strategy 1 for Achieving Desired CWD Levels in the *Late Successional Reserve Assessment for Oregon's Northern Coast Range Adaptive Management Area* (LSRA) will be used in these stands, to meet the 'high' target level of CWD prescribed in the LSRA. The CWD levels prescribed in the LSRA are based on

existing levels of CWD in late-successional stands resulting from a history of natural disturbances. The necessary quantity of average or larger-sized trees (generally 20"-28" diameter classes) will be left above those needed for live tree density, and later girdled, cut or topped to meet the target level of CWD. However, the maximum number of trees dedicated to CWD creation will be capped at eight trees per acre. This is because research has shown that when three or more Douglas-fir over 12" dbh fall per acre, the numbers of Douglas-fir bark beetles that brood and emerge in the material is sufficient to cause infestation and mortality of standing live Douglas-fir. (*Hostetler and Ross, 1996, Generation of coarse woody debris and guidelines for reducing risk of adverse impacts by Douglas-fir beetle. Unpublished paper, USDA Forest Service Westside Forest Insect and Disease Technical Center, Troutdale, OR, 6p*). Greater risk is taken by treating up to eight trees per acre, above the guideline of three trees per acre, in order to meet CWD goals over more of the project area. So, in summary, in stands 80 years and older, CWD will be created as needed to reach the 'high' levels prescribed in the LSRA, up to a limit of eight trees per acre.

The proposed project goes a long way toward augmenting stands deficient in CWD. However, a balance is struck between this goal and containing the risk of bark beetle infestation and other effects that could result from creating a very large pulse of CWD at one time. On average, about half of the standing trees per acre in stands in the project are proposed for removal to meet goals for live tree density. Though these are generally the smaller trees in each stand, this represents a tremendous amount of material. Creating CWD in excess of the levels prescribed in the LSRA is not supported by analysis in the LSRA, by the Northwest Forest Plan or the Salem RMP or other management direction.

For additional discussion of these topics, see the Forest Vegetation section of the Effects section in the EA.

Comment # 4 – "*Many of the stands proposed for treatment are native stands that are already experiencing competitive mortality and have significant snag resources that will be lost or degraded by logging and hazard tree removal. This effect is difficult to mitigate, so some of the older, snag-rich stands should be dropped. The EA acknowledges the high variation in existing snag abundance but does not say which units have lots of snags which would help decide whether alternative non-commercial restoration treatments may be appropriate."*

BLM Response - All of the stands proposed for treatment would accurately be described as native stands that are already experiencing competitive mortality; however the stands do vary in their existing level of snags. If the only objective of the project was to augment CWD levels in deficient stands, existing snag levels would be a major selection criterion for stand treatment as suggested, and in fact this is the case in stands selected for treatment with the Hoag Pass Fish and Wildlife Habitat Enhancement Project. However, reducing live tree density is a goal of the density management project as well as increasing CWD levels; existing live tree density a selection criterion for treatment stands. All of the stands selected for treatment contain high densities of live trees. Some stands are relatively 'snag-rich', based on the snag data collected. This data is available in project files or upon request. A close look at the data reveals that the bulk of these snags are 'soft' (decay classes 3-5) and are of the smaller diameter and height classes. Density management is prescribed for these stands to reduce live tree density, and CWD creation is prescribed from average or larger size diameter classes to increase the proportion of decay class 1 and 2 snags ('hard' or recent snags) of relatively large height and diameter. The value of the larger, recent snags is that they will replace softer, smaller snags as they fall, maintaining higher snag levels over time, and they have greater longevity and habitat value.

For additional discussion of these topics, see the Forest Vegetation section of the Effects section in the EA.

Comment # 5 - *"The extremely rare and endemic dusky red tree vole may occur in this area, so in stands over 60-years-old the BLM should do careful surveys, including tree climbing, in order to avoid accidental harm to this species. The RTV survey protocol is inadequate for this purpose, because it has a high rate of false negatives."*

BLM Response – In a 2005 paper, researchers report looking at the taxonomic relationships for tree voles (including the "dusky subspecies") using Mitochondrial DNA (Bellinger, M.R., S.M. Haig, E.D. Forsman, and T.D. Mullins. 2005. Taxonomic relationships among *Phenacomys* voles as inferred by cytochrome b. Journal of Mammalogy, 86(1): 201-210). While they acknowledge that subspecies designations in *P. longicaudus* deserve further attention, they found no clear difference between the two Oregon subspecies of red tree vole (*P. l. longicaudus* and *P. l. silvicola*) and conclude that the lack of consistently verifiable morphological differences suggest that subspecific status might not be warranted.

