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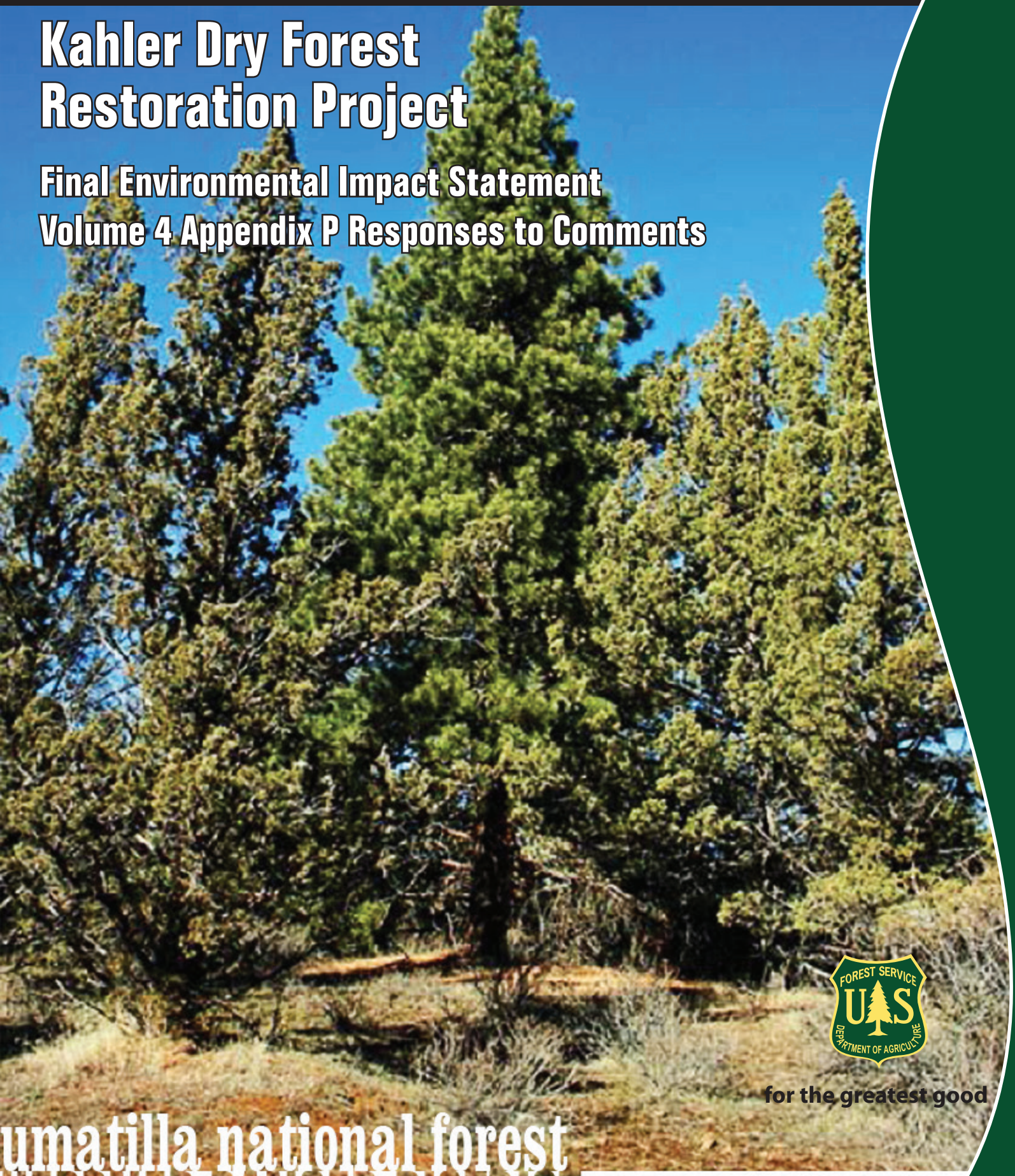
Kahler Dry Forest Restoration Project

Final Environmental Impact Statement
Volume 4 Appendix P Responses to Comments



FOREST SERVICE U S DEPARTMENT OF AGRICULTURE

for the greatest good

umatilla national forest

HEPPNER RANGER DISTRICT

Project Number 40712

December 2015

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Appendix P
Responses to Comments

Last Name	First Name	Letter #	Comment Number	Comment Text	CR Number	Response Text
Solomon	Laurie	5	2	Existing Forest Plan standards will be violated by the logging of now-scarce over 21" dbh trees, as well as the heavy logging, leaving only 30 square feet of basal area. At least 60-80 square feet basal area should be the minimum to preserve biodiversity and recreational values, including deer and elk cover.	1	In the Supporting Forest Vegetation Report, Section titles "Rationale for Removing Trees Greater than 21-inches in Diameter", beginning on page (93), best explains the reasoning for removal of 21 inch trees younger than 150 years of age. Restoration is defined in the forest vegetation report glossary. Additional reference documents are found throughout the report. Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the forest vegetation report. Table 16 displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler Planning Area. Effects to late and old structure habitat and features, as well as those species dependent on these habitats are disclosed in Chapter 4, Wildlife Section of the FEIS. Impacts are also disclosed in Appendix M, the Terrestrial Wildlife Specialist Report.

