

Appendix C - Response to Comments Lake Branch Thin

The proposed action along with a preliminary assessment (which in addition to proposed action included the need for the proposal, the alternatives considered, and the environmental consequences) was made available for public comment, (36 CFR 215, 5/13/03). Letters and e-mails were received during the 30-day comment period, which ended on August 3, 2009.

The responsible official has considered comments received and has developed the Lake Branch Thinning Environmental Assessment in response to those comments.

This appendix responds to the substantive comments. Substantive comments are comments that are within the scope of the proposed action, are specific to the proposed action, have a direct relationship to the proposed action and include supporting reasons for the Responsible Official to consider (36 CFR 215.2).

The emails and letters are in the analysis file; the following is a summary. In the responses, section numbers refer to the Environmental Assessment unless otherwise specified.

	Comment	Response
Oregon Wild	1. What is a “preliminary assessment?” Do we get to comment on a draft EA too? We encourage the FS to take public comments on commonly understood NEPA documents like scoping notices and draft EAs or DEISs, so the public does not have to learn a bunch of obscure terminology and procedures that differ by forest and district.	A detailed ‘preliminary assessment’ was prepared to afford the public the opportunity to review essentially all of the information that is contained in the EA. The Agency does not use the term “Draft EA.” (36 CFR 215).
Oregon Wild	2. We generally support thinning in young stands like these and the FS has includes some good aspects of variable density thinning, but this sale could be improved with some increased provision of long-term recruitment of dead wood.	The project includes variable density thinning with skips and gaps and the retention and creation of down wood, snags and trees with the elements of wood decay, s. 2.3.1. Long-term recruitment of snags and down logs would be emphasized in skips, riparian protection buffers and across a broad landscape outside of units. Skips and riparian protection buffers would have processes similar to those described for no action where tree mortality would create an abundance of snags and down wood, s. 4.5.3.4.

	Comment	Response
Oregon Wild	3. The flawed conception of snags and dead recruitment pervades many parts of the EA including: riparian reserves and their need to large wood, owl dispersal habitat and its need for woody structure for owl prey species, the analysis of management indicator species that rely on snags and dead wood, and the carbon-climate analysis. The FS needs to run a stand simulation model to clearly describe and mitigate this likely adverse impact. We are not arguing against appropriate thinning in young stands, but we are asking for a more thoughtful consideration of how to provide a balanced mix of thinned and unthinned areas that can attain a more balanced suite of habitat characteristics across the landscape.	See response to comment #2. Section 4.1.6.1 describes the balancing of variable density restoration thinning to gain diversity while creating some dead and down wood. The action alternatives would create some snags and down logs (s. 2.3.9.2&3). However, the only trees available in these units are small and no amount of felling, girdling, topping or inoculation of these small diameter trees would restore the units to historic levels of large down logs and large snags. Thinning does remove the smaller trees in a stand: the ones that would otherwise die from suppression mortality if no action were taken. The action alternatives provide a mix of some small snags and down wood now and thinning to create variability and larger trees (s. 4.1.). The Forest has run the FVS stand simulator. If having large quantities of dead and down wood were the only objective, perhaps no action would be a good strategy. However, the FVS modeling and previous experience with similar thinning indicate that restoration thinning with skips, gaps and heavy thinning creates a better mix of diversity, riparian health, larger trees and forest products while providing sufficient quantities of dead and down wood.
Oregon Wild	4. The purpose and need at section 2.2.1 is founded on false assumptions. Models have shown clearly that thinning in young stands captures mortality and reduces and delays recruitment of large dead wood. There is no compelling evidence that thinning is “needed” to attain ACS objectives. Please disclose how each ACS objective will be met by no action. The FS needs to run a stand simulation model that can disclose the effects of thinning on the long-term recruitment of pool-forming wood and large wood.	See response to comments #2 & 3. The Northwest Forest Plan indicates that restoration thinning is appropriate in riparian reserves (page C-32). The elements of the Aquatic Conservation Strategy are discussed in s. 4.3.4.2. The discussions in s. 4.1.3.2 & 4.3 discuss the effects and benefits of no action for riparian resources. The impacts and benefits of thinning in riparian reserves are discussed in s. 2.2.1 and s. 4.3. The application of Best Management Practices and the provisions of the programmatic biological assessment (s. 2.3.9) would result in minimal impact to water quality (s. 4.3). The unthinned protection buffers would provide some recruitment of dead wood to streams.
Oregon Wild	5. The EA needs to clearly disclose how “diversity” will be enhanced if thinning captures mortality and reduces and delays recruitment of large wood, which is a defining characteristic of late-successional forests and ecological diversity. The real question (not addressed in the EA) is what combination of both thinning and not thinning will best attain diversity objectives. We want to thin some places to grow big trees and stimulate a new layer of vegetation, but we also want to encourage the accumulation of dead wood that is typical and necessary at this stage of forest development.	See response to comments #2 & 3. Diversity is discussed in s. 4.2. Diversity has many elements. Variable density thinning with skips and gaps and the retention and creation of down wood, snags and trees with the elements of wood decay would result in stands with greater diversity compared to no action.

