

**DECISION NOTICE  
and  
FINDING OF NO SIGNIFICANT IMPACT  
for the  
Emile Timber Sale Project  
Environmental Assessment**

USDA Forest Service-Umpqua National Forest  
North Umpqua Ranger District  
Douglas County, Oregon

The Emile Timber Sale Project Environmental Assessment (EA) documents a no-action alternative and three action alternatives that would accomplish commercial harvesting of timber, treating activity generated fuels, conducting road improvement, road construction/reconstruction and road maintenance and implementing connected actions within the Adaptive Management Area, Matrix and Riparian Reserve land allocations of the Little River and Middle North Umpqua watersheds on the Umpqua National Forest, North Umpqua Ranger District.

The Emile planning area is located approximately 14 road miles southeast of the city of Glide, on the North Umpqua Ranger District (NURD), Umpqua National Forest (UNF). The planning area encompasses four 6<sup>th</sup> field subwatersheds within the Little River and Middle North Umpqua 5<sup>th</sup> field watersheds. It includes all or portions of T26S, R1E, R1W and R2W; T27S, R1E, R1W and R2W; and T28S R2W, Willamette Meridian, Douglas County, Oregon.

The project area is located within the boundaries of the Umpqua National Forest, in the Little River and Middle North Umpqua 5<sup>th</sup> level watersheds, in Douglas County, on the North Umpqua Ranger District. The Umpqua National Forest Land and Resource Management Plan (LRMP), as amended, is the principle policy under which this action was developed. An analysis of the proposal was conducted in accordance with the National Environmental Policy Act (NEPA) and the implementing regulations of 40 CFR 1508. The purpose and need for the proposed action is described in detail in Chapter 1 (EA pages 6-8).

***Decision***

I have decided to implement Alternative 4 as described in the Emile Timber Sale Project EA (pages 31-37). This decision also includes a non-significant, project-level amendment of the Umpqua National Forest Land and Resource Management Plan (EA pages 32).

My decision to implement Alternative 4 is based on information contained in the administrative record, including the EA, Appendix A (response to public comments), the scoping summary, the mitigation measures and management requirements described in Chapter 2 of the EA, and the effects analysis described in Chapter 3 of the EA (pages 53-213). This decision also includes the implementation of best management practices, mitigation measures, and project design features (EA pages 37-49).

#### ***Details of Alternative 4***

- Commercial thinning of about 1,835 acres of timber stands using helicopter, ground-based, and skyline logging systems in AMA, Matrix and Riparian Reserve land allocations generating about 26 million board feet of timber.
- Implementing a project-level amendment to the 1990 Forest Plan that would allow thinning within 150 feet of some natural meadows and rock outcrops. Thinning adjacent to these areas would not normally occur under Standards and Guidelines for unique habitats (Wildlife Prescription C5-1, LRMP IV-200), but is considered beneficial for maintaining natural openings and enhancing development of desired stand conditions.
- Planting and pruning rust resistant sugar pine and seeding with native big game forage mix within: eight, one-acre gaps; eighteen, two-acre gaps; and one, three-acre gap<sup>1</sup>.
- Treating activity created fuels on 1,171 acres by underburning, crushing, machine piling, pruning/chipping, or handpile burning.
- Using 6 existing landings or rock pits for helicopter logging<sup>2</sup>.
- Building a total of 1.0 miles of new temporary spur roads to access thinning areas then obliterating them (subsoiling as necessary, and pulling displaced soil and woody debris over the surface) after use.
- Constructing/reconstructing 7.3 miles of temporary spur roads located on existing old abandoned roads (unclassified roads), skid trails, or firelines to access thinning areas; then obliterating the roads after use.
- Reconstructing 7.0 miles and 14 sites of system roads to facilitate hauling logs including the placement or replacement of surface rock, the replacement of several undersized or deteriorated stream crossings, armoring culvert outlets, replacing asphalt, stabilizing road fills and road shoulders, reshaping road beds, and the reconstruction of ditches as needed in portions of the roads.
- Maintaining about 57.5 miles of existing roads including the grading and shaping of existing road surfaces, dust abatement, constructing water bars, cleaning asphalt, ditch maintenance as needed, opening and re-closing existing closed roads, and the cutting of intruding vegetation along roadsides. Asphalt repair and patching would also occur on Road 27 and 4714-330.
- Utilizing the existing Limpy, Coolwater, and Gobbler rock pits, along with several rock stockpile sites as the rock source for the road work, and as disposal areas for material cleaned from ditches, road surfaces and excess excavation.

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<sup>1</sup> Based on past experience and the professional opinion of the project silviculturist canopy gaps that are one acre in size or larger create site conditions conducive to the successful survival, growth and health of young sugar pine seedlings which would be planted in these sites. A clump of 5 trees/acre would be retained within these gaps and subsequently killed with fire to provide snag habitat.

<sup>2</sup> All helicopter landings would be retained following use, but where feasible, landings would be planted with grasses and shrubs to reduce erosion and provide big game forage. No revegetation would occur in rock quarries that are used as helicopter landings.

The connected actions are disclosed in Chapter 2 and are summarized here (EA pages 23-24):

#### Connected Actions

- Planting sugar pine; pruning sugar pine; seeding with big game forage mix; precommercial thinning and slash treatment; subsoiling; snag creation; road improvements for erosion control (including installation of rolling dips and culvert replacements); addition of large wood for stream channel stabilization; noxious weed control; and revegetating bare ground.

#### Project-Level Forest Plan Amendment

A project-level Forest Plan amendment would be implemented under Alternative 4. Most of the standards and guidelines in the 1990 Umpqua LRMP were developed in the context of even-aged harvest of most of the remaining old-growth forest. They were crafted to protect areas from high impact logging and site preparation and to retain areas of old growth timber to help mitigate the loss of habitat and to mitigate risks from disturbance. The level of disturbance associated with thinning and gap creation in dense second-growth stands is substantially less than that of clearcutting and broadcast burning old growth. In addition, the beneficial effects of thinning dense, overstocked managed plantations was not considered when the LRMP was written. With this changed context, the following project-level Forest Plan amendment is proposed to meet the purpose and need:

- This project-level amendment to the 1990 Forest Plan would allow thinning within 150 feet of some natural meadows and rock outcrops. Thinning adjacent to these areas would not normally occur under Standards and Guidelines for unique habitats (Wildlife Prescription C5-1, LRMP IV-200), but is considered beneficial for maintaining natural openings and enhancing development of desired stand conditions described in the Purpose and Need.

#### ***Best Management Practices, Project Design Features, Mitigation Measures, and Monitoring***

This decision also includes implementation of Best Management Practices as required by the Clean Water Act and as disclosed in Chapter 2 (EA pages 37-49). Some of the actions identified as mitigation measures in the EA are considered to be sale area improvements or enhancement of the existing condition, and as such are appropriate for funding with Knutson-Vandenberg (KV) and other funding sources. The monitoring items that will be implemented include:

- The silviculturist will review marking guides with the timber contract appraiser prior to contract preparation. The timber sale contract will contain provisions for monitoring the Designation by Description (DxD) specifications to ensure the silvicultural prescription will be implemented as planned.
- The levels of effective ground cover will be monitored, as funding allows. If monitoring determines that effective ground cover goals are not met then site specific recommendations will be developed by a soil scientist and the fire management officer. Monitoring will include representative samples of each yarding method and fuels treatment to determine if soil management objectives are being met (S&G#11, LRMP IV-71).

- Fuel monitoring plots are set up in Emile units 7, 10, 18, 26, 36, and 38. Post-harvest Brown's Fuel Transects will be re-run along the same fuel transects to compare the pre-harvest fuel levels to the predicted post-harvest fuel levels as funding allows.
- A soil scientist shall review all temporary roads prior to treatment to initiate and finalize the treatment prescription; the effectiveness of the temporary road restoration prescription in preventing erosion and providing suitable plant habitat shall be monitored.

### **Decision Rationale**

I have decided to implement Alternative 4 because I believe it most fully addresses the purpose and need, and also responds to the unresolved scoping issue of increased big game foraging habitat in MA 11 winter range (where provision of habitat and timber production consistent with other resource objectives is the focus). As displayed in the EA in the Table 5 Comparison of Alternatives (pages 36-37), Alternative 4 equals or exceeds Alternatives 2 and 3 in all measures for the stand health, density and diversity, element of the purpose and need. Alternative 4 accomplishes about 18 more acres of sugar pine planting in ecologically appropriate locations in the planning area. Although gap size was a concern for some, support for sugar pine restoration was mentioned in three of the public scoping letters we received for the project (Umpqua Watersheds, Oregon Wild, and Cascadia Wildlands Project), and I too believe that sugar pine planting is an important component of the Emile project.

Alternative 4 also meets or exceeds Alternatives 2 and 3 in all measures for the cost-effective timber production element of the purpose and need (EA pages 36-37). Alternative 4 harvests the most timber to support our local economy and also allows us to accomplish the most sale area improvements of all the alternatives (EA page 57). Potential sale area improvements include precommercial thinning in Riparian Reserves which was a concern noted by Umpqua Watersheds, Cascadia Wildlands Project, and Klamath Siskiyou Wildlands Center during the 30-day comment period for the project.

Alternative 4 addresses the American Forest Resource Council's scoping issue regarding provision of additional big game foraging habitat in the project area. Alternative 4 creates eighteen more acres of early successional habitat than Alternatives 2 and 3, and approximately doubles the areas that will be seeded with big game forage mix (EA pages 36 and 37). Given that foraging habitat is declining on federal lands (EA page 133), I think it is important to capture opportunities for providing even small amounts of future forage, when it is consistent with the land allocations and project purpose and need, as is the case for the Emile Timber Sale Project.

Although Alternative 4 was designed with minimal temporary road impacts, I understand that my decision does not address the issue of new temporary road building (EA page 11), which was raised by several conservation groups. These publics were concerned that building approximately 1.0 miles of new temporary spur roads may cause environmental impacts including long-term affects to aquatic ecosystems, cutbanks, erosion, channeling water, and spreading noxious weeds. However, IDT specialists have determined that there would be no differences between the alternatives effects relative to public access (EA page 63) and that the new temporary roads would not create any new water concentrations or diversion, so no new instability problems are expected (EA page 183).