St.Martin	Amanda	3	1	Logging unspecified numbers of rare, large trees over 21" DBH and leaving only 30 square feet of basal area is NOT "restoration."	1	In the Supporting Forest Vegetation Report, Section titles "Rationale for Removing Trees Greater than 21-inches in Diameter", beginning on page (93), best explains the reasoning for removal of 21 inch trees younger than 150 years of age. Restoration is defined in the forest vegetation report glossary. Additional reference documents are found throughout the report. Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the forest vegetation report. Table 16 displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler Planning Area. Effects to late and old structure habitat and features, as well as those species dependent on these habitats are disclosed in Chapter 4, Wildlife Section of the FEIS. Impacts are also disclosed in Appendix M, the Terrestrial Wildlife Specialist Report.

Solomon	Laurie	5	7	Prescribed fire in the springtime when sensitive species of plants and birds are reproducing will inflict unacceptable damage to many species, and increase the risk of fire later in the year by depleting needed moisture from the soils right before the fire season.	2	Design Features/Monitoring/Mitigation Common to Action Alternatives in Kahler EIS refer to the mitigations in place to limit soil exposure (PF7) and encourage the use of prescribed fire in late summer/fall. If landscape burning occurs in the spring, it should be implemented prior to May 15th (WL11) to reduce potential impacts to ground and near-ground nesting birds. Landscape underburning in the Kahler prescribed fire units is designed to allow up to 50% of the total area to remain unburned to achieve underburn objectives, such creating and/or maintaining diverse habitats across the landscape (WL12; Kahler Purpose and Need; Kahler Fire and Fuels Report). Potential impacts to migratory birds in relation to burning are disclosed in the FEIS beginning on page 198. As was stated above, a portion of the proposed burn acres are expected to be unaffected by low-intensity underburning, which will preferably occur in the late summer or fall. In addition, design criteria will be implemented that will reduce the potential for impacts to migratory birds should spring burning occur (WL11 and WL12). Impacts on pileated woodpecker and marten source

Coulter	Karen	4	17	There is no sign that forest types are outside of HRV. Of course insects and fire will continue!	3	See Silvicultural report for HRV analysis. The purpose and need of the project is to move toward the HRV for density, composition, and structure. [Silviculture Report] Refer to HRV Analysis for Kahler Forest Vegetation Affected Environment: Forest Structure beginning on page 28 of the Forest Vegetation Report. Also refer to the Effects Analysis section and Table 18: State and tranisition of predicted changes due to implementation of silvicultural activities.

McClure	Steve	8	12	We are concerned about the cumulative effects of not being able to place 31,000 acres of prescribed fire on the landscape over the next 10-20 years. There is a large backlog of prescribed fire on the Umatilla and we are concerned that the Forest Service will not be able to fully implement the project which could have a significant effect on the desired outcomes of this project. Are there other ways to emulate prescribed fire to treat the fuels on the landscape that do not have as many requirements?	4	The purpose and need for the Kahler Dry Forest Restoration project is, in part, to reestablish the character of a frequent fire regime to the landscape to aid in maintaining open stand conditions and fire-tolerant species, improve big game forage, and reduce conifer encroachment. For further information regarding the need for prescribed fire as the preferred treatment, refer to the Kahler EIS Chapter 3 Fuels Desired Conditions paragraph 2.
Warness	Lindsay	2	4	The project is proposing prescribed fire on approximately 31,000 acres, is this feasible? It is my understanding that the Umatilla has thousands of acres of prescribed fire backlogged. Are there other options to reduce the fire danger in the area, such as mastication, more aggressive treatments, etc.?	4	The purpose and need for the Kahler Dry Forest Restoration project is, in part, to reestablish the character of a frequent fire regime to the landscape to aid in maintaining open stand conditions and fire-tolerant species, improve big game forage, and reduce conifer encroachment. For further information regarding the need for prescribed fire as the preferred treatment, refer to the Kahler EIS Chapter 3 Fuels Desired Conditions paragraph 2.

Warness	Lindsay	2	6	Will the action alternatives bring the area back into the appropriate condition class for fire? Please ensure that all areas in need of these treatments are analyzed within the EIS in order to allow for the FS to do work when and where it is most appropriate.	5	The proposed treatments, particularly within the first 10 years of treatment, would effectively move the landscape closer to a Fire Regime Condition Class 1 (approximately 59% of the landscape for alternative 2 and 55% for alternative 3). Taking no action would result in further deviation from HRV across the landscape. With time, Fire Regimes I, II, and III would become substantially altered from their historical range. The Kahler area, currently classified as a FRCC 2 would shift to a 3. With this shift, changes to fire size, intensity, severity, and/or changes to landscape composition would occur. Low and mixed severity fire regimes would continue on the path toward infrequent moderate to high severity fires (Fuels Report, Alternatives, Fire Regime Condition Class).