	Comment	Response
Oregon Wild	6. Section 2.2.3. exhibits a bias against mortality processes that are perfectly natural, healthy, and desired for the forest ecosystem. A healthy forest includes many dead trees, but these stands already have too few, and this project will continue that adverse trend.	Section 4.1.6.1 describes the balancing of variable density restoration thinning to gain diversity while creating some dead and down wood.
Oregon Wild	7. Producing wood products during a severe economic downturn is not a very important goal. There is very little demand for wood products. And the 15 year old Matrix land allocation may no longer be valid based on new information such as climate change, the barred owl, and the need for updated standards & guidelines to address the regional deficit of dead wood habitat. The FS should not tier to the NWFP analysis justifying matrix logging until new information has been fully considered and incorporated into a new management plan.	The disposition of matrix lands will be considered in the Forest Plan revision process: it is not within the scope of this analysis. Section 4.12 contains a discussion of timber markets.
Oregon Wild	8. The EA describes the adverse effect of thinning on spotted owl dispersal habitat but only in terms of reduced canopy cover. The EA fails to describe the adverse effect of thinning on dead wood as it contributes to high quality owl dispersal habitat. The EA says that “Snags and down woody debris are an important component of spotted owl habitat. Few remnant (i.e. legacy) snags and down wood remain in the units.” The EA should disclose that high quality dispersal habitat should include foraging opportunities and foraging opportunities are provided by an abundance of prey species that are associated with snags and accumulations of dead woody structure. Thinning will reduce the accumulation of complex dead wood habitat and degrade owl foraging opportunities in this dispersal habitat. The NEPA analysis needs to disclose and consider this.	Sections 4.4.3.1 & 4.4.3.2 discuss the impacts of thinning on owls including the situation with snags and down logs.
Oregon Wild	9. The EA says that under the no action alternative, “Snag levels would remain essentially unchanged.” How can this be? Significant levels of density dependent mortality is expected in the coming decades, so snag habitat should improve. Even if the snags are small, they will be numerous. And don’t forget that trees continue to grow even if they are not thinned, so the snags to be recruited under the no action alternative won’t be as small as the trees are now.	The quoted text in the owl section describes short-term effects. The next sentence describes the snag situation for the coming decades, s. 4.4.3.1. Greater detail on the effects to snags can be found in the snag section, s. 4.5.3.4.
Oregon Wild	10. The EA lists a large number of LRMP standards & guidelines by number (e.g., FW 170 & 171, FW-174, FW-175, FW -176, FW 177, & 178, FW-179) but the EA never discloses the substance of those requirements.	The Forest Plan contains the text of the listed standards and guidelines. The text is not duplicated in the EA. The standards and guidelines are discussed or analyzed in detail where necessary. Many standards and guidelines are not applicable to this project.