There were no anticipated substantive adverse long-term impacts to the aquatic environment associated with Alternative 4 or any other alternative (EA pages 157-203). I note that, erosion and sedimentation from temporary roads are expected to be low with minimal differences in effects among action alternatives (EA pages 182-183, 187-189) 153). This is because site-specific mitigation measures and best management practices will be employed to lessen the magnitude of effects on the beneficial uses (EA pages 41-42). Although there is a slight increase in the likelihood of spread of invasive weeds under this alternative from new temporary roads, weed spread would be minimized through preventative measures taken prior to, during, and after thinning operations. Project design includes buffers around known weed sites, equipment washing, revegetation and mulching (if needed) of disturbed areas, post-treatment survey and weed treatment, and pretreatment of existing weed sites (EA pages 47-49).

As such, I feel that the low level of environmental risk associated with the temporary road building in Alternative 4 is justified. This is especially true when weighed against the increased benefits of Alternative 4 as described above and summarized in Table 5 Comparison of Alternatives (pages 36-37).

### ***Other Alternatives Considered***

Chapter 2 of the EA includes a description of the other alternatives considered in detail. The following briefly summarizes those alternatives. The reason I did not select those alternatives are described below.

Alternative 1: Under this no-action alternative, no actions would be taken to thin dense managed plantations, plant trees, work on roads, treat activity fuels or accomplish connected actions such as native grass seeding, snag creation or noxious weed treatments.

This alternative was not selected because it would not meet the purpose and need for action, which would not be a responsible decision, as I believe that these managed plantations are in need of restorative thinning.

Alternative 2: This alternative is the proposed action that was designed to meet the purpose and need of reducing tree density in second-growth stands, in a cost-effective manner, in order to: increase growth, health, and vigor of the leave trees remaining in the stand; restore stand density, and species and structural diversity to those considered characteristic under a natural disturbance regime; and provide wood products to the local economy. The proposed action is thoroughly described on pages 17-22 of the EA. It includes: commercial thinning of about 1,835 acres of timber stands using helicopter, ground-based, and skyline logging systems generating about 25 million board feet of timber; implementing a project-level Plan amendment that would allow thinning within 150 feet of some natural meadows and rock outcrops; planting and pruning rust resistant sugar pine within 29 one-acre gaps; treating activity created fuels on 1,171 acres by underburning, crushing, machine piling, pruning/chipping, or handpile burning; using 6 existing landings or rock pits for helicopter logging; building approximately 1.0 mile of new temporary spur roads to access thinning areas then obliterating them; constructing/reconstructing 7.3 miles of temporary spur roads located on existing disturbed areas and then obliterating them; reconstructing 7.0 miles of system roads and repairing 14 additional sites to facilitate hauling logs; maintaining about 57.5 miles of existing roads; and utilizing the existing Limpy, Coolwater, and Gobbler rock pits, along

with several rock stockpile sites as the rock source for the road work, and as disposal areas.

The connected actions for Alternative 2 are described on pages 23-24 of the EA; they are the same as those for Alternative 4, but differ in the amount of acres and sites that would be planted with sugar pine and seeded with big game forage mix.

I did not select Alternative 2 because it produces less timber and less return to the treasury, accomplishes lower levels of sale area improvements; plants less sugar pine, and accomplishes less big game forage enhancement than Alternative 4. While Alternative 2 is economically viable and would accomplish close to the same outputs and benefits as Alternative 4, I believe a responsible decision includes returning as much money to the treasury as possible, conducting as much restorative thinning and planting as possible, and implementing the highest levels of relevant sale area improvements and connected actions.

Alternative 3: Alternative 3 was developed to meet the purpose and need and to respond to the issue of potential environmental impacts associated with the construction of new temporary roads. Alternative 3 is thoroughly described on pages 25-31 of the EA. It includes: commercial thinning of about 1,754 acres of timber stands using helicopter, ground-based, and skyline logging systems generating about 24 million board feet of timber; implementing a project-level Plan amendment that would allow thinning within 150 feet of some natural meadows and rock outcrops; planting and pruning rust resistant sugar pine within 29 one-acre gaps; treating activity created fuels on 1,171 acres by underburning, crushing, machine piling, pruning/chipping, or handpile burning; using 6 existing landings or rock pits for helicopter logging; building approximately 0.6 miles of new temporary spur roads to access thinning areas then obliterating them; constructing/reconstructing 7.1 miles of temporary spur roads located on existing disturbed areas and then obliterating them; reconstructing 7.0 miles of system roads and repairing 10 additional sites to facilitate hauling logs; maintaining about 56.5 miles of existing roads; and utilizing the existing Limpy, Coolwater, and Gobbler rock pits, along with several rock stockpile sites as the rock source for the road work, and as disposal areas.

The connected actions for Alternative 3 are described on pages 23-24 of the EA; they are the same as those for Alternative 4, but differ in the amount of acres and sites that would be subsoiled, planted with sugar pine and seeded with big game forage mix.

I did not select Alternative 3 for the most of the same reasons I did not selected Alternative 2. Alternative 3 produces less timber and less return to the treasury, accomplishes lower levels of sale area improvements; plants less sugar pine, and accomplishes less big game forage enhancement than Alternative 4. Although Alternative 3 is responsive to the issue raised about temporary road building, I believe the tradeoff's of building only 0.4 miles of additional road with Alternative 4 are worth the minor impacts, given these roads will be subsoiled and seeded.

### ***Public Participation and Scoping***

Scoping was conducted as part of the analysis process. The scoping process for the Emile Timber Sale Project is described on page 10 of the EA. Formal scoping (a process used to surface issues) began after the proposed action was developed when the project was first listed in the July 2007 Umpqua National Forest Quarterly Schedule of Proposed Actions (SOPA). A scoping notice describing the project components and soliciting interest in a field trip was sent to the public in October of 2007 with the intent of

introducing the proposed action and soliciting issues. Douglas County joined as a Cooperating Agency on the project on November 21, 2007. The Emile project record contains a detailed scoping summary that describes Forest Service outreach efforts, the scoping comments received for the project, and how the Forest Service addressed scoping comments in the Emile EA. Scoping generated two significant issues (EA pages 10-11) that resulted in the development of two alternatives to the proposed action; one issue was resolved through the development of project design features and mitigation measures; four issues were resolved through silvicultural prescription and contract requirements; and ten issues were tracked for full disclosure. In addition, one issue was considered to be non-significant. The no action alternative (EA page 17) was also analyzed.

During the 30-day comment period, three written comments were received. I read and considered the comments that were submitted to me prior to making my decision and I have responded to those comments in detail (Appendix A). Most of the comments received were positive and supportive of this project. Several of the comments displayed concern about the effects of 2 and 3 acre canopy gaps; the effects of the project on current and future snags and down logs; and the construction of new temporary roads. Appendix A provides a detailed response to all public comments. To summarize my responses to these comments, I believe that the gaps will function as designed to accomplish sugar pine restoration and provide big game habitat with minimal adverse impacts (Chapter 3, EA pages 53-213); that snag and down log mitigations/enhancements will be implemented (EA page 46) and the effects to Coarse Woody Debris are fully disclosed (EA pages 79-84); and that as I described earlier, the benefits associated with the minimal and short-term disturbance caused by these temporary roads is justified in order to accomplish more thinning and sale area improvements. After reviewing the public comments, I am certain that we considered and used the best available science in our analysis and that both the public and I are informed of the effects of the proposal and the benefits and consequences of my decision.

### ***Finding of Forest Plan Consistency***

#### ***Standards and Guidelines***

This decision tiers to the 1990 Umpqua National Forest Land and Resource Management Plan Final Environmental Impact Statement (Forest Plan), as amended. I have ensured that the decision is consistent with the Forest Plan goals, objectives, and standards. All applicable Forest Plan standards and guidelines are listed and discussed throughout Chapter 3 of the EA (transportation, pages 61-62; coarse woody debris, pages 79-80; soils pages 98; management indicator species, pages 131-132; noxious weeds, page 147; water quality, page 159; stream flows, pages 164-165; riparian reserves, page 168; stream channels, page 174; mass wasting, page 182; surface erosion, page 185; fluvial erosion, page 188; recreation, page 203; and visual quality, page 206. Alternative 4 is fully consistent with all applicable standards and guidelines.

#### ***Rare and Uncommon Species***

On July 24, 2007, the Under Secretary of the Department of Agriculture signed a new Survey and Manage Record of Decision that removed the survey and manage requirements from all of the National Forests' land and resource management plans (LRMPs) within the range of the northern spotted owl. Because the court in Northwest Ecosystem Alliance et al v. Mark Rey et al, Civ. No. 04-844, Western District of

Washington has not yet granted the government's motion to lift the modified October 11, 2006, this project falls within at least one of the exceptions listed in the modified October 11, 2006 injunction, which is that the stands being proposed for thinning are less than 80 years of age. The EA fully describes the impacts and analysis to all rare and uncommon species (EA pages 140, 141, 155). Therefore, this project fully complies with current direction.

### ***Aquatic Conservation Strategy (ACS)***

Based on the project level evaluation of the environmental effects documented in the EA, I find that the project is consistent with and does not prevent attainment of the nine objectives of the Aquatic Conservation Strategy (ACS) as described in the 1994 Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl. The activities within the Riparian Reserve land allocation comply with Riparian Reserve Standards and Guidelines as discussed on EA pages 168 and 174. All nine objectives have been discussed throughout the EA (page 66, 79, 142-144, 157, 164, 166-168, 173-174, 179-182, 190, 192, 201, and 212). Moreover, Alternative 4 was designed to contribute to the maintenance and restoration of natural riparian habitat conditions and processes based on watershed analysis recommendations, as detailed throughout Chapter 3 of the EA.

### ***Watershed Analysis and Roads Analysis***

I have considered the Middle North Umpqua Watershed Analysis (2001), the Little River Watershed Analysis (1995) and the Umpqua National Forest Forest-Scale Roads Analysis. These intermediate analyses (intermediate between the Forest Plan and the site-specific EA) provided a foundation for the development of the proposed action and Alternative 4. Alternative 4 implements numerous recommendations from the watershed analysis. Relevant recommendations from the watershed analyses are listed throughout Chapter 3 (EA pages 53-213).