Coulter	Karen	4	42	Reg[arding] the group opening: This is ridiculous. It is the job of the lookout person to watch for fires.	6	The Kahler Purpose and Need for Action defines a need for improved fire sighting capabilities from Tamarack Lookout. For more information, please refer to the Kahler Fire and Fuels Report Existing Conditions, Alternative 2, Alternative 3, and Alternative 4 Tamarack Lookout and Cabin Rental section.

Warness	Lindsay	2	13	Please explain why the other 21,000 acres of the project area do not have mechanical treatment prescribed for them. Are they not commercially viable stands or are there other barriers that would prevent treatment of this acreage?	7	Although the project spans approximately 32,840 acres, not every acre will receive treatment. The Kahler project focuses on the purpose and need statements: Move species composition toward its historical range of variation (HRV); move forest structure towards HRV; and move stand density towards HRV. Table 6 of the forest vegetation report exisiting condition section explains the "step-down" process from 32,840 acres to 31,120 acres. Note per Table 7 (and others) of the Forest Vegetation Report (Powell, 2015) that approximately 3,840 acres are considered non forested. As shown in table 12, not all vegetated acres analyzed are ready for mechanical treatment, notice acres in the stand initiation stage. In short, they are not commercially viable stands, but will receive some sort of treatment.

Vandehey	Roberta	6	1	The first statement in the second paragraph states "the Kahler Project area has seen relatively recent damage from defoliating insects and uncharacteristic wildfire effects associated with the 1996 Wheeler Point fire." I believe that to be totally untrue and most likely to be unlikely. I have yet to have someone show me any relationship between the Wheeler Point Fire and what I perceive is contained in the Project proposals. I do know that after the Wheeler Point Fire, the Heppner Ranger District of the USFS repeatedly did prescribed "controlled" burns east of the Wheeler Point Fire that became uncontrolled and did extensive damage to those areas. Possibly blame for those fires is being wrongly shifted to the Wheeler Point Fire.	8	The controlled burns east of the Wheeler Point Fire, in the Henry Creek area, were completed according to the burn plan that was written for the prescribed burn and were not "uncontrolled".

Vandehey	Roberta	6	9	thinned stand has a lower humidity resulting from elevated temperatures and drying affects of wind, as well as a vigorous undergrowth of grass. Grass fuels our hottest, fastest-moving fires. Grass is the basis of a preventable ladder fuel. Don't thin the stands! Fire loves a thinned stand!	9	Opening up the stand can increase grass fire, however decreasing the ladder fuels by thinning will decrease the ladder fuels and decrease the chances of fire getting into the crowns of desirable trees.

St.Martin	Amanda	3	9	Areas that are naturally more densely forested should remain so, such as north and northeast slope aspects, riparian zones, and higher elevations. Wildlife habitat corridors, Late and Old structure stands, dedicated Old Growth, any areas never before logged, and large trees over and approaching 21" DBH should not be logged.	10	Instances where 21â€DBH trees might be removed are limited to stands with the following criteria: Douglas-fir vegetation types, moderate or higher stocking classes, dominated by PP, have 10 trees/ acre or more of trees greater than 21â€and not currently classified as Old Forest Single Stratum (OFSS). If all of these criteria are met, than a DF or GF that is young yet large may be removed from within two driplines of a medium sized PP (greater than 15â€dbh). This determination is based on site specific stand analysis. As noted on page 3 of the supporting forest vegetation report " Between skips and gaps, the matrix area will be thinned to a variable density with minimum amounts of residual basal area varying with a unitâ€™s plant association (at least 25-60 ft2/acre of basal area will be retained after thinning; see tables 16 and 48)." Retained basal areas will fluctuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the forest vegetation report. Table 16 displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler

Solomon	Laurie	5	1	Logging over 2000 acres in previously never-logged forest will compromise one of the few remaining areas left for sensitive species, recreational enjoyment, and carbon storage to prevent climate change.	11	Refer to Chapter 3, Affected Environment. The Past, Present, and Reasonably Foreseeable Actions sections addresses past harvest of approximately 26,000 acres between 1940 and 2009. The predicted effects of logging on undeveloped lands is discussed in Chapter 4 on pages 312-316 of the EIS. Refer to the Terrestrial Wildlife Specialist Report (Appendix M) for the full analysis of impacts on these species. Impacts to recreational opportunities is dicussed on pages 304-310. In regards to how Kahler will affect Climate change refer to the "Climate Change Considerations" section of the Supporting Forest Vegetation Report.

St.Martin	Amanda	3	11	I am very concerned by the proposed logging of over 2,000 acres of "other undeveloped lands" that have never been logged before. The rare native forest stands that remain (in the Umatilla and on the entire planet in general) provide wildlife habitat, carbon storage capabilities, recreation and scientific study opportunities that are found nowhere else.	11	Refer to Chapter 3, Affected Environment. The Past, Present, and Reasonably Foreseeable Actions sections addresses past harvest of approximately 26,000 acres between 1940 and 2009. The predicted effects of logging on undeveloped lands is discussed in Chapter 4 on pages 312-316 of the EIS. Refer to the Terrestrial Wildlife Specialist Report (Appendix M) for the full analysis of impacts on these species. Impacts to recreational opportunities is dicussed on pages 304-310. In regards to how Kahler will affect Climate change refer to the "Climate Change Considerations" section of the Supporting Forest Vegetation Report.