	Comment	Response
Oregon Wild	11. The EA continues to rely on outdated “potential population” method of analyzing wildlife snag needs. This has been discredited and the FS needs to adopt a new forest plan standards & guidelines to ensure that dead wood is retained in adequate numbers of serve all the important ecological services of dead wood, not just habitat, but also hydrologic functions, nutrient cycling, and carbon storage. The EA refers to the DecAID 30% tolerance level as if it is some new management objective. It is not. The EA does not even disclose that there are 50% and 80% tolerance levels also included in DecAID.	The amendment of snag standards will be considered in the Forest Plan revision process: it is not within the scope of this analysis. The EA discloses the snag situation using both the biological potential method and the DecAID method, s. 4.5.3.2. The EA makes no assertion that DecAID is a new management objective: it is a tool to describe effects to snags and down wood. With DecAID, all alternatives including no action would be below the 30% level.
Oregon Wild	12. The EA says “The attainment of large diameter snags and down woody debris would be slower with the no-action alternative when compared with the action alternatives.” Depending on how it is interpreted, this statement is either highly misleading or simply untrue (based on stand simulation models). If the goal is to provide biologically relevant amounts of snags and dead wood, the objective of management is not to thin produce the first large vigorous tree, rather the objective must be to provide continuous and pulsed recruitment of large snags and dead wood over the long term. Thinning is a detriment to the recruitment of dead wood. Run the models and see.	See response to comment #3. The purpose and need for this project is in section 2.2. While snags and down wood are part of the element of diversity (s. 2.2.2) and play a role in riparian communities (s. 2.2.1), there is no specific project goal to provide ‘biologically relevant’ amounts of snags and down logs. Sections 4.1.3, 4.1.6.1, 4.2, 4.4.3.2, and 4.5.3 describe the balancing of restoration thinning to gain diversity while creating some dead and down wood. Clarification was added to section 4.5.3.4 to better describe short and long-term effects and snag sizes.
Oregon Wild	13. The EA comes close to identifying the trade-off between thinning that produces fewer-larger-later snags vs no-action that produces numerous-smaller-sooner snags. “Implementation of the action alternatives would reduce the amount of natural selection that would have occurred through the process of stress and mortality. Some of the snags and downed logs that might have formed in the future from the death of the intermediate and suppressed trees would be removed through the timber harvest. As a result, the action alternatives would delay the attainment of moderate-sized snags and down wood through natural process because of the reduction in density of the stands. Although some trees with elements of wood decay would be left and some snags would be created to provide habitat for snag-dependent species; fewer new snags, trees with elements of wood decay, or large down wood would be created for the short to mid term because of this thinning. However, the action alternatives involve leaving the largest trees standing and growing. This would accelerate the growth and size of trees and would eventually provide larger	See response to comments #3 & 4.

	Comment	Response
	snags.” But this is far from full disclosure of the trade-off. A stand simulation model will show that no action will produce not only more snags, but more snags of “pool forming size” and more “large” (>20”dbh) snags sooner than the thinning alternative.	
Oregon Wild	14. The EA claims that thinning will benefit carbon storage by diverting trees to long-term storage in wood products and by increasing the growth of residual trees. This is flawed. Logging virtually always increases carbon emissions and reduces carbon storage relative to not thinning. Science has shown that wood products decay at about the same rate as dead wood in the forest, but logging kills trees and stops the further accumulation of carbon in the trees that are killed, so logging accelerates carbon emissions relative to living forests. Also, only a small fraction of the carbon in the trees is turned into wood products, and only a small fraction of those wood products are put into long-term storage.	The EA lists forms of carbon emission and sequestration but does not quantify them or claim that long-term storage in wood products or increasing growth would outweigh emissions, s. 4.15.3.
Oregon Wild	15. Make sure long-term benefits out-weigh short-term degradation. One of your evaluation criteria should be whether any short-term degradation of ACS objectives is off-set by long-term benefits brought about by the proposed action. For example, sediment caused by culvert work will generally be off-set by better fish passage and or better accommodation of high flows. And some insolation, weeds, and soil disturbance from logging can be off-set by enhanced understory diversity and increased growth of conifers brought about directly by the canopy reduction. However, extensive road construction or road reconstruction will not be justified by a small restoration thinning effort. And ground-based logging that allows heavy equipment off of roads may cause significant soil disturbance that will not be offset by any intended benefits to the vegetation.	The short and long-term effects of road construction and reconstruction were carefully considered (s. 2.3.7.7&8) and are disclosed throughout the Environmental Consequences section. Alternative C was developed that would not construct any new roads or reconstruct any previously decommissioned roads, s. 3.2. Ground based logging would reuse existing skid trails and landings, s. 2.3.9.5. The analysis did not identify any circumstances where short-term effects outweighed long term benefits.
Oregon Wild	16. We encourage the FS to carefully consider the impacts of reopening roads that have been previously closed and/or decommissioned. How many acres of thinning are being accessed by each road? The FS should develop a chart that compares how much thinning gets done with each road segment and consider dropping those thinning units that require relatively long roads for relatively small gains in thinning acres.	Section 2.3.7.8 lists the roads proposed for opening. They are shown on the maps in Appendix A. The suggested chart has been added to the transportation section 4.13. The feasibility of opening roads to access the thinning units was considered when the proposal was developed. No circumstances were found where a relatively long road would be opened for relatively small gains. Alternative C would not open any roads previously decommissioned.