### ***Consistency with National Forest Management Act [16 USC 1604(g)(3)]***

I find this decision to be consistent with the 2005 National Forest Management Act implementing regulations at 219.12(b)(2), specifically:

- A) This project complies with and considers the economic and environmental aspects of resource management (EA Chapter 3 pages 53-213);
- B) This project implements the 1990 Umpqua LRMP, as amended and as such, provides for diversity of plant and animal communities based on the suitability and capability of the land allocation;
- C) This project contains monitoring (as described previously) to ensure that management activities will not produce substantial and permanent impairment of the productivity of the land;
- D) The 1,835 acres of thinning authorized by this decision produces approximately 26 million board feet of timber, and contributes to the Umpqua National Forest's timber program of about 45 million board feet; this level of timber harvest is less than what was estimated in the 1994 Northwest Forest Plan. As such, this project complies with this subsection by not exceeding the current level of timber offered for sale on the Umpqua.
- E) This project only harvests timber from National Forest System lands on lands that: (i) will not be irreversibly damaged; (ii) can be adequately restocked; (iii)



protect streams and water bodies from damage and adverse impacts; and (iv) the harvest systems selected were not selected primarily because they give the greatest return or output of timber.

F) The openings that create gaps within the stands are used only where objectives for stand diversity are being met and where the natural disturbance process is being approximated; impacts have been assessed and appropriate protection measures prescribed; they will blend with the natural terrain; are prescribed for the appropriate forest type; and the clearings do not exceed 3 acres in size, which is well below the maximum limit for areas to be cut in one harvest operation.

### **Forest Plan Amendment**

This decision is being made under the 2008 Forest Service planning regulations (36 CFR 219) which allow plan amendments to be made using the procedures from the 1982 planning regulations during the three-year transition period (36 CFR 219.14(b)(2). This amendment is being made using the 1982 procedures.

FSH 1909.12, Section 5.32, outlines the factors to be used to determine whether a proposed change to the LRMP is significant or not significant, based on National Forest Management Act requirements. A discussion of each of these four factors follows and is detailed on pages 133-144 of the EA.

1. Timing. Determine whether the change is necessary during or after the plan period. In most cases, the later the change, the less likely it is to be significant for the forest plan. The proposed amendment is necessary now in order to harvest the Emile stands and meet the desired stand conditions, and would occur at the end of the current plan period. Therefore, timing is not considered to be a significant factor related to the amendment.

2. Location and Size. Define the relationship of the affected area to the overall planning area. In most cases, the smaller the area affected by the change, the less likely it is to be significant for the forest plan. There are approximately 1,130 acres of mapped unique habitats in the Emile planning area. The proposed amendment would affect approximately 25 acres of unique habitat across the 35,482 acre planning area. This represents 0.07 % of the planning area and 2.2 % of the mapped unique habitats within the planning area. Even if all 215 acres of unique habitat described were impacted by the project, only 0.6% of the planning area and 19% of the unique habitats would be impacted. Thus, impacts to unique habitats are limited in scale and consequence. Therefore, the location and size of the area involved in the proposed amendment are not considered to be significant.

3. Goals, Objectives, and Outputs. Determine whether the change would alter long-term levels of goods and services projected by the forest plan. The proposed amendment would not change existing goals, or outputs as defined by the Forest Plan. The proposal would not result in changes in the level of goods and services currently being produced, which are consistent with levels projected by the LRMP. Therefore, the goals, objectives, and outputs are not considered to be a significant factor related to the proposed amendment.

4. Determine whether the change in a management prescription is only for a specific situation or whether it would apply to future decisions throughout the planning area. The proposed amendment would not permanently change management of unique habitats. This amendment applies to this project only; upon completion of this project, Prescription C5-1 would again apply. Therefore, changes in management prescription are not considered to be a significant factor related to the proposed amendment.

After consideration of these factors, I have concluded that the proposed amendment would not represent a significant change to the LRMP.

### ***Finding of No Significant Impact (FONSI)***

Based on the documentation in the Emile Timber Sale Project EA and Analysis File, I have determined the following with regard to the context of this project:

The Emile Timber Sale Project EA project implements direction set forth in the Umpqua National Forest Land and Resource Management Plan, as amended. The Umpqua National Forest is comprised of about 1 million acres; the North Umpqua Ranger District encompasses about 269,000 acres of the Forest. The Emile Planning area is comprised of about 35,482 acres within the North Umpqua Ranger District. The 1,835 acres of Alternative 4 authorized with this decision will implement thinning, burning, and other connected activities on about 5.2% of the planning area, less than seven-tenths of 1% of the North Umpqua Ranger District, and less than two-tenths of 1% of the Forest. Given the area affected by the project at both the planning area, District, and Forest scale, I find that the effects of the project are not significant as disclosed throughout Chapter 3 of the EA (pages 53-213), and will have a negligible effect at the planning area, District, and Forest scale.

Based on the documentation in the Emile Timber Sale Project EA and the Analysis File, I have determined the following with regards to the intensity of this project:

1. The Environmental Assessment provides sufficient information to determine that this project will not have a significant impact (either adverse or beneficial) on the land and its natural resources (EA pages 53-213), including air quality (EA pages 207-210), or water quality (EA pages 159-164).
2. Considering the remoteness of the project in relation to local and regional population centers and the measures taken to ensure compliance with the Clean Air Act (EA pages 207-210, 212), the Clean Water Act as discussed on EA pages 159-192 and the use of BMP checklists during implementation (EA pages 37-49, and BMP checklists in the Project Record), the likelihood of the project affecting the public's health and safety is low.
3. The supporting documentation located in the EA and in the Analysis File for the Emile Timber Sale Project EA provides sufficient information to determine that this project will not negatively affect any known unique characteristics of the geographic area such as park lands, prime farmlands, wetlands, wild and scenic rivers, inventoried roadless areas, or ecologically critical areas (EA pages 211-212).
4. The degree of controversy with regard to effects on the quality of the human environment are limited and considered not significant. Three comment letters were received during the 30-day comment period. Based on my review and consideration of these comments, documentation of our answers in Appendix A, and personal discussions I have had with members of the public, I find that there is no scientific controversy with the

project. Many of the comments received consisted of opinions or were related to thinning intensities and gap size, coarse woody debris, and a limited amount of temporary road building. I have fully addressed these comments in Appendix A, and all other comments received were also addressed. These comments have limited or no controversy; this does not satisfy the threshold for the preparation of an Environmental Impact Statement (EIS).

5. Similar types of harvest, fuel treatments, tree planting, road work and other connected actions have occurred previously on the Umpqua and on other National Forests. No impacts to the human environment that are highly uncertain or involve unique or unknown risks have been identified in Chapter 3 (EA pages 53-213) of the analysis.

6. The proposed commercial thinning, burning, and associated activities are well established practices on the Umpqua National Forest and on the North Umpqua Ranger District and do not establish a precedent for future actions (past, present and foreseeable actions as documented in the EA pages 61-64).

7. I have reviewed the impacts of those past, present, and reasonably foreseeable actions described in the Environmental Effects Section of the Emile Timber Sale Project EA (EA pages 53-55) and find that this action will not have a significant cumulative impact on the environment (EA pages 53-213).

8. The Cultural Resources Report and the associated disclosure in the EA (page 210-211) reveal that no prehistoric sites will be impacted. A mitigation measure is included (EA page 49) under Alternative 4, that will protect any prehistoric cultural sites that may be found during implementation. No direct, indirect, or cumulative effects to cultural resources are expected to occur.

9. Based on the information disclosed in the Emile Timber Sale Project EA (pages 53-213), the wildlife and botanical biological evaluations, and the fisheries disclosure, and the concurrence letters issued by the US Fish and Wildlife Service (April 29, 2008) and NOAA Fisheries (August 21, 2008), I have determined that this action will not jeopardize any species listed or proposed for listing under the Endangered Species Act.

10. Laws imposed for the protection of the environment provided the framework for the 1990 Umpqua National Forest Land and Resource Management Plan (LRMP), as amended. From the documentation provided in Chapter 3 (EA pages 53-213) of the Emile Timber Sale Project EA, I find that the project activities do not threaten a violation of Federal, State, or local law imposed for the protection of the environment (EA page 212).

From the preceding, I find that the Emile Timber Sale Project does not constitute a major Federal action that would significantly affect the quality of the human environment. Therefore, an Environmental Impact Statement is not necessary.

### **Implementation**

I have reviewed the Emile Timber Sale Project and its associated analysis file. I feel there is adequate information within these documents to provide a reasoned choice of action. I am fully aware of the short-term adverse environmental effects that are disclosed in Chapter 3 (pages 53-213) of the EA. I have determined that these short-term impacts will be outweighed by the long-term benefits of implementing the restorative thinning of 1,835 acres under Alternative 4. Implementing this project will cause no unacceptable cumulative impact to any resource. There will be no impact to cultural resources,

consumers, civil rights, minority groups, environmental justice, or women. There are no unusual energy requirements for implementing Alternative 4 (EA page 212).

Implementation may occur on, but not before the 15th business day following the date of appeal disposition. In the event of multiple appeals, the implementation date will be established following the last appeal disposition (36 CFR 215.9(b)). If no appeal is filed, implementation may begin on, but not before, the 5th business day following the close of the appeal filing period (36 CFR 215.9(a)).

### ***Procedure for Changes during Implementation***

Minor changes may be needed during implementation to better meet on-site resource management and protection objectives. In determining whether and what kind of further NEPA action is required based on any such changes, I will consider the criteria for whether to supplement an existing Environmental Assessment in 40 CFR 1502.9(c) and FSH 1909.15, sec. 18, and in particular, whether the proposed change is a substantial change to the intent of the selected alternative as planned and already approved, and whether the change is relevant to environmental concerns. Connected or interrelated proposed changes regarding particular areas or specific activities will be considered together in making this determination. The cumulative impacts of these changes will also be considered. For example, thinning unit boundaries may be modified if site conditions dictate and if other resource objectives can be met. Minor adjustments to unit boundaries may be needed during final layout for resource protection, to improve logging system efficiency, and to better meet the intent of my decision. Temporary road locations were estimated during field reconnaissance; minor adjustments to those locations may be necessary. Many of these minor changes will not present sufficient potential impacts to require any specific documentation or action to comply with applicable laws.

### ***Administrative Review***

My decision is subject to administrative appeal (CFR 215.11). Organizations or members of the general public may appeal my decision according to 36 CFR Part 215.