Kelley	Brian	13	7	We are concerned that commercial thinning treatments may be driven disproportionately toward attaining the lower limits of stocking levels based on Stand Density Index (SDI). We agree that SDI is a useful tool for dry forest thinning. SDI provides useful site-specific information about a range of stocking levels that may be appropriate for different forests related to their plant associations, and SDI also adjusts for the presence of larger trees in determining appropriate stocking levels. However, SDI is only one of many important factors that should be considered. The lower limits of stocking derived through SDI should be used as an ultimate limit on thinning intensity rather than a goal to be attained. We are concerned that the commercial thinning of the Kahler project will result in thousands of acres of National Forest being cut to the lowest allowable level. We are concerned	12	SDI is one of many important factors used in developing a harvest plan. Additional factors are considered when site specific presciptions are completed. Often times the lower limit management zone is higher than what is recommended through SDI.

Kelley	Brian	13	8	As stated above, SDI is one of many important factors to be considered in dry forest restoration. We are encouraged that the Forest Service is proposing to protect and retain old trees and large trees in the Kahler project. However, it's also important that all ponderosa pines growing in a natural clump to are protected and retained even if some of those pine trees are younger or smaller. Additionally, it's important to protect and retain some of the younger and smaller trees throughout the forest to provide diversity. Franklin et. al. (2013) recommend leaving a minimum of 10 square feet per acre of basal area in younger trees. This recommendation is a minimum level for younger trees-not a goal.	13	The USFS agrees that younger and smaller ponderosa pine should be retained on site, as well as trees retained in clumps.

Coulter	Karen	4	10	We want the basal area for any logging that takes place to be significantly higher, such as a minimum of 60 to 80 square feet instead of 30 to 40 square feet at the low end of variable density thinning, to preserve essential forest structure, biodiversity of plants and wildlife, and recreational values. Areas that are naturally more densely forested should remain so, such as north and northeast slope aspects, riparian zones, and higher elevations.	14	Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the supporting forest vegetation report. Table 16 displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler Planning Area.

Kelley	Brian	13	10	The DEIS for Kahler emphasizes "damage" from native insects that have evolved with these forests over millennia. Populations of spruce budworm and tussock moth naturally fluctuate over time and these insects have performed their roles in the forests accordingly. When these insect populations are high, these native defoliators kill tree tops and entire trees. While this can decrease lumber values, it also create important wildlife values. Unique tree structures develop and standing snags are created. When snags eventually fall to the ground they become important habitat as down logs. Eventually, these logs decay and replenish the soil. Spruce budworms and tussock moths themselves are in turn eaten by birds. Native insects have performed these functions for millennia. HCPC is opposed to thinning forests to an excessively low residual stocking level in an	14	Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the supporting forest vegetation report. Table 16 displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler Planning Area.

Kelley	Brian	13	27	Additionally, an alternative was not developed that rests allotments or at a minimum reduces grazing activities within logged and burned areas to allow them to recover post project.	15	See effects analysis in the Range Report that addresses grazing management. Developing an alternative that reduces grazing does not address the stated purpose and need for Kahler, so is beyond the scope of this project.

Kelley	Brian	13	26	The Kahler project NEPA analysis does not acknowledge grazing as an underlying cause of increased contiguous fuels accumulation across the project area. The impacts of grazing on forest health within the project area are not adequately analyzed. The NEPA analysis does not adequately address: * the management direction for grazing allotments and Annual Operating Instructions for grazing permittees to address impacts of livestock grazing on fuel accumulation and fire behavior, * the best available science on this issue identified in the Livestock and Forest Health reference section of these comments, * the cumulative impacts on the project area from logging and grazing, and * whether thinning, logging, and burning prescriptions, particularly within or adjacent to RHCAs will result in increased livestock access to riparian areas.	16	The Forest Plan identifies grazing standards and guidelines, which include riparian areas. These standards and guidelines are part of the Term Grazing Permits issued to the permittees (Forest Plan 4-63 through 4-65). Present livestock managment has consistently met Forest Plan Standards and Guidelines. Historic grazing practices may have altered stand and fuel dynamics, but such effects are out of context with current grazing managment/strategies. See historical section in Range Report for the Kahler project. Management direction for grazing allotments and Annual Operating Instructions for grazing permittees are beyond the scope of the Kahler project.

Kelley	Brian	13	14	The DEIS does not address the likelihood that logging within the RHCAs will result in increased livestock access to riparian areas. Increasing livestock access to riparian areas would be expected to negatively impact riparian vegetation, water quality and fish habitat.	17	The Forest Plan identifies grazing standards and guidelines for riparian areas. These standards and guidelines are part of the Term Grazing Permits issued to the permittees (Forest Plan 4-63 through 4-65).