	Comment	Response
Oregon Wild	<p>17. If young stand thinning requires construction of temporary roads, the agency should do an analysis that illuminates how many acres of thinning are reached by each road segment so that we can distinguish between short segments of spur that allow access to large areas (big benefit, small cost) and long spurs that access small areas (small benefit, big cost). This can help inform the decision-maker's balancing of the costs and benefits of thinning and roading.</p> <p>Temporary roads still cause serious adverse impacts to soil, water and wildlife, and spread weeds. Decommissioning such roads is not entirely successful and the soil compaction effects can last for decades. The agency should consider avoiding building spurs by treating some areas non-commercially (e.g. thin lightly, create lots of snags, and leave the material on site).</p>	<p>Section 2.3.7.8 lists the roads proposed for opening. They are shown on the maps in Appendix A. The suggested chart has been added to the transportation section 4.13. The feasibility of constructing new temporary roads to access the thinning units was considered when the proposal was developed. Temporary road construction was proposed because the original logging method used to create these plantations was found to be inappropriate with today's standards. No circumstances were found where a relatively long road would be opened for relatively small gains. Alternative C would not construct any new temporary roads.</p> <p>The option of non-commercial thinning is addressed in s. 3.4.3.</p>
Oregon Wild	18. We wish that you would use variable density thinning prescriptions in all young stand thinning projects regardless of land allocation.	Variable density restoration thinning will be used in all stands including matrix lands, s. 2.3.1 to 2.3.6.
Oregon Wild	19. Oregon Wild made 17 specific recommendations for restoration thinning and analysis. They recognize that some of the recommendations are already being implemented, but there is room to improve this project by embracing others.	The project already incorporates most of these concepts except as discussed above.
BARK	20. We were disappointed to find once again, that despite an open public comment period, the Forest Service has done virtually no marking or flagging for this timber sale. We understand that with such a large project, this could be an arduous and time consuming exercise, however we see it as a necessary component to communicating the intent of the project to the public. At times we have been told that interagency communication for project planning utilizes GPS points and GIS shape files. Having this information provided on the Mt. Hood National Forest website would be a step in the right direction if the agency plans to phase out flagging timber sales. In particular, use of .kmz files gives people the opportunity to view the boundaries of a project over aerial images using the free service of Google Earth. However, we do not consider this nearly as effective as taking the time and resources to flag the boundaries, leave/take trees and survey points of a timber sale.	Marking the unit boundaries usually happens after the EA is completed and decision notice is signed. Until that point, changes could be made based on the analysis or public comment. GIS files for ongoing projects are not stored on the agency corporate web site but they can be sent to you upon request. Maps were posted on our web site in October of 2008.