The 45-day appeal period begins the day following publication of this decision in the Roseburg News Review, the newspaper of record. The Notice of Appeal must be filed with the Appeal Deciding Officer:

Regional Forester, USDA Forest Service  
Attn. 1570 Appeals  
PO Box 3623,  
Portland, OR 97208-3623  
Business Hours: 8:00 am-4:30 pm  
Fax: 503-808-2255, Email: [appeals-pacificnorthwest-regional-office@fs.fed.us](mailto:appeals-pacificnorthwest-regional-office@fs.fed.us)

It is the responsibility of those who appeal a decision to provide the Regional Forester sufficient written evidence and rationale to show why my decision should be changed or reversed. The appeal must be filed with the Appeal Deciding Officer in writing. At a minimum, an appeal must include the following (36 CFR 215.14):

1. Appellant's name and address, with a telephone number, if available;
2. Signature or other verification of authorship upon request (a scanned signature for electronic mail may be filed with the appeal);
3. When multiple names are listed on an appeal, identification of the lead

- appellant and verification of the identity of the lead appellant upon request;
4. The name of the project or activity for which the decision was made, the name and title of the Responsible Official, and the date of the decision;
  5. Any specific change(s) in the decision that the appellant seeks and rationale for those changes;
  6. Any portion(s) of the decision with which the appellant disagrees, and explanation for the disagreement;
  7. Why the appellant believes the Responsible Official's decision failed to consider the substantive comments and;
  8. How the appellant believes the decision specifically violates law, regulation, or policy.

It is the responsibility of all individuals and organizations to ensure their appeals are received in a timely manner. For electronically mailed appeals, the sender should normally receive an automated electronic acknowledgement from the agency as confirmation of receipt. If the sender does not receive an automated acknowledgement of the receipt of the appeal, it is the sender's responsibility to ensure timely receipt by other means.

### **Contact Person**

For additional information concerning the specific activities authorized with my decision, you may contact:

Sherri L. Chambers,  
Emile Interdisciplinary Team Leader, District Wildlife Biologist  
North Umpqua Ranger District  
18782 North Umpqua Highway  
Glide, OR. 97443  
541-496-3532, Business Hours: 8:00 am-4:30 pm  
Fax: 541-496-3534  
Email: [schambers@fs.fed.us](mailto:schambers@fs.fed.us)

/s/ Clifford J. Dils

**Clifford J. Dils**

**Forest Supervisor  
Umpqua National Forest**

**09-03-08**

**Date Signed**

**09-09-08**

**Date Published**

## **PUBLIC INVOLVEMENT AND RESPONSE TO PUBLIC COMMENTS**

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### ***INTRODUCTION***

This appendix documents the public involvement process that occurred during the Emile Timber Sale Project, and includes some of the information found in Chapter 4 of the EA. The 30-day public comment process is also described, along with the comments received on the EA and the Forest Service's response to those comments.

### **PUBLIC INVOLVEMENT PROCESS**

Public involvement for the Emile Timber Sale Project began when the project was first listed in the July 2007 Umpqua National Forest Quarterly Schedule of Proposed Actions (SOPA). A scoping notice introducing the project was sent to the public in October of 2007. Douglas County joined as a Cooperating Agency on the project in November 2007. The formal scoping period for the project ended on November 30, 2007. In total, eight letters/emails were received during scoping. The Forest Service communicated with interested parties as issues were finalized and alternatives developed. The Emile project record contains a detailed scoping summary that describes Forest Service outreach efforts, the scoping comments received for the project, and how the Forest Service addressed scoping comments. Concerns for the project were focused on roads, riparian areas, economics, big game forage, and retention of wildlife habitat and old-growth features.

Draft EA Chapters 1 and 2 (issues and alternatives) and the project scoping summary were posted on the Umpqua National Forest website and an email concerning this information was sent to all parties who provided scoping comments on March 25, 2008. A project update and field trip invitation was sent to 136 members of the public on May 19. A public field trip was held on May 29<sup>th</sup> and eight members of the public attended.

### **AGENCY CONSULTATION**

The regulatory agencies charged with overseeing the Endangered Species Act (US Fish and Wildlife Service and NOAA Fisheries) were consulted as appropriate during the planning process. US Fish and Wildlife Service participated in a field trip on August 07, 2007 and provided recommendations for incorporation into the proposed action. Informal discussions with NOAA Fisheries began in early 2008 when the Forest Service became aware that the Coho salmon would be relisted under the ESA. Consultation with both regulatory agencies will be finalized prior to the issuance of the Decision Notice.

### **TRIBES THAT WERE CONSULTED FOR THE EA**

Cow Creek Band of Umpqua Tribe of Indians

Confederated Tribe of Grand Ronde of Indians

Confederated Tribe of Siletz Indians

## **RESPONSE TO COMMENTS**

The 30-day Public Comment period for the Emile Timber Sale EA opened on June 19, 2008 and closed on July 21, 2008. The public was asked to give comment on Alternative 4 of the EA. Three timely comment letters (paper and electronic) were received.

Comments were received from the following:

1. Doug Heiken, Oregon Wild
2. Francis Eatherington, Umpqua Watersheds, Inc.; Josh Laughlin, Cascadia Wildlands Project; George Sexton, Klamath Siskiyou Wildlands Center
3. Jake Groves, American Forest Resource Council

All comments submitted must be considered and addressed. Examples of comments which are most helpful are those which:

- provide new information pertaining to the preferred alternative or an alternative in the analysis;
- identify a new issue or expand upon an existing issue;
- identify a different (alternative) way to meet the purpose and need of the project;
- provide an opinion regarding one or more alternatives, including the basis or rationale for that opinion;
- point out a specific flaw in the analysis, or;
- identify a different source of credible research, which if used in the analysis could result in different effects.

It should be noted that all comments received are valuable. Alternative preferences, values and feelings also contribute to increased understanding and were carefully read and considered. The following narrative contains the comments, grouped by subject matter and paraphrased where appropriate, followed by the Forest Service's response.

Table A-1. Comments received on the EA, by subject of concern, and the Forest Service’s Response.

Letter Number	Subject of Concern	Comment	Forest Service Response
1	Suggested Improvements	When it can be accomplished without detrimental impacts to soil, water, wildlife, weeds, and carbon, Oregon Wild supports thinning in dense young stands to increase biological diversity in all its dimensions, but we want encourage the Forest Service to do the best they can. This project could be improved by increasing variable spacing of residual trees, enhance dead wood values, and reduce road construction.	Thank you for your comment.
1	DxD	Using DxD prescription results in a small amount of within stand variability, but its a significant compromise compared to the amount of variability that is desired within and between stands and that could reasonably be accomplished if we tried.	Thank you for your comment. Pages 12 and 13 of the EA describe how the silvicultural prescription will maintain within stand variability. The silvicultural prescription which is part of the Project Record describes different DxD prescriptions for different units based on elevation, topography, landscape position, and stand exam data. Thus, the Emile project is expected to achieve between stand variability as well.
1	Temporary Road Density	We appreciate the display of acres accessed by each segment of temporary road. Now to take the analysis one step further, what is the “effective road density” consequence of each segment? In other words, what if that much road were required to reach each acre of the planning area? And how does that compare to standards for big game, cumulative hydrological impact, etc? For instance, the short spur in unit 57 results in an effective road density of (640/1550) or .41 mi/mi <sup>2</sup> , pretty good; but the road to reach unit 25 would be (640/76) or 8.4 mi/mi <sup>2</sup> , that’s probably not worth it.	Thank you for your comment. The EA (pages 62-63) displays the analysis requested by Oregon Wild in the November 28, 2007 scoping letter.
1	Timber Production and Climate Change	The EA places too much emphasis on timber production in the matrix. Under the Northwest Forest Plan the Matrix is actually supposed to be managed for a mix of economic and ecological objectives. Also, the timber production goal was adopted before climate change (and our forests’ role in mitigating climate change) were recognized as	We agree that the matrix land allocation has multiple functions in addition to timber production. We also agree that the Forest Service has an important role in addressing and developing responses to climate change. In fact, climate change is one of three emphasis areas described by Forest Service Chief Kimbell, and Chief Kimbell has said that responding to climate change is one of the most urgent tasks facing the Forest Service (1300 Chief’s memo of February 15,



Letter Number	Subject of Concern	Comment	Forest Service Response
		<p>real and substantial issues, so the LRMP is invalid to the degree that the FS has not prepared a new NEPA document to reconsider that objective in light of new information. My point is not that thinning is inappropriate but that it should be restorative in nature rather than economic. To prepare forests for climate change and to store more carbon we should manage for long-term ecological resiliency and enhance biodiversity in all its dimensions. We should also retain more dead wood in the forest where it will last longer than will wood products in our throw-away culture. See attached supporting materials regarding “protecting forests are carbon stores” and “thinning in the matrix must be variable.”</p>	<p>2008). The following website provides a number of briefing papers and articles describing the Agency’s strategy for contributing to solutions to this global problem (<a href="http://www.fs.fed.us/kidsclimatechange/climate.shtml">http://www.fs.fed.us/kidsclimatechange/climate.shtml</a>); and an additional online reference on climate change has just been launched by the U.S. Forest Service’s three western research stations: the Climate Change Resource Center (CCRC) at <a href="http://www.fs.fed.us/ccrc">http://www.fs.fed.us/ccrc</a>. Revision of the LRMP and Northwest Forest Plan to address climate change is beyond the scope of this project; however, plan revision is scheduled for 2013. In the interim, climate change is addressed at the project scale when an issue is raised. As this issue was not raised during scoping, it did not drive an alternative.</p> <p>The Forest Service considers the proposed thinning both restorative and economic as described in the elements and measures of the purpose and need for the Emile project (EA pages 6-8).</p> <p>Multiple BMP’s, mitigation measures, and project design features were incorporated into the Emile project to address the dead wood resource in the context of wildlife habitat and soil productivity (carbon storage) and are detailed in the EA on pages 44 and 46. In addition, carbon is discussed on pages 104 in terms of carbon sequestration, and global warming is described in the context of emissions, pages 207-210.</p>
1	Coarse Woody	<p>Another way to improve upon this project is to recognize that the existing standards for managing dead wood are discredited and make extra efforts to “manage for decadence.” The EA describes mortality as a bad thing and a lost economic opportunity, but actually mortality is good. There are scores of wildlife that depend on dead trees for survival, and many ecological services that are performed by dead wood such as nutrient cycling, soil stability, carbon storage. Etc. Capturing that mortality and sending to the mill should be thought of as a lost ecological opportunity but this is not fully acknowledged and discussed in the EA. See attached supporting materials regarding “new information on dead wood”</p>	<p>The Forest Service agrees that dead wood is an important element of forest ecosystems; page 79 of the EA states: Coarse woody debris (CWD) is defined here as standing dead trees (snags) and large down woody debris (≥6” diameter). These forest components provide essential habitat for many species of wildlife, plants, fungi, liverworts, mosses, lichens, and ecological processes. Coarse wood helps provide for the maintenance and eventual recovery of late-successional organisms in the matrix land allocation (ROD B-7). The Emile project incorporates multiple activities designed to retain and manage for decadence:</p> <ul style="list-style-type: none"> <li>• Retain and protect (during harvest and burning) existing large down wood (&gt;6 inch diameter) and snags (&gt;9 inch dbh) to the extent practical and safe. Avoid mechanical impacts and</li> </ul>