Kelley	Brian	13	39	The reasons for protecting old growth trees and forests continue to accumulate, indicating the life-giving and supporting nature of these complex, interconnected ecosystems. Recent findings have shown the immense value of old growth forests for protecting carbon stores (Smithwick et al. 2002, Luyssaert et al. 2008, Hudiburg et al. 2009, Keith et al. 2009) and for continued accumulation of carbon in soils (Zhou et al. 2006). Old growth forests are not just incredible stores of carbon, they are also key wildlife habitat, sensitive plant species refugia, and biodiversity strongholds. These forests are also a defining and irreplaceable part of our natural heritage and provide our region with a great cultural identity. Unfortunately, old growth has been heavily targeted for logging in the Blue Mountains for over a century. Restoration efforts in dry forests must include	18	Thank you for your support. Unit-specific prescriptions will promote and maintain current old forest conditions.

Kelley	Brian	13	6	However, HCPC is concerned that the extensive and heavy commercial thinning/ logging treatments proposed for the Kahler project will have an overall negative impact on wildlife, aquatics, and the overall ecosystem. We are concerned that the forests of Kahler will be logged too heavily. Between the skips and gaps, "generally 30-60 feet squared/acre of basal area will be retained after thinningâ€¦" (DEIS Forest Vegetation Report page iii). This level of cutting would log off much of the forest and leave a very thin residual forest behind.	19	As noted on page 3 of the supporting forest vegetation report " Between skips and gaps, the matrix area will be thinned to a variable density with minimum amounts of residual basal area varying with a unitâ€™s plant association (at least 25-60 ft 2 /acre of basal area will be retained after thinning; see tables 16 and 48)." Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the supporting forest vegetation report. Table 16 displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler Planning Area. RMO direction can be found in DEIS page 113 under PACFISH.

Coulter	Karen	4	2	Both alternatives would apparently log Late and Old (old growth) forest below the historic range of abundance for this forest structural stage, again in violation of the existing Forest Plan, log in a Dedicated Old Growth area on Tamarack Mountain around the fire lookout, also in violation of the Forest Plan, and drive Elk forest cover (for thermal cover and hiding protection from predators) in winter range and related Habitat Effectiveness Index standards further below minimum Forest Plan standards.	20	Currently the old forest structure is well below HRV in the single stratum, and within HRV in the multi-stratum (Table 3-5, FEIS). Harvest will trend the old forest single structure towards HRV. Old forest multi-strata will decrease with harvest, but remain within HRV (Table 4-4, FEIS) Treatment of the area immediately adjacent to the Tamarack site would require a Forest Plan amendment; treated acres would be transferred from the C1 designation to an E1 management area designation so that future maintenance of vegetative conditions around the administrative site could occur. The impacts of these activities are described in the EIS on pages 126-127. Impacts to elk and elk habitat are described in the EIS on pages 141-154.

Kelley	Brian	13	38	HCPC is supportive of the use of proactive fire to restore and maintain natural conditions, however, the ultimate purpose of these treatments should be to allow natural disturbance processes to reestablish. Therefore, HCPC strongly encourages the Forest Service to couple these treatments with wildland fire use plans that allow land managers the ability to let wildfire increasingly perform its natural role. Wales et al. (2007) found that the natural disturbance patterns (as compared to suppression) resulted in the largest amount of all types of medium and large tree forests and best emulated the Natural Range of Variability for medium and large tree forests after several decades. Restoring the natural disturbances regimes and processes is the key to restoring ecosystem functionality.	21	Thank you for your comments. At this time, the Forest Plan does not allow for the use of natural fire (wildfire use) within the Kahler planning area. Fire suppression strategies are listed in the Kahler Fire and Fuels report (Compliance with Forest Plan and Other Relevent Laws, Regulations, Policies, and Plans; Management Areas Standards and Guidelines; Fire Management Direction). Prescribe fire burn plans are developed to mimic natural disturbance.

Coulter	Karen	4	18	In fact the natural denseness of a forest type is influenced by slope aspect, elevation, and proximity to riparian areas, and not all of the Kahler sale units are in "dry forest," so this is not just dry forest "restoration." The DEIS also uses omission of critical information to make its case that heavy logging (logging to 30 sq. feet of basal area is not just light commercial thinning creates virtual clearcuts) is equivalent to forest "restoration." Logging does not replicate any natural process and creates unnatural impacts, but this is not disclosed.	22	Restoration is defined in the forest vegetation report glossary. Additional reference documents are found throughout the report. Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the supporting forest vegetation report. Table 16 displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler Planning Area.