All of the proposed density management treatment units that triggered protocol were surveyed for red tree voles. A total of approximately 821 acres were surveyed for red tree voles in conjunction with the Hoag Pass Density Management Project in February 2005. Often the individual areas surveyed were somewhat larger than proposed treatment units in order to assure the best habitat within the areas were surveyed. *Survey Protocol for the Red Tree Vole* (Version 2.1) was followed for all surveys. Additional 100-meter searches and climbing were conducted in December 2005 and February 2006. All of these surveys and climbing resulted in one active tree vole nest being located. It is located across a small drainage and approximately 600 to 700 feet from a density management treatment unit in an area not proposed for treatment.

Comment # 6 – "*The EA indicates that some stands proposed for treatment have inactive RTV nests. These stands should be more thoroughly surveyed to determine the location of the active nests. RTVs move around from nest to nest. The inactive nests should be protected with 10 acre buffers because they may be reoccupied."*

BLM Response - As you suggest, in December of 2005 and as a result of four of the ten identified inactive nests being located within or relatively near proposed treatment units as configured for the planning process, four additional 100-meter searches were conducted in an attempt to obtain additional RTV information. As the units are currently configured, two of these inactive nests were located within proposed treatment units, the third depending upon final layout may or may not be within a density management unit, while the forth was located approximately 100 meters from a proposed treatment unit boundary. The 100-meter searches identified five trees with structures which were unable to be identified from the ground as to whether or not they were RTV nests; these five trees were climbed in February of 2006 – all structures were confirmed to be the nests of species other than red tree voles.

As per the current management recommendations for this species - *Management Recommendations for the Oregon Red Tree Vole Arborimus longicaudus, (Version 2.0),* there is no requirement or expectation that confirmed inactive nests would be protected with a 10-acre buffer. However, in order to manage these confirmed inactive sites, the marking guidelines in the immediate area of these inactive nests would be evaluated during the project layout phase to assure the treatment assists with the development of improved habitat conditions at these sites or depending upon site-specific conditions, they may be posted out of the treatment units.

Comment # 7 – "*OHVs could harass wildlife, harm soil and water, and spread invasive weeds. We are concerned that opening these stands and build new roads and spurs will invite/allow OHVs to intrude into these stands. Please retain vegetative barriers and down wood barriers to prevent OHV trespass."*

BLM Response - Thank you for your comment. We recognize your concern that following a density management operation treated stands are more accessible to OHVs. This is especially true for portions of the Hoag Pass Density Management Project within or near the Upper Nestucca OHV trail area. In an effort to limit unauthorized access by OHVs and prevent potential resource damage, design features have been included into the Hoag Pass Density Management Project to minimize potential conflicts with OHVs. These design features include restricting OHV use on decommissioned roads after treatment by blocking and assuring that designated OHV trails within the area were cleared of logging slash thereby providing an authorized riding facility.

However, after reviewing your comment and the project's design features, it was determined that additional measures to address your concern would be appropriate. Therefore, where openings, skidtrails or yarding corridors are created near or adjacent to existing designated OHV trails and roads, logging slash or other material would be configured as appropriate to discourage OHV riders from leaving the trail system and/or developing new, unapproved trails.

Comment # 8 – "*The EA should recognize that traditional spotted owl dispersal habitat is "where spotted owls go to die." A more accurate conception of dispersal habitat is that it should resemble NRF habitat so as to provide foraging opportunities, roosting opportunities, and protection from predators, etc. The EA should not say that there is "adequate" dispersal habitat (p 26)."*