Letter Number	Subject of Concern	Comment	Forest Service Response
		and “managing for decadence” and “considerations before relying on DecAID.”	<p>movement of large down wood and leave felled snags on site. (EA page 46).</p> <ul style="list-style-type: none"> <li>• To mitigate for some snag loss and a decreased rate of snag recruitment caused by the thinning, and to achieve moderate levels of snags, retain 5 trees/acre (&gt;15 inch dbh or largest trees available) for snag creation. This applies to all or portions of Units 1, 2, 4, 5, 7, 8a, 8b, 9, 10, 11, 14-17, 19, 20, 24-32, 35,40, 42-46, 57, 58. (EA page 46).</li> <li>• Snag creation as required mitigation would occur to meet DecAID 50% tolerance levels for units adjacent to spotted owl cores and in spotted owl Critical Habitat Units; this equates to creation of five snags per acre on approximately 1,247 acres. For the remaining areas (approximately 588 acres), snag habitat would be managed to meet DecAID 30% tolerance levels; this would require no additional active snag creation. Probable methods of active snag creation would include: (1) use of prescribed fire to create clumps of snags in all units that would be underburned; (2) use of prescribed fire to create clumps of 5 snags/acre within all sugar pine gaps; (3) use of prescribed fire to kill clumps of off-site ponderosa pine trees; and (4) fungal inoculation (preferred method), topping, or girdling to create clumps of snags where fire is not a practical/desired tool. (EA pages 24 and 81). (Trees would be inoculated with locally collected native heart rot fungus. Inoculated trees begin to develop heart rot within 5 years as they continue to grow (Duncan 1999), eventually producing larger trees with cavities and or broken tops, and eventually future snags. Inoculation is a management tool being used to offset the reduction of suppression mortality caused by thinning and to maintain a component of decadence within these managed stands (EA 81).</li> <li>• Maintain at least 45%-65% effective ground cover in order to maintain soil productivity and prevent soil erosion. (EA page 44).</li> </ul> <p>Potential impacts of the proposed project on the dead wood</p>

Letter Number	Subject of Concern	Comment	Forest Service Response
			resource are described in the EA on pages 79-84.
1	DecAid Tolerance Levels	The analysis of DecAID tolerance levels seems to imply that 30-50% tolerance level is adequate to meet forest plan objectives, but there is no scientific evidence to support this and certainly not NEPA analysis supporting that. Assuming for the sake of argument that that DecAID is valid, maintaining only 30-50% tolerance means that half or less of the potential population of snag associated wildlife would likely find the area suitable for persistence. This is not good enough.	<p>The Forest Service considers the information contained in the DecAID advisor as the “Best Available Science” and managing for snags and down wood using DecAID results in higher levels of dead wood retention than those identified in the LRMP or Northwest Forest Plan. The Forest Service does not agree that maintaining 30-50% tolerance means that half or less of the potential population of snag associated wildlife would likely find the area suitable for persistence. The information below taken from the DecAID website provides some clarification about this management tool <a href="https://wwwnotes.fs.fed.us/pnw/DecAID/DecAID.nsf">https://wwwnotes.fs.fed.us/pnw/DecAID/DecAID.nsf</a> :</p> <p>The DecAID Advisor arose from the recognition by Pacific Northwest Region, USDA Forest Service, of the growing need to update guidelines for managing snags and down wood. It was described in the wildlife Species Habitat Project of Washington and Oregon (Rose and others 2001, Johnson and O’Neil 2001). DecAID developed into a major data synthesis project under USDA Forest Service, Pacific Northwest Region, and Pacific Northwest Research Station, Portland, Oregon, with contributions of expertise from USDI Fish and Wildlife Service, and other agencies and institutions.</p> <p>Modeling biological potential of wildlife species (particularly only of primary cavity excavator birds) has been used in the past, and we developed the DecAID Advisor to avoid some pitfalls associated with that approach. There is no direct relationship between the statistical summaries presented in DecAID and past calculations or models of biological potential. Field studies have suggested that predictions of biological potential (relative or absolute population sizes of snag-associated wildlife species) do not match research findings.</p> <p>DecAID presents information on wildlife use of snag diameter, snag density, down wood diameter, and down wood percent cover, and on the range of natural (unharvested) and current (all) conditions of snag density and down wood percent cover by diameter classes. The information is presented at three statistical tolerance levels</p>

Letter Number	Subject of Concern	Comment	Forest Service Response
			<p>which may be interpreted as three levels of “assurance:” low (30% tolerance level), moderate (50% tolerance level), and high (80% tolerance level). Minimum and maximum values are also presented. Additional information on interpretation of DecAID tolerance levels is detailed in the following document: <a href="http://www.fs.fed.us/wildecology/decaid/decaid_background/decaid_stbasis.pdf">http://www.fs.fed.us/wildecology/decaid/decaid_background/decaid_stbasis.pdf</a></p> <p>DecAID is organized around “vegetation conditions” that combine wildlife habitat type, vegetation alliance, structural condition (average tree size and canopy closure), and geographic location (subregion). Wildlife habitat types and structural conditions as used in DecAID were derived from the wildlife habitats and structural conditions defined in the Species Habitat Project (Chappell and others 2001).</p> <p>DecAID provides interpretation and advice on the roles of insects and pathogens in the creation and dynamics of dead wood, and the implications of snag and down wood management on ecosystem health, and offers mitigation considerations. It includes information and advice on relationships between forest insects and pathogens and snag and down wood management, and summarizes the occurrences of specific pathogens within various vegetation conditions.</p> <p>DecAID also provides a summary of forest inventory data representing the range of “natural” (unharvested) and current conditions of snags and down wood in forests of all ownerships and disturbance histories. The DecAID Advisor presents information from research studies and inventories about range of natural conditions where available, and can be used to help identify knowledge gaps and areas of needed research.</p> <p>DecAID describes fungi associated with decayed wood in Oregon and Washington, including a summary of their ecological roles, the importance of dead wood to fungi, and considerations for maintenance of fungal biodiversity. At present, DecAID does not specifically address effects of fire.</p> <p>Because forest management has evolved to address forests as ecological communities and dynamic ecosystems, DecAID addresses</p>

Letter Number	Subject of Concern	Comment	Forest Service Response
			far more than just wildlife (terrestrial vertebrate) use of snags and down wood. Ecosystem management acknowledges how organisms link to their environments and how human activities influence more than just individual species. In this spirit, DecAID provides information on the array of key ecological functions and functional groups of wildlife that use snags and down wood, and can be used to describe the impact of changing snag and down wood levels on those functions and functional groups.
1	Snags and Future Logging Entries	The snag analysis also fails to recognize that over the course of the 100 year analysis period, future logging entries will further reduce snag recruitment, exacerbating the delay in attainment of objectives.	As noted in the EA on page 81, snag analysis modeling did not assume future thinning entries. Predicting timing and silvicultural prescriptions for future thinning entries over the next 100 years would be speculative. We agree that future thinning could further reduce/delay large snag recruitment.
1	50 tpa and Large Snags	Retaining only 50 trees per acre may be too few to ensure that enough large snags are recruited over time in the future to meet all our ecological objectives. Small pockets of 50 tpa might be OK, but most areas should retain far more. Please use a stand modeling software to fully understand the consequences of heavy thinning in terms of “captured mortality” and “lost opportunities for snags.”	As document on page 80 of the EA: the Northwest Forest Plan requires site-specific analysis and application of models for computing down wood information (ROD C-40) and snag recruitment models (ROD C-46) to take into account tree species, diameters, falling rates, and decay rates, to determine appropriate tree and snag densities to achieve desired future conditions. The Fire and Fuels Extension to the Forest Vegetation Simulator model (FVS v6.21, revision 1/19/06) was used to analyze existing and future levels of snags and down wood for this project.  Modeling was completed using stand exam data and proposed silvicultural prescriptions which included units with 50-70 tpa retention levels.
1	Gaps	Gaps should be heavily thinned not clearcut.	A clump of 5 trees per acre would be retained within gaps and subsequently killed with fire to provide snag habitat. Based on past experience and the professional opinion of the project silviculturist, canopy gaps that are one acre in size or larger create site conditions conducive to the successful survival, growth and health of young sugar pine seedlings which would be planted in these sites (EA pages 9, 17, 25, 32).
1	Machine Piling	Machine piling should be reconsidered. It has severe impact on soils.	Potential impacts of machine piling on soils are described in Chapter 3 of the EA under Soil Productivity (pages 98-105).