Coulter	Karen	4	19	Reducing tree density should not be done where current higher tree density naturally occurs - as on steep slopes above riparian areas and in moister mixed conifer forest types - both of which are especially prevalent in the Southeast half of the sale and in higher elevations in the Northern tip of the project area west of highway 207. Many wildlife species depend on denser forests such as these for their security from predators and/or their ecological habitat niche, including elk, Northern goshawk, Cooper's hawk, Sharpshinned hawk, Pileated woodpecker, Northern pygmy owl, and various interior and multi layer mixed conifer forest dependent Neotropical songbirds. We are concerned by the impacts to these species posed by proposed heavy logging in naturally denser forest and by proposed violation of Eastside Screens RHCA buffers for Class 4 streams to log these RHCAs, threatening fish species, Columbia	23	Impacts to pileated woodpecker, elk, Columbia spotted frog, goshawk, and Neotropical migratory birds are described in the FEIS on pages 140-204. The other species listed in the comment are neither Sensitive or ESA listed; there is no requirement to analyze the impacts for these species in the Biological Evaluation for this project. Project design criteria would be used to protect raptor nests that may be encountered to meet Forest Plan direction (WL5 and WL6). At the time of this analysis, regional direction is that undeveloped lands less than 5,000 acres do not need to be analyzed for wilderness values. RMO direction can be found in DEIS page 113 under PACFISH. As noted on page 3 of the supporting forest vegetation report " Between skips and gaps, the matrix area will be thinned to a variable density with minimum amounts of residual basal area varying with a unitâ€™s plant association (at least 25-60 ft2/acre of basal area will be retained after thinning; see tables 16 and 48)." Retained basal areas will fluctuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the forest vegetation report. Table 16 displays minimum stocking levels for the Umatilla

Coulter	Karen	4	20	We are strongly opposed to violating the existing Forest Plan by logging trees 21" dbh and greater. The Kahler area is very deficient in large trees of all species.	24	Instances where 21â€DBH trees might be removed are limited to stands with the following criteria: Douglas-fir vegetation types, moderate or higher stocking classes, dominated by ponderosa pine, have 10 trees/ acre or more of trees greater than 21â€and not currently classified as Old Forest Single Stratum (OFSS). If all of these criteria are met, than a DF or GF that is young yet large may be removed from within two driplines of a medium sized PP (greater than 15â€dbh). This determination is based on site specific stand analysis.

Coulter	Karen	4	23	* Logging Douglas fir and Grand fir at 21" dbh or greater will definitely diminish and degrade these stands as the Forest Service should know perfectly well if the staff has spent any significant time in the planning area - I've done both inventory and sensitive plant surveying across the Heppner District, field checked numerous proposed timber sales on the District live right below the planning area (within Â¼ mile) and have field checked many of the proposed sale units myself. Believe me, there's no excess large trees out there and no real unnatural "competition" issue between firs and pines at or over 21" dbh. This is a bogus rationale to justify logging large trees and is being pushed on all the Districts out here by Region 6. There are suddenly almost all of the proposed timber sales out here including planned logging of trees > 21" dbh in violation of the Forest Plan. This is not a site-specific need, but a regional scheme to "get the	24	Instances where 21â€DBH trees might be removed are limited to stands with the following criteria: Douglas-fir vegetation types, moderate or higher stocking classes, dominated by ponderosa pine, have 10 trees/ acre or more of trees greater than 21â€and not currently classified as Old Forest Single Stratum (OFSS). If all of these criteria are met, than a DF or GF that is young yet large may be removed from within two driplines of a medium sized PP (greater than 15â€dbh). This determination is based on site specific stand analysis.

Coulter	Karen	4	21	In bemoaning the loss of old-forest single stratum structure, the Forest Service fails to acknowledge that logging of large trees (such as is again proposed) created this situation and that is natural for regenerating logged forest to have more trees and more canopy layers than original old growth stands as young and younger/mature are growing into the gaps created by past logging and there needs to be allowance for natural mortality before these stands achieve old growth status. Logging some of the last large trees will not restore OFSS but will further retard its development.	25	Refer to the Effect Analysis section, starting on page 38, of the Supporting Forest Vegetation Report; as well as the section titled "Consisitency of Proposed Silvicultural Activities with Eastside Screens" on page 82. The glossary containes definitions of "old forest" and "old growth". Impacts to late and old structure habitat are also described under the wildlife portion of the EIS on pages 127-133.

Warness	Lindsay	2	5	Each of the action alternatives have the same amount of prescribed fire. How will this affect the cover in the stands, is there a risk that this prescription will not be implemented? If the Forest Service chooses alternative 3, what is the risk that the larger skips and untreated areas will be negatively affected by the prescribed fire? Will there be additional measures taken to protect these areas? How would wildland fire affect them?	26	Prescribed fire burn plans are controlled by the mitigations located in the Kahler EIS (Design Features/ Monitoring/ Mitigation Common to Alternative 2 and 3). Prescribed burn plans are limited by the environmental conditions and lighting patterns developed for the burn units, as well as acceptable stand mortality as determined by the silviculturist. Skips and untreated areas will be allowed to burn under conditions that exhibit flame length under 4 feet. The effect of wildland fire was analyized across all alternatives and is located in the Kahler Fire and Fuels Report (No Action, Alternative 2, Alternative 3; Fire Behavior). The expected impacts associated with underburning with regard to elk habitat are disclosed starting on page 154 of the FEIS. In general, it is not expected that low intensity underburning will impact overall cover in the analysis area. At the fine scale, it is anticipated and desired that small patches of cover and non-cover will experience higher overstory mortality, while other areas will remain unburned.