	Comment	Response
BARK	21. The Lake Branch Thinning Project brings up questions about why road repair and decommissioning is falling under a timber sale? The Forest Service has taken a commendable step forward towards transportation planning and reducing an unmanageable road network. How does the road work included in this PA relate with the Aquatic Restoration projects?	The Forest generally looks for opportunities to decommission roads with all appropriate harvest Environmental Assessments to coordinate planning and for efficiency. There will not be a duplication of efforts with this project and Forest Wide Aquatic Restoration assessments. Similar road decommissioning was included with the restoration thinning in the recent EAs for North Fork Mill Creek Restoration, 2007 Plantation Thinning and Upper Clack Thin.
BARK	22. The Appropriations Act of 2009 and 36 CFR 212.5 direct the Forest Service to conduct an appropriately-scaled roads analysis and identify a minimum road system. If a timber sale is simultaneously opening roads that are currently decommissioned, ensuring future access to areas for treatment, and justifying road repair as part of a mitigation argument for short term impacts to water quality and forest health then it is not achieving restoration priorities.	The Forest-Wide Roads Analysis was completed in 2003 and the Forest OHV plan is in progress but is not yet completed. The Forest is conducting analyses of decommissioning of unneeded roads starting in high priority watersheds and proceeding across the Forest. This project and other road management projects across the Forest are in compliance with road management regulations. Alternative B would reopen temporary roads on the alignment of old decommissioned roads (s. 2.3.7.8) while Alternative C would not. These would be reclosed upon completion of the project. Reusing these roads is not mitigation.
BARK	23. By including aggressive decommissioning work with a timber sale, certain LRMP standards are met because of the beneficial effects of restoration mitigating the detrimental impacts of logging.	The Forest generally looks for opportunities to decommission roads with all appropriate harvest Environmental Assessments to coordinate planning and for efficiency. The road decommissioning has not been framed as a mitigation for timber harvest.
BARK	24. Although we appreciate the ongoing efforts by the Forest Service to reduce the miles of roads in Mt. Hood National Forest, we question coupling this important work with a timber sale. It is important that we understand the answers to the following questions: 1 Is this restoration work that has been prioritized through the forestwide restoration planning process? 2 Why is it coupled with this timber sale? 3 Will it still be implemented if this timber sale is cancelled or cannot be sold? 4 Should a timber operator want to opt out of incurring the cost of the restoration work, would an option to just log be offered to a company? 5 Would the Forest Service then put money from the timber sale back into a restoration contract and would that need to be administered through a stewardship group like the Clackamas Stewardship Partners in the Clackamas District?	1. Lake Branch is a Key Watershed and as such is a high priority for restoration work. 2. The decommissioning and restoration thinning are included in the same EA for efficiency: they will not likely be included in the same contract for implementation. 3. Decommissioning would occur after harvest where the roads are needed for log haul. Some proposed decommissioning can proceed because they are not needed for log haul. 4&5. The projects would not likely be combined in a stewardship contract because a partnership group has not yet coalesced to consider this project. There would likely be separate timber sale contracts and road decommissioning contracts.

	Comment	Response
BARK	25. In the Financial Analysis, the PA states, “The project is a restoration thinning with road repair and decommissioning and as such is not intended to generate income.” (pg 104) How does this address the issue of paying for the road repair? In addition, the PA predicts that the downturn of the timber market is “likely to be temporary” (pg 105). Evidence of this is not provided in the PA. The estimate of the road work is approximately \$3 million, but without a consideration for the potential value of the timber that would be auctioned, how can the Forest Service be concluding that there is or there is not going to be an income made on this project?	Some of the road repairs and reconstruction are needed for log haul and to achieve the restoration thinning. The value of the timber would need to cover the cost of this and other logging costs. However most of the road repairs and the decommissioning are not part of the restoration thinning operation and these would be paid for with other funding sources. S. 2.3.7. There may be timber sale receipts generated from the project based on markets and bidding but this is not the primary goal of the project, s. 2.2.4.
BARK	26. We found that roads are currently recovered in some instances. Despite the conclusions in the PA that temporary reconstruction of these roads would not impact hydrological features in the project area, we remain disappointed that the Forest Service would use any funds to open more roads.	Alternative B would reopen temporary roads on the alignment of old decommissioned roads (s. 2.3.7.8) while Alternative C would not. These would be reclosed upon completion of the project. These old decommissioned roads were assessed considering both cost and resource impacts to determine whether it would be appropriate to reuse them for Alternative B. Reusing the alignment of an old road was considered preferable to building new roads elsewhere.
BARK	27. In addition to roads work, the forestwide aquatic restoration includes in-stream work. If thinning in Riparian Reserves now is intended to speed up the large diameter tree recruitment for future aquatic features such as log jams, how does this purpose fit the need, considering there are efforts being made to bring decadent trees from other places on and off the forest to areas like Lake Branch, where past logging has depleted the resources and slope stability is important. By planning to bring in logs that have been felled elsewhere (such as those along the road to Cloud Cap, left from the Gnarl Ridge mop up) the Forest Service is aiming to achieve short-term aquatic restoration goals. In light of this aquatic restoration, is there truly still a need to speed up the recovery of Riparian Reserve forest ecosystems? Acknowledging the overlap of these planning processes seems appropriate in the Lake Branch Thinning PA.	Thinning in riparian reserves is considered complimentary to projects that add wood and structure to streams, however at this time logs are not being brought into Lake Branch for this type of restoration work.
BARK	28. Bark maintains concerns around slope stability in this project area. On Road 13, the Indian Creek culvert is designed to sustain intensive debris flow. The map provided in the PA shows red X marks along Road 1330 that are not keyed out, but appear to be washouts and road repair sites. The PA discusses using a monitoring plan for adaptive management. (pg 16) However, in the	Slope stability is addressed in section 4.6.7.4. The design of road repairs will incorporate knowledge about past events and the stability of landforms.