Letter Number	Subject of Concern	Comment	Forest Service Response
1	Fire-Regime Condition Class	Fire-regime condition-class may not be an accurate way to describe fire hazard in SW Oregon, because it assumes incorrectly that time-since-fire is an accurate indicator of fire hazard. There is compelling evidence that time-since-fire has exactly the opposite of the assumed effect, that is, in some areas, fires may burn more severely in early seral vegetation, and burn less severely in closed canopy forests. This may be related to the fact that closed canopy forests maintain a cool-moist microclimate that helps retain higher fuel moisture and more favorable fire behavior. Canopy cover also helps suppress the growth of ladder fuels. The significance of this is that it may make sense to variably retain more canopy cover while thinning and don't focus on treatment of canopy fuels except to provide some well-spaced "escape hatches" for hot gases generated by surface fires. Credible models of post-thinning fire behavior, must account for both fuel structure and microclimate effects of thinning. See supporting materials (attached) regarding "fire regimes in SW Oregon are unique."	Thank you for your comment. Fire Regime Condition Class (FRCC) is an established national standard for use in assessing landscape fire risk. In addition to Fire Regime Condition Class, a variety of models and tools (Farsite, Flammap, and FFE/FVS) were used to characterize and increase understanding of fire and fuels behavior in the Emile planning area (EA pages 88-98). These tools consider: slope, aspect, elevation, fuel model, time since last disturbance, local weather conditions, fire fighter response time and stand exam data.
1	CWD and Spotted Owl Critical Habitat	Since this project is in NSO critical habitat, the FS should retain adequate canopy cover, and retain lots of extra snags and down logs for ongoing recruitment of complex forest structure that will enhance the prey base.	Thank you for your comment. ESA Consultation with the USFWS has been completed for the Emile Timber Sale Project and snag and coarse wood levels meet Project Design Features described for Critical Habitat management. Potential impacts on canopy cover and spotted owl prey base are detailed in the EA on pages 108-113.
1	General Comments-	Oregon Wild makes the following recommendations to enhance the quality of this thinning project:  1. When conducting commercial thinning projects take the opportunity to implement other critical aspects of watershed restoration especially pre-commercial thinning, restoring fish passage, reducing the impacts of the road system, and treating invasive weeds.  2. Focus on treating the youngest stands that are	Thank you for your comment. The EA responds to Oregon Wild's concerns in the following manner:  1. The EA includes several of the recommended actions as connected actions: precommercial thinning, road improvements for erosion control, addition of large wood for stream channel stabilization, and noxious weed treatments (EA pages 23-24).  2. The EA proposes thinning in stands between 40-60 years of age (EA page 7) and precommercial thinning younger stands (EA page 24).

Letter Number	Subject of Concern	Comment	Forest Service Response
		<p>most "plastic" and amenable to restoration.</p> <p>3. Generally retain all the largest trees, then "free thin from below" retaining some smaller trees in all age-size classes.</p> <p>4. Retain and protect under-represented conifer and non-conifer trees and shrubs.</p> <p>5. Strive for a variable density outcome. Use your creativity to establish diversity and complexity both within and between stands. Use skips and gaps within units to help achieve diversity. Gaps should be small, while skips should be a little larger, but even small clumps and patches of trees are desirable. Gaps should not be clearcut but rather should retain some residual structure in the form of live or dead trees. Landings do not make good gaps because they are clearcut, highly compacted and disturbed, more likely subject to repeated disturbance, and directly associated with roads.</p> <p>6. The scale of patches in variable density thinning regimes is important. Ideally variability should be implemented at numerous scales ranging from small to large, including: the scale of tree fall events; pockets of variably contagious disturbance from insects, disease, and mixed-severity fire; soil-property heterogeneity; topographic discontinuities; the imprint of natural historical events; etc.</p> <p>7. Retain abundant snags and coarse wood both distributed and in clumps so that thinning mimics natural disturbance. Retention of dead wood should generally be proportional to the intensity of the thinning, e.g., heavy thinning should leave behind more snags not less. Retain wildlife trees such as hollows, forked tops, broken tops, leaning trees, etc.</p> <p>8. Continuous recruitment of snags is critical to development of old growth forest habitat. This is</p>	<p>3. The EA proposes thinning that would in most cases retain the largest dominant second growth trees similar to a thinning from below (EA page 13, 47, and silvicultural prescription). The EA also documents that the silvicultural prescriptions were applied to each unit depending on slope, aspect, and landtype association and are intended to increase growth, health, and vigor of the leave trees. The 70-90 TPA prescription is intended to develop multi-layered, late seral habitat within gentle/moist landtypes, where it may have persisted under the historical fire regime; the 50-70 TPA prescription is intended to develop single or two-storied stand conditions within steep/dry landtypes, typical of the historical fire regime.(EA pages 20, 28, and 34).</p> <p>4. The EA retains species other than Douglas-fir and includes restoration of native species such as sugar pine and western redcedar (EA pages 13, 47, 67-72, and the silvicultural prescription in the Project Record).</p> <p>5. The EA proposes thinning that includes clumps (EA page 13), "skips" or no thin areas within units (EA pages 20-21, pages 28-29, and 34-35) and gaps (EA pages 12, 17, 25, and 32) and Chapter 3.</p> <p>6. The EA contains variable density thinning within and between stands (EA pages 12-13 and Chapter 3).</p> <p>7. The EA retains and recruits snags and down wood and other "wildlife trees", and silvicultural prescriptions are designed to develop stand conditions typical of historical fire regimes (EA pages 13, 20, 28, 34. 46, 47 and Chapter 3).</p> <p>8. The EA contains snag mitigations referenced in response 7 above, discloses impacts to coarse woody debris (EA pages79-84), and contains unthinned patches within thinned stands (EA pages 20-21, pages 28-29, and 34-35).</p> <p>9. The EA includes moderate and heavy thinning, as well as unthinned areas and gaps (EA pages 20-21, pages 28-29, and 34-35) and gaps (EA pages 12, 17, 25, and 32) and Chapter 3. Silvicultural prescriptions are designed to develop stand conditions typical of historical fire regime (EA pages 20, 28, 34 and Chapter 3).</p> <p>10. The EA does not prescribe whole tree yarding or yarding tops</p>

Letter Number	Subject of Concern	Comment	Forest Service Response
		<p>especially critical in uplands that are already short of snags and in riparian areas where recruitment of large wood is important to stream structure. It is often asserted that thinning grows big trees faster and therefore results in more rapid recruitment of large snags, but FVS and other tools show this NOT to be true. In fact, thinning both reduces and delays recruitment of snags, first by removing trees that would otherwise suffer suppression mortality, and second by increasing stand vigor and postponing overall mortality. The implications are that heavy thinning should be used sparingly and generous unthinned patches should be retained WITHIN thinned stands in order to continue the snag recruitment process and mitigate for captured mortality.</p> <p>9. Thin heavy enough to stimulate development of understory vegetation, but don't thin too heavy. Recognize that thinning captures mortality and that plantation stands are already lacking critical values from dead wood due to the unnatural stand history of all clearcut and planted stands.</p> <p>10. If using whole tree yarding or yarding with tops attached to control fuels, the agency should top a portion of the trees and leave the greens in the forest in order to retain nutrients on site.</p> <p>11. Avoid impacts to raptor nests and enhance habitat for diverse prey species. Train marking crews and cutting crews to look up and avoid cutting trees with nests of any sort and trees with defects.</p> <p>12. Take proactive steps to avoid the spread of weeds. Use canopy cover to suppress weeds.</p> <p>13. Buffer streams from the effects of heavy equipment and loss of bank trees and trees that shade streams. Mitigate for the loss of LWD input by retaining extra snags and wood in riparian areas.</p>	<p>attached.</p> <p>11. The EA avoids known nest sites. The EA retains habitat for prey (EA pages 111) and retains defective trees (EA page 13).</p> <p>12. The Forest Service began proactive steps to avoid weed spread by treating scotch broom in the Emile planning area in 2007 and 2008. The EA prescribes weed mitigation including prevention strategies (EA pages 44-49, 144-148).</p> <p>13. The EA includes stream protection and buffers (EA pages 40-41), and restoring desired riparian conditions is an element of the projects purpose (EA page 7, 68). Impacts to riparian conditions, both adverse and beneficial are disclosed in Chapter 3 of the EA, including potential impacts on LWD.</p> <p>14. The EA does not include construction of any permanent roads; only temporary roads that would be constructed and then obliterated following use. The effects of temporary road building have been disclosed throughout Chapter 3 of the EA and the analysis request by Oregon Wild in scoping comments is documented on EA pages 62-64. Logging and hauling outside the normal operating season would only occur as long as road conditions and water quality would not be impacted (EA 23, 31).</p> <p>15. Chapter 3 of the EA provides full disclosure on the impacts of the Emile project.</p>



Letter Number	Subject of Concern	Comment	Forest Service Response
		<p>Recognize that thinning captures mortality that is not necessarily compensated by future growth.</p> <p>14. Avoid road construction. Where road building is necessary, ensure that the realized restoration benefits far outweigh the adverse impacts of the road. Rank new road segments according to their relative costs (e.g. length, slope position, soil type, ease of rehabilitation, weed risk, native vegetation impacts, etc.) and benefits (e.g. acres of restoration facilitated), then use that ranking to consider dropping the roads with the lowest ratio of benefits to costs. Do not allow log hauling during the wet season.</p> <p>15. Make the NEPA analysis transparent and explicit on all these issues.</p>	
1	“Supplemental Materials”	<p>Summary: Thinning in the Matrix must be Variable.</p> <p>Thinning must be designed to develop characteristics such as large trees, and high levels of snags and logs, to support spotted owl populations and diverse prey species for owls and other species. Stands in the matrix can be managed for timber production and maintenance of biodiversity.</p>	Thank you for your comment and supporting literature. Page 12 of the EA summarizes how the Emile project addresses this concern.
1	“Supplemental Materials”	<p>Summary: Manage for Decadence.</p> <p>Thinning “captures mortality”, but removes future snags and down logs. Oregon Wild is concerned that heavy thinning delays recruitment of snags, and delays development of critical old-growth components. Oregon Wild recommends multiple techniques for enhancing decadence:</p> <ul style="list-style-type: none"> <li>• Retaining all large snag and large dead wood by keeping workers out of the hazard zone if necessary,</li> <li>• Intentionally retaining leaning trees, and trees with defects, broken tops, forked tops, etc.</li> <li>• Leaving some untreated skips where future</li> </ul>	Thank you for your comment and supporting literature. As detailed in previous responses, the Emile EA includes project design features and mitigations designed to retain and create decadence in thinned units. Many of the techniques referenced in your comments are incorporated into the Emile project. EA pages 81-84 provide full disclosure of the project’s impacts on Coarse Woody Debris.