Coulter	Karen	4	36	Please don't use helicopter ignition. This will help avoid crown fires.	27	Prescribed fire burn plans are controlled by the mitigations located in the Kahler EIS (Design Features/ Monitoring/ Mitigation Common to Alternatives). Prescribed burn plans are limited by the environmental conditions and lighting patterns developed for the burn units, as well as acceptable stand mortality as determined by the silviculturist. It is anticipated and desired that some areas will see higher mortality, while other areas will remain unburned.
Solomon	Laurie	5	3	Amending the Forest Plan in this situation is obviously being done to justify the extreme violation of the intent and understandings that the Forest Plan is supposed to protect the habitat and recreational quality of the Umatilla National Forest inhabitants and visitors.	28	Impacts of proposed Forest Plan amendments on terrestrial wildlife and habitat are disclosed on pages 125-204 of the EIS. Effects to old growth, late and old structure, and elk are specifically discussed on pages 125-126, 126-132, and 140-153. Impacts of proposed Forest Plan amendments on recreation are disclosed on pages 304-310 of the FEIS.

Solomon	Laurie	5	6	Road construction and opening miles of currently closed roads will increase access to poachers and ORV's and illegal firewood cutting, increasing the likelihood as well of invasive exotic plant introduction to this area.	29	Impacts related to potential non-permitted OHV use and the road system as a whole are described in the Rocky Mountain Elk section beginning on page 140 (FEIS). Design criteria (RD1, page 27 of FEIS) will be implemented to reduce or eliminate the potential for illegal motorized vehicle use on existing and temporary roads used during implementation. Design criteria (NW-1) describes treatment of noxious weed infestations in Kahler project area before and after project activities which will reduce the risk of weed spread with existing road system. The other design criteria for noxious weeds (NW 2-9) will also reduce the risk of weed spread with roads. The invasive plant effects analysis in Chapter 4 beginning on page 268 (FEIS) acknowledges that although the design criteria for noxious weeds will reduce the risk for weed spread, the risk cannot be completely eliminated.

Solomon	Laurie	5	8	The Kahler Draft Environmental Impact Statement fails to analyze potential impacts to listed species and species that are candidates for up-listing, that may be in the project area. This is not a proposal for "restoration", only for devastation.	30	Impacts to ESA listed and Region 6 Sensitive Wildlife Species with a potential to occur in the area are analyzed and disclosed in the FEIS on page 53. Additional analysis of effects for these species and their habitats is provided in Appendix M, the Terrestrial Wildlife Specialist Report. Changes will be incorporated into the FEIS and Specialist Report reflecting recent changes in the status of the North American wolverine, which is no longer considered as Proposed for listing under the Endangered Species Act. It will be analyzed as a Region 6 Sensitive Species. The only federally listed fish in this project is the Mid-Columbia steelhead. This fish species occurs in Class I and II streams and does not occur in Classs III or IV streams. Only Class IV streams will have some commercial thinning.

Coulter	Karen	4	32	Is logging in RHCAs only for juniper? Why not use prescribed fire instead, done carefully so as not to increase sediment into streams? This would be a more natural way to reduce juniper and would leave the largest and oldest trees.	31	Refer to the Comparison of Alternatives Table in the FEIS. In short, all conifer speices may be harvested within the RHCA.
Coulter	Karen	4	29	If OFSS is below HRV and is already OFSS, it should not be logged.	32	Currently the old forest structure is well below HRV in the single stratum, and within HRV in the multi-stratum (Table 3-5, FEIS). Harvest will trend the old forest single structure towards HRV. Old forest multi-strata will decrease with harvest, but remain within HRV (Table 4-4, FEIS). The increase in OFSS is from harvest within OFMS or UR (understory re-initiation) stands. Alternative 4 was developed, in part, to address concerns regarding logging in OFSS. To date, stand analysis and field reviews have confirmed very little OFSS within the Kahler Project.

Coulter	Karen	4	52	Page 201 * Drop all logging of LOS stands, including the OFSS stands under HRV. Logging OFSS stands and degrading their structure is completely contradictory to the express purpose and need for this project, which includes increasing OFSS.	32	Currently the old forest structure is well below HRV in the single stratum, and within HRV in the multi-stratum (Table 3-5, FEIS). Harvest will trend the old forest single structure towards HRV. Old forest multi-strata will decrease with harvest, but remain within HRV (Table 4-4, FEIS). The increase in OFSS is from harvest within OFMS or UR (understory re-initiation) stands. Alternative 4 was developed, in part, to address concerns regarding logging in OFSS. To date, stand analysis and field reviews have confirmed very little OFSS within the Kahler Project.

Henning	Blake	7	5	the HEI model is no longer the "best science" for analysis of impacts of landscape level silviculture treatments on elk. The DEIS should clearly state that it is not and why it is not, and then apply the best science for the analysis.	33	The HEI model is mandated by the Forest Plan for analyzing impacts to elk habitat and provides standards that are to be met in certain management areas. Therefore, the HEI model was used to assess potential impacts for the Kahler area (see DEIS pages 141-154). A new Eastside Elk Model is currently in the Beta testing phase, but has not been released for general use. When released, it would still be necessary to run HEI for site-specific projects; to adopt the new model (and not utilize HEI) would require a Forest Plan Amendment.