	Comment	Response
	<p>Cumulative Effects analysis, the PA offers a disclaimer; “A catalog and analysis of all past actions would be impractical to compile and unduly costly to obtain.” (pg. 29) While we appreciate that compiling information from the past that encapsulates both natural and human history is very time-consuming and capturing existing condition can give a more accurate cumulative analysis, we still see value in assessing the known historical trends and impacts. Road washouts are often a result of too few cross-drains and culverts. There is very little information provided about the specifics of the road work and the techniques that should be used to mitigate impacts from logging on steep slopes. It seems that the existing condition has provided realistic source material for analyzing what features can and should be included in road restoration work. If just one section of the roads work is going to cost over a million dollars, identifying and incorporating the lessons learned from past actions in that area would be a valuable addition to the existing assessment and future monitoring questions.</p>	
BARK	<p>29. We maintain serious concerns for the impacts to Listed Fish Habitat (LFH) from this timber sale. We appreciate the inclusion of documents from consultation with NOAA fisheries in with the PA, however, we maintain concerns that impacts from thinning units adjacent to LFH will be compacted by the roads work that is being proposed in these same locations. Because the consultation documents are programmatic, we can only assume that site-specific measures will be taken into consideration based on their recommended mitigation measures. For instance, with regards to the Water Temperature, the PA claims that a 50% canopy closure will ensure enough shade to maintain stream temperature. (pg 45) However, there is significant overlap with Riparian Reserves and the Summer Elk Range, where heavy thinning is proposed. (pg 10)</p>	<p>This project would be consistent with all project design criteria from the applicable programmatic consultation documents - the design criteria are in Appendix B. Heavy thinning would not occur within the stream shade zone, s. 2.3.3.</p>
BARK	<p>30. The No Action consideration of impacts to Fisheries and Water Quality is unacceptable, particularly considering the weight that the PA has placed on existing conditions as the coverage for NEPA requirements of past, present and future conditions. The PA states, “If no action were taken in riparian reserves, riparian stands would maintain their mid-seral structure for many decades not reaching the desired late-successional characteristics as quickly as thinned stands.” (pg 40) However, the project area is in an area of high earthflow and debris runoff is shown to be common.</p>	<p>Section 4.1.3.2 indicates that with no action, stands would develop late-successional characteristics in 70 to 100 years compared to 30 to 40 years with thinning, s. 4.1.3.3.</p> <p>Landslide risk is presented in section 4.6.7.4. The project area does not have earthflows. Debris flows have occurred in the past in confined channels, s. 4.6.3.4. Areas of concern for stability have been eliminated from harvest units.</p>