Letter Number	Subject of Concern	Comment	Forest Service Response
		<p>mortality can be expected,</p> <ul style="list-style-type: none"> <li>•When determined to be necessary, snag creation must be a creative endeavor. Trees killed in different way will die and decay in different ways. A variety of techniques should be used within and between stands: girdling, topping, burning, infecting with heart rot fungus or other native pathogens, etc.</li> </ul>	
		Material includes snag analysis from another EA and states that the agency must come up with a way to manage for decadence to mitigate the fact that thinning captures and delays mortality.	
1	“Supplemental Materials”	<p>Summary: Protect Forests as Carbon to Help Stabilize the Climate</p> <p>Material includes approximately 10 pages of excerpts from current literature discussing the role of public forests in carbon sequestration and climate change; consideration of green house gas emissions and global warming in NEPA project planning and analysis; a summary of adverse consequences of logging in terms of greenhouse gases-particularly harvest of mature and old-growth forests; and recommendations from 600 prominent scientists urging U.S. Congress to pass legislation to curb global warming pollution and help protect wildlife and other natural resources threatened by global warming.</p>	<p>Thank you for your comment and supporting literature. The Emile project does not harvest old-growth forests referenced in your comments as important reservoirs of carbon. However, as detailed in a previous response, the Forest Service recognizes that the Agency has an important role in addressing carbon sequestration, greenhouse gas emissions and climate change.</p> <p>The Emile EA discusses carbon storage (page 104) and carbon emissions in the context of air quality and human health (pages 207-210). However, to further answer the comments submitted, it is acknowledged that the action alternatives would likely release some carbon currently stored in trees that will not end up as durable wood products and also would result in greenhouse gas emissions from traffic generated by logging and milling operations and implementing connected actions. However, this project is also designed to move stands toward desired future conditions based on natural disturbance regimes, increasing the likelihood that residual trees in the stands would survive fire and persist to serve a mitigating/neutralizing function on greenhouse gases as future mature/old trees, storing even more carbon in the future than what would be emitted during operations.</p>
1	“Supplemental Materials”	<p>Summary: Snags, DecAID, and Cavity Nester Populations</p> <p>Materials include approximately 12 pages of excerpts from current literature discussing snag standards;</p>	Thank you for your comment and supporting literature. As detailed in previous responses, the Forest Service considers the information contained in the DecAID advisor as the best science available for use in assessing snag habitat and managing for cavity nesters. The EA discloses potential impacts of the project on Snags and Down

Letter Number	Subject of Concern	Comment	Forest Service Response
		and critiquing the adequacy of current and former snag guidelines and analysis tools (DecAID and previous methods based on cavity nester population potential).	Wood (EA pages 79-84), and on Pileated Woodpeckers and Primary Cavity Excavators (EA pages 134-136).
1	“Supplemental Materials”	Summary: SW Oregon Fire Regimes are Unique Materials include approximately 4 pages of excerpts from “Patterns of fire severity and forest conditions in the western Klamath Mountains, California” (Odion et al. 2004). Oregon Wild commented that fuel reduction projects in SW Oregon must consider the implications of this article.	Thank you for your comment and supporting literature. Emile was not designed as a fuel reduction project, although a reduction in some natural and activity-generated fuels is an additional beneficial outcome associated with the project (EA page 6). The project fire/fuels specialists has reviewed and considered the provided information.
2	Preferred Alternative	For the Emile Project, Umpqua Watersheds, Klamath Siskiyou Wildlands Center, and Cascadia Wildlands Project encourage you to choose Alternative 3, with the least amount of road building. If not 3, then alternative 2, the proposed action, should be chosen.	Thank you for your comment.
2	Alternative 2 vs. Alternative 4	The proposed action, alternative 2, uses one-acre gaps, whereas alternative 4 uses up to 3-acre gaps. The EA never explained why alternative 4 was chosen as the “preferred” alternative.  The only reason alternative 4 was even considered is because the timber industry proposed it. While the timber industry stated they wanted to increase big game habitat, the timber industry’s interest is primarily logging volume. Alternative 4 was requested by the timber industry, alternative 3 was requested by the environmental organizations, and alternative 2 is the middle ground. The EA failed to justify why the Forest Service is leaning more to industry requests.  The Forest Service should at least stick with the middle ground, or error on the side of healthy wildlife, soils, and watershed functions and go with	We agree, the EA does not explain why Alternative 4 was identified as the preferred alternative. The purpose of identifying a preferred alternative is to solicit public comments on the alternative. The Decision Maker will then consider these public comments along with other factors when making a final alternative selection. Rationale for why the Decision Maker chose the selected alternative is documented in the Decision Notice and Finding of No Significant Impact for the Emile Timber Sale EA.  As documented in Chapter 1 of the EA (pages 10 and 11), two significant issues were identified during public scoping: new temporary road building and big game forage enhancement. Alternative 3 (EA pages 25-31) was developed to meet the purpose and need and respond to the issue of new temporary road building and Alternative 4 (EA pages 31-35) was developed to meet the purpose and need and respond to the issue of providing additional foraging habitat for deer and elk in the planning area. The Forest Service has responded to the concerns of both timber industry and environmental organization representatives and met its

Letter Number	Subject of Concern	Comment	Forest Service Response
		alternative 3.	requirements under NEPA. Potential adverse and beneficial impacts of all alternatives on wildlife, soils, and watershed functions are documented throughout Chapter 3 of the EA.
2	Landscape-Scale Forage Conditions	Even for big-game use, gaps up to 3-acres do not make any difference in big-game health or population numbers. The EA says “the forage:cover ratio for all action alternatives remains at 14:86”, and all action alternatives “represent an improvement in big game winter range”. Even alternative 4 “would not be enough to stop the declining trend in forage habitat and forage/cover ratios”. If there is virtually no difference on landscape scale big game habitat, which is why the timber industry promoted alternative 4 to begin with, why is it the preferred alternative?	Page 6 of the EA documents that desired conditions may not be reached with one project alone; this is applicable to the condition of big game winter range in the planning area and the general condition of forage at the landscape scale. Implementation of the Emile project represents movement toward desired conditions for big game habitat, but not attainment of optimal habitat for deer and elk. As described on page 134 of the EA, Alternative 4 would result in the greatest improvements in big game foraging habitats because it creates the largest acreage of canopy gaps (forage quantity) and accomplishes the most forage seeding (forage quality) of the action alternatives. Due to the small scale of proposed activities relative to the large size of the planning area (i.e. thinning on proposed on about 5% of the Emile planning area), the forage:cover ratio for all action alternatives remains at 14:86 and HEs = 0.972. However, all action alternatives nonetheless represent an improvement in big game winter range and a beneficial impact on deer and elk over the existing condition.
2	Canopy Gaps	The EA failed to consider that the 2 and 3-acre gaps proposed in alternative 4 are just mini-clearcuts, where forest floor drying occurs and fire hazards increase.	As described in the EA, the Forest Service considers creation and subsequent planting of 1-3 acre canopy gaps located on south/west aspects and ridgetops as a prescribed action that would help to achieve the desired condition of increased populations of healthy sugar pine (EA page 72). Canopy gaps under all action alternatives would be planted with sugar pine seedlings and 5 trees/acre would be retained within the gaps for snag creation (EA pages 17, 23, 25, 32, 72). Under Alternative 4, canopy gaps would also be seeded with native big game forage mix (EA page 31). Greater forest floor drying after harvest/slash treatment would occur in the larger gaps in Alternative 4, due to less edge effect. Big game forage seeding

Letter Number	Subject of Concern	Comment	Forest Service Response
			within these gaps would help retain soil moisture into late spring\early summer. No meaningful increases in fire hazards would be expected in gaps due to proposed slash treatment and site preparation for sugar pine planting.
2	Cumulative Impacts	<p>For cumulative impacts to the proposed action, the Blaze ATV timber sale was not mentioned. Why not? Our records show that the Blaze timber sale (part of the Withrow EA) would log 12.1 mmbf from 700 acres of native and old growth forests, and build new roads and reconstruct roads in the Little River watershed. This is the biggest impact from logging in the Little River water in a decade. Since it is in the same watershed, it must be considered in cumulative impacts. Even though the EA for Blaze was written in 1998, the cumulative impacts will occur virtually concurrently with the Emile timber sale logging.</p> <p>The EA states on page 84 that the Felix Timber Sale “would potentially contribute to a cumulative impact to the CWD resource in the planning area”. Really? Felix? You referred to Table 9, but I don’t see Felix mentioned in Table 9. Perhaps you meant the BLM’s Emile timber sale, which we are glad to see table 9 tells us is “withdrawn indefinitely”. That statement should be made for Mjollnir, Blaze and Felix projects also.</p>	<p>The Blaze ATV timber sale would harvest approximately 239 acres, and construct and then obliterate 1.75 miles of temporary road. The closest Blaze ATV unit is over 5 air miles west of the nearest Emile unit. Blaze ATV was not included in EA Tables 8 or 9 because it does not occur within the 35,482 acre analysis area that was used to bound cumulative effects for the Emile project. The Emile planning area encompasses four 6th field subwatersheds within two 5<sup>th</sup> field watersheds- the Little River watershed, and the Middle North Umpqua watershed. The analysis area for cumulative effects does not include the entirety of both 5<sup>th</sup> field watersheds. However, per the Emile IDT specialists, consideration of the management actions that would occur under Blaze ATV would not change the cumulative effects analysis currently documented in EA.</p> <p>Felix Timber Sale is not included in Table 9 because it is no longer reasonably foreseeable. The EA is corrected to exclude its mention on page 84. Second growth units that were originally included in the Mjollnir Timber Sale EA are included as Emile units in this EA; old-growth units from Mjollnir are not reasonably foreseeable, and thus are not included in the cumulative effects analysis.</p>
2	CWD, Carbon Storage, and Climate Change	<p>The EA failed to consider woody debris’ contribution to carbon storage to mitigate climate change, now, and in the desired future condition of the stands. In fact, every project that the Forest Service does should have a goal of mitigating the predicted, dramatic, earth destroying climate change. It should be a top goal of any project.</p>	<p>Carbon storage is discussed in the EA on page 104. The following addendum is added to the EA to include additional information on coarse wood, carbon storage and climate change as follows:</p> <p>Greenhouse gas emissions (IPCC 2007): The Intergovernmental Panel on Climate Change recommendations and guidance for forest management included the replacement of fossil energy sources by sustainably managed sources of biomass, increase substitution efforts of highly energy consuming products by wood, technology</p>

Letter Number	Subject of Concern	Comment	Forest Service Response
			<p>improvement with regards to the use of fuel wood, and encouragement of the recycling of forest products to provide even longer storage for carbon pools. This project sequesters carbon in both the soils and in the finished wood products, and reduces emission potential by creating more fire resilient stands, thus meeting IPCC guidance.</p> <p>Maintaining soil structure and soil organic matter, large woody material, and the forest litter is a critical element to long-term soil productivity. Unacceptable soil disturbance (severe compaction, displacement, or burned soil), effective ground cover, carbon and nitrogen balance are used as measures of the potential to have direct, indirect, or cumulative effects to long-term soil productivity, sustainability, and global warming. As described on page 103 of the EA, the desired condition for soils in the planning area is to keep cumulative unacceptable soil disturbance to less than 20% of the treatment areas, and maintain 45- 65% effective groundcover of surface organic material for soil productivity. By doing so, soil productivity and thus, carbon, are successfully stored and maintained.</p> <p>An additional guideline exists related to soil productivity: Forest soils are the primary stores of carbon and can sequester large amounts of greenhouse gases, thus creating a carbon neutral project if more carbon is sequestered than emitted (IPCC 2007). While the tools to model carbon exist, the use of these tools in project planning is evolving. Since carbon was not brought up as an issue during scoping, these tools were not used for this project.</p>
2	Snags/15% Live Tree Retention	The EA is proposing leaving only five small dead trees in the center of gaps <sup>1</sup> . In fact, many more trees should be left, including a few live trees. If alternative 4 is chosen, 2 and 3 acre-mini cuts need at least 15% retention of live trees <sup>2</sup> .	<p>As detailed in Chapter 2 alternative descriptions, all action alternatives would retain clumps of 5 trees/acre within gaps for snag creation.</p> <p>The Northwest Forest Plan standards and guidelines for green tree retention in Matrix management (S&amp;G's C-41, item B) describe retention of at least 15 percent of the area associated with each cutting unit (<i>stand</i>); rather than a canopy gap <i>within</i> a stand.</p>

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<sup>1</sup> UNF Emile EA page 21

<sup>2</sup> Northwest Forest Plan.