BLM Response – The BLM fully recognizes that dispersal habitat provides for more than the ability of an owl to move through an area. Within the Biological Assessment currently under development by the interagency Level 1 Team (terrestrial subgroup) for the North Coast Planning Province entitled *Biological Assessment of Habitat-Modification Projects Proposed During Fiscal years 2007 and 2008 in the North Coast Planning Province, Oregon that would affect Bald Eagles, Northern Spotted Owls or Marbled Murrelets or the Critical Habitats of the Northern Spotted Owl or the Marbled Murrelet* which includes the Hoag Pass Density Management Project, it is stated that "spotted owls use dispersal habitat to move between blocks of suitable habitat, roost, forage and survive until they can establish a nest territory. Juvenile owls also use dispersal habitat to move from natal areas. Although nesting might occur in dispersal habitat, dispersal habitat generally lacks the optimal structural characteristics needed for nesting". Hoag Pass density management treatments within stands currently considered to be dispersal habitat contain several design features that recognize, and promote the afore mentioned functions of spotted owl dispersal habitat as well as minimize potential adverse impacts. These design features include attention given to canopy closure, maintenance of unthinned areas, augmenting current CWD level, and retaining green trees with cavities, or dead, forked or broken tops.

In order to obtain early involvement from the terrestrial sub-group of the North Coast Province Interagency Level 1 Team and to facilitate the ESA section 7 streamlined consultation process, on October 11, 2005 elements of the Hoag Pass projects, including impacts to dispersal habitat, were discussed at the team's quarterly meeting held at the BLM Salem District Office. Based upon the analysis conducted for spotted owl dispersal habitat it was determined that there currently is, and

post- density management treatment there would be, "adequate" dispersal habitat within the Analysis Area to facilitate spotted owl dispersal throughout the area.

Comment # 9 – *"The EA says that the thinning will have long-term benefits to spotted owls, but the analysis does not appear to account for the loss of current snags and down wood, nor the loss of future recruitment of snags due to "captured mortality" that is sent to the mill. Snags and dead wood are closely associated with spotted owls and owl prey."*

BLM Response - Recognizing the importance of CWD habitat features, page 28 of the EA contains a discussion of the impacts to CWD habitat associated with the implementation of the Density Management Treatments (including short- and long-term, direct and indirect impacts). On pages 29 and 30 these impacts are discussed within the context of spotted owls and owl prey.

Additionally, as you say, snags and dead wood are closely associated with spotted owls and owl prey. The IDT concerns over this close association resulted in the inclusion of design features to create CWD within the treatment units. The design feature of creation of CWD within timber sale units is incorporated to help offset the direct impacts of the thinning operation such as the felling or inadvertently knocking over of the existing snags, as well as the indirect, longer-term impacts such as the disruption of the natural snag recruitment processes through "captured mortality".

Comment # 10 – *"We support project 2, snag creation and instream wood placement, but we urge BLM to retain the largest live trees as future snags and down wood. Also, the BLM should retain more of the mortality on site rather than "capturing" it for commercial exploitation. BLM should view increased beetle activity as an acceptable risk, part of the natural ecological processes of disturbance and pulses of mortality. Beetles provide food and continue the disturbance/thinning process. Learn to incorporate this into the LSR restoration process."*

BLM Response – For project 2, the Fish and Wildlife Habitat Enhancement Project, trees would be selected for CWD creation that are about average size (middle half of diameter range) within each stand. The largest trees (top 25% of diameter range) within each stand would remain untreated. The smallest trees (bottom 25% of diameter range) would have lower habitat value as CWD, so they too would not be selected for treatment.

The Hoag Pass projects include both areas proposed for commercial density management and areas that are not. The rationale for balancing commercial removal with creation of CWD to achieve density management goals is discussed in the responses to comments #1 and #3.

Also discussed in the response to comment #3 were the thresholds of CWD creation expected to result in live tree mortality from bark beetle infestation (*Hostetler and Ross, 1996),* and the decision to exceed that threshold in this project. This is proposed because the threshold is considered conservative, and greater risk is consistent with meeting LSR objectives, as your comment suggests. Mortality resulting from natural processes of insects, disease and weather, in addition to density mortality, are indeed an important part of the natural ecological processes of disturbance and pulses of mortality. Greater bark beetle mortality is accepted, and again could be seen as partial mitigation for the expected reduction in density mortality that would result from the proposed action. By experimenting with levels of CWD creation at the stand scale and small watershed scale and then applying Adaptive Management principles we can learn from projects such as these to further our understanding of how to incorporate natural disturbance agents into the LSR restoration process.