	Comment	Response
	Additionally, this is one of several references to “many decades.” Can the Forest Service predict how many decades? Was modeling done to consider historical presence of landslide events that may natural quicken the recovery rate of this forest?	
BARK	31. In the Transportation analysis, the PA states, “Because funding is not available to repair roads...” as a justification for the No Action alternative. (pg 106) This is a misleading statement. There is significant funding available for this kind of work, with the expectation that planning and prioritization goes into which roads should be getting repair attention. Because of the high use that Road 13 provides to people for access to several popular recreation areas, this road would most certainly be considered a high priority road for funding allocation. Indeed, there is not enough funding for all the road repair and road removal work that is being prioritized, however funding is available. This justification for an action alternative based on a missed restoration opportunity is another example of the conflict of interest when coupling timber sales and restoration work in the same analysis.	The lack of funding for road maintenance and repair is one of the reasons for the Forest-wide effort to decommission roads, s. 2.2.5. Most of the cost of repairing Road 13 would not be covered by a timber sale, s. 2.3.7.1. They are included in the same EA but would be implemented separately.
BARK	32. With regards to Elk Winter Range, the PA discloses that forage is less important than maintaining thermal coverage with regards to retention of canopy coverage, but then exhaustively discusses the importance of forage.	Thermal cover is very abundant, s. 4.5.4.2 while forage is lacking, s. 4.5.4.1.
BARK	33. Additionally, the Mt. Hood LRMP states, “Timber harvest units should average 20 acres and 30 acres in size on winter range and summer range, respectively.” (LRMP, Four-72) How is a timber sale in compliance with the intent of this standard when the units are directly adjacent to each other, particularly considering the planning of this project where most units are lined up one after another?	Standard and guideline FW-200 is a forest-wide standard that addresses deer and elk habitat (FP page four-73) and is intended to spread out the creation of forage. The current thinning units are formed around plantations that were clear cut before this standard and guideline was created and they are no longer considered forage openings. The average unit size for Lake Branch Thinning is 16 acres, s. 3.3. FW-200 does not address unit adjacency.
BARK	34. With regards to degrading suitable dispersal habitat for the Northern Spotted Owl, we request that all units be dropped if they are adjacent to known suitable nesting, roosting and foraging habitat. In Bark’s visits to the project area, we observed that the past clearcut logging has, indeed, led to stands lacking in decadent features. Yet, these cuts are largely adjacent to mature forests that are providing potential habitat for this known threatened species. By decreasing this dispersal habitat, predation will increase in an area that has known and historical presence of spotted owl pairs.	There would be no impact to suitable habitat. There would be short-term impacts to dispersal habitat, but in the long term, thinning treatments would accelerate the development of suitable spotted owl habitat, s. 4.4.4.2. The option of deleting units adjacent to suitable habitat is discussed in section 3.4.2.

	Comment	Response
BARK	35. On page 93, the Preliminary Assessment states, “Surveys to detect the presence of most fungi species are not considered practical because of the variability in fruiting-body production from year to year.” However, when surveys determined the presence of suitable habitat of fungal Sensitive Species, the determination was found to be “May Impact Individuals or Habitat but is not likely to lead to a trend toward federal listing.” This determination of impact would seem to be reason for conducting field surveys for fungal species.	The determination of ‘May Impact Individuals or Habitat but is not likely to lead to a trend toward federal listing’ is given because there may be species present that can not be reliably found by surveying.
BARK	36. In addition, while out surveying in the project area, we sited a rare Gnome Plant, <i>Hemitomes congestum</i> in Unit 116 (see photo). Does this plant exist on any federal or state sensitive species?	This is not a sensitive species.
BARK	37. Who is providing written material, research and data on Climate Change analysis for NEPA from Mt. Hood National Forest? In the list of preparers, there is no mention of a climatologist or specialist who may be provide a more thorough synthesis of information from scientific literature. For instance, the presumption that the use of utilizing tress to create long-lived wood products as a carbon sequestration measure, is not based on reliable ecosystem analysis. Attached is The Wilderness Society’s report on this very issue.	The analysis of climate change is documented in section 4.15. It found that thinning would result in some carbon emissions and some carbon sequestration. The benefits to forest diversity and resiliency with the proposed action would allow stands to better respond and adapt to the future climate. The EA lists forms of carbon emission and sequestration but does not quantify them or claim that long-term storage in wood products would outweigh emissions, s. 4.15.3.
BARK	38. Discussion on the removal of old logging roads on page 107 of the PA perpetuates the idea that the Forest Service can afford to continue having access to all parts of the forest for treatment rotations in perpetuity. This is not economically or ecologically viable. If true restoration thinning is to occur as a priority, then landscape-level road decommissioning must be included in planning. If there are areas with past regeneration harvest that cannot be treated with restoration logging at this time, but can be predicted for treatment in the future, then this should be included in the cumulative impacts analysis of past, present and future conditions in the project area.	While there may be future thinning or other actions, there is no proposal now for future actions that have sufficient site specificity to conduct an analysis. The appropriate time to conduct a cumulative effects analysis for future projects would be in a future EA after a firm proposal is developed, 4.13.3. Landscape-level road decommissioning was included in the planning for this project.