Letter Number	Subject of Concern	Comment	Forest Service Response
			Emile units would retain greater than 15% live trees under all action alternatives.
2	Snag Size	The EA failed to disclose the size of the created snags to be left in the gaps (five snags) and snags created per acre in the owl CHU's (also five snags) <sup>3</sup> . In fact, the created snags should be at least as large as the trees put on the log trucks. The snags will be pretty small anyway in managed plantations, so for them to persist until larger snags can replace them, the created snags should be chosen from the largest of the trees that otherwise would be cut and sold.	In created gaps and owl CHU, five snags per acre (> 15 inch dbh or among the largest trees available) would be retained for snag creation using methods described in footnote 18 on page 24 of the EA.
2	Snags and 40% Cavity Nester Populations	The EA failed to describe how the 30-50% tolerance of the DecAID model relates to the requirements of the Northwest Forest Plan, which requires that dead wood support 40% of cavity nesters. The Northwest Forest Plan, page C-42 says "the objective is to meet the 40 percent minimum standard throughout the matrix..."	Snag levels prescribed to meet the 30-50% tolerance levels under DecAID exceed the requirements described in the 1994 Northwest Forest Plan and the 1990 LRMP. (The LRMP requires management of cavity nesting species at or above 60% potential population capacity (IV-129). Potential population capacity is now considered to be a flawed technique for assessing snag habitat and cavity nester populations (Rose 2001) because the model did not include adequate snags to meet all of the species needs (i.e. foraging habitat).
2	CWD and Spotted Owls	The Endangered Species Act, and the associated Critical Habitat designated for the Northern Spotted Owl in the project, should take precedence even over this level of woody debris. Critical habitat should be managed for natural decadence to enhance future owl populations.	Thank you for your comment. ESA Consultation with the USFWs has been completed for the Emile Timber Sale Project and snag and coarse wood levels meet Project Design Features described for Critical Habitat management.
2	Land Allocations, Matrix, AMA, and Riparian Reserves	The EA mistakenly claims "stands in the Emile planning area are located in land allocations where timber production is emphasized". This is incorrect. The matrix and AMA land allocations of the Northwest Forest Plan emphasize far more than just timber production. For instance, the AMA units should emphasize research and restoration, not	The various land allocations and designations that comprise the Emile planning area and their objectives are detailed in the EA on pages 1, 2, 7, 8, and 109. We agree that the matrix and AMA land allocations have multiple functions in addition to timber production. The sentence referenced in your comments from page 67 was a summary statement that reads: "With the exception of the Riparian Reserves where riparian dependent resources receive

<sup>3</sup> UNF Emile EA page 81.

Letter Number	Subject of Concern	Comment	Forest Service Response
		timber production. In a CHU, the emphasis must be on not degrading suitable habitat, now and in the future.	primary emphasis, the second growth stands in the Emile planning area are located in land allocations where timber production is emphasized”.
2	ASQ and Riparian Reserves	The final decision should disclose the volume that is attributable to the ASQ and the volume from the riparian reserves that is not attributable to the ASQ.	<p>Allowable Sale Quantity (ASQ) is the maximum volume assigned by the Forest Plan and is based on the 1990 LRMP models. For the most part, the volume harvested by the Forest is now attributed to Probable Sale Quantity (PSQ), which was defined by the Northwest Forest Plan. PSQ is the volume the Forest is likely to achieve based on volume planned outside of reserves.</p> <p>However, volume removed from reserves can contribute toward the Forest’s annual timber sale target, which is assigned by Congress. The annual target includes all volume, whether or not it is chargeable or non-chargeable to ASQ/PSQ. The riparian reserve volume is considered non-chargeable and won’t be considered in ASQ/PSQ reporting, but will be counted towards the Umpqua’s assigned annual timber target.</p>
2	Precommercial Thinning	Precommercial thinning is proposed with KV Funds. The decision should confirm that the priority for precommercial thinning is in Riparian Reserves. In the planning area, “37% of the riparian reserves within the Forest Service boundary have been previously clearcut” . Therefore, “clearcut harvesting created young plantations along stream reaches that are now growing even-aged stands of Douglas fir. These stands are not on trajectories for riparian diversity and function.” While this is a good reason to thin the 50-year-old clearcuts, it is equally a good reason to precommercially thin the 20-year-old plantations. Also, in Critical Habitat, restoring diversity to riparian reserves through smart (not usual) precommercial thinning should take precedence over precommercial thinning for commodity production in matrix. Precommercial thinning in Riparian Reserve should reintroduce diversity at a young age, which is more beneficial to the stand then trying to reintroduce diversity at an older age, such as the age of the units now being	Thank you for your comment.



Letter Number	Subject of Concern	Comment	Forest Service Response
		commercially thinned.	
2	General Support of Alternatives 2 or 3.	<p>In general, the Emile EA was well written, thorough, and alternative 2 and 3 proposes a reasonable and necessary thinning project. We appreciate the attempt to diversify the stands by retaining minor species, retaining small groups of trees, and proposing a thinning prescription that diversifies tree spacing. In the future, the Umpqua National Forest could consider prescriptions that further diversify the landscape.</p> <p>Thank you for the opportunity to comment on the Emile thinning project. Please choose alternative 3, or at least alternative 2, in your final decision.</p>	Thank you for your comment.
3	Economics	AFRC would like to see all timber sales be economically viable. Appropriate harvesting systems should be used on all units to achieve an economically viable sale and increase the revenues to the government. AFRC is pleased that all the alternatives in the Emile Project EA appear to be economically viable. However, AFRC supports Alternative 4 as it appears to be the most economically viable of the three action alternatives while best addressing multiple natural resource objectives.	Thank you for your comment.
3	Big Game Forage	AFRC is pleased that the Umpqua National Forest created an alternative (Alternative 4), that specifically addressed the need to improve big game foraging opportunities in winter range. The eight, one-acre gaps; eighteen, two-acre gaps; and one, three-acre gap that are proposed in Alternative 4, will create 47 acres of early successional habitat in winter range for species such as Columbian black-tailed deer ( <i>Odocoileus hemionus columbianus</i> ) and Roosevelt Elk. This is an increase of 18 acres of	Thank you for your comment.

Letter Number	Subject of Concern	Comment	Forest Service Response
		early successional habitat in critical winter range over Alternatives 2 and 3. As you know, early successional habitat is not provided by typical thinning treatments. Thinning treatments do not provide the quantity or quality of forage that would be sufficient to sustain wild ungulate populations. AFRC applauds the Umpqua National Forest's leadership on working to improve big game winter range habitat.	
3	Road Construction and Decommissioning	AFRC supports road construction that will help the Forest Service offer economically viable timber sales, give them greater access to the area for future fuel reduction treatments, and improve the agencies ability to respond to wildfires. Constructed roads can always be removed, or made inaccessible to vehicles after logging operations are completed. For the same reason that AFRC supports the construction of roads to improve access for fuels reduction treatments and early initial response to wildfires, we do not support the decommissioning of any permanent roads. Getting into the habit of decommissioning permanent roads on a landscape that is prone to catastrophic wildfires is careless and not beneficial to the continued health of the forest.	Thank you for your comment.
3	Seasonal Restrictions	Seasonal and wildlife restrictions often make timber sales extremely difficult to complete within the contract timelines. Fire season restrictions on top of seasonal and wildlife restrictions can often limit workdays to 4-5 hours. All these restrictions have a cost to the purchaser and results in a lower bid for the stumpage.	Thank you for your comment.
3	Winter Haul	AFRC would also like to continue to encourage the Umpqua National Forest to offer sales that will allow winter harvesting and haul. It appears the majority of the haul routes for the Emile Project are on rocked or paved surfaces, AFRC is pleased that the Forest Service will allow winter harvesting on most	Thank you for your comment. As documented on pages 23, 31, and 35 of the EA, although opportunities are considered to be limited in the project area due to the elevation of the units, under all action alternatives, timber may be logged and hauled outside the normal operating season as long as road conditions and water

Letter Number	Subject of Concern	Comment	Forest Service Response
		of these improved roads. The loggers need winter work and the mills generally need winter wood, this is a big bidding issue for a purchaser.	quality would not be impacted.
3	Riparian Reserve Thinning	AFRC would also like to continue to support the Umpqua National Forests' thinning treatments inside the riparian reserves. By prescribing smaller no cut buffers (25-60 feet) to be left to maintain stream temperatures and thinning the remaining acres inside the riparian reserves you can achieve the management objectives of moving them into late seral habitat faster. By reducing the no cut buffers to 25-60 feet and thinning down to that distance, the forest also harvests more volume during the sale thus reducing unit cost. We encourage the Forest Service to continue to use silvicultural thinning treatments in riparian reserves on future projects to accelerate the development of desired riparian conditions.	Thank you for comment. As documented on page 40 of the EA, all action alternatives include no-cut stream buffers and thinning treatments in riparian reserves.