Coulter	Karen	4	33	1939 is hardly a good baseline for determining HRV, coming after a lot of heavy logging in the region. Aerial photos might not show stumps of trees removed by logging. This does not seem to be definitive evidence of juniper and conifer encroachment into shrub/steppe habitat. If a juniper is 21" dbh it is likely old enough to have been historically present. Juniper grows very slowly (up to 35 years per inch of radial growth based on coring near Prineville.) most managers 16-18" dbh limit on logging juniper in addition to protecting trees with old growth characteristics, not 21" dbh,	34	Refer to "Juniper Thinning and shrub-steppe enhancement" section of the Supporting Forest Vegetation Report, starting on page 9. Aerial photos were used to determine the degree to which conifer encroachment has impacted grassland and shrubland openings that were present on the landscape in 1939. Photos were used to refine boundaries of proposed shrub-steppe enhancement units. During project development, portions of units where juniper historically occurred were identified; in some cases, these areas were dropped from treatment due to the fact that the current density of these stands had not significantly increased from historic conditions.

Coulter	Karen	4	39	So the Forest Service really isn't focused on reducing fire risk or even excess density if small dbh trees may not be cut if there is no market for them! The motivation for this sale is clearly economic gain for the timber industry, not restoration. Most density in the whole project area is trees less than 7" dbh.	36	

Henning	Blake	7	6	The Pacific Northwest's Starkey Forest and Range Research Station has available for beta testing the Blue Mountains Elk Nutrition and Habitat Utilization Model. We believe this new model is based on the best science and that it should be utilized for the Final EIS analysis of all alternatives. The elk habitat utilization segment of the model, coupled with additional elk hiding cover, may provide information necessary for modifying Alternative 3 to increase its effectiveness in retaining elk on the National Forest.	37	The new Eastside Elk Model is currently in the Beta testing phase, but has not been released for general use. This model was run for the summer range/general forest portion of the Kahler area in 2013 during initial Beta testing using the established protocols. Currently (January 2015), researchers at the Pacific Northwest Research Station are exploring variations in the nutrition portion of the model and standardizing the road classification portion of the disturbance model. The outputs were used to suggest potential areas (with existing moderate probability of elk use) where the probability of elk use may be improved through management activities, specifically road closures. As the model has not been released for general use, the HEI model, which is the Forest Plan standard, was used in this analysis. See pages 141-154 for the elk effects analysis.

Artley	Dick	1	26	The all-important Environmental Consequences disclosures for the Kahler timber sale pre-decisional EA are twisted and corrupted by most IDT members. Their goal is to use lies to convince the public that 1) selecting the No Action alternative would be a tragic mistake, and 2) selecting the Proposed Action is in their best interest because it will benefit amenity resources in the long-term.	38	The No Action Alternative provides a baseline for comparison of alternatives to guage trade-offs that invariably occur as a result of management activities. Direct, indirect, and cumulative effects are disclosed for terrestrial wildlife species and habitats in Chapter 4 of the EIS on pages 126-205 and in Appendix M (Terrestrial Wildlife Specialist Report). Where possible, quantitative measures are used to describe the expected impacts.

Artley	Dick	1	27	Most IDT members know the Responsible Official expects them to use the following scheme in their Environmental Consequences (40 CFR 1502.16) disclosures of the direct, indirect and cumulative effects if the No Action alternative is selected. This is the case with Kahler.	39	The No Action Alternative provides a baseline for comparison of alternatives to guage trade-offs that invariably occur as a result of management activities. Direct, indirect, and cumulative effects are disclosed for terrestrial wildlife species in the Wildlife section in Chapter 4 of the FEIS and in Appendix M (Terrestrial Wildlife Specialist Report); edits have been incorporated into the No Action discussions in the Wildlife Report based on information provided by the fuels specialist. Where possible, quantitative measures are used to describe the expected impacts. Direct, indirect, and cumulative effects are disclosed for botanical resources in the Botanical Resources section of Chapter 4 of the FEIS and in Appendix A (Botanical Resource Report). Open Road Desity is compared in the FEIS on page 29.

Artley	Dick	1	29	perhaps you should learn how competent USFS other resource specialists working on IDTs describe the direct and indirect effects of the No Action alternative in timber sale NEPA documents. They simply describe the existing condition of their resource and then list the logging-related damage that won't be inflicted on their resource if No Action is chosen. Want a few hints on what this damage will be? Read Opposing Viewpoints Attachments #1 and #4.	40	The No Action Alternative provides a baseline for comparison of alternatives to guage trade-offs that invariably occur as a result of management activities. Direct, indirect, and cumulative effects are disclosed for terrestrial wildlife species in the Wildlife section of Chapter 4 of the FEIS and in Appendix M (Terrestrial Wildlife Specialist Report).

Coulter	Karen	4	40	The RHCA buffers set by INFISH/PACFISH should be the no commercial logging/no mechanical equipment zone for all RHCAs - this means at least 50 feet of horizontal buffer to each side for category 4 RHCAs and avoidance of steep slope logging above streams - see our survey sheets and photos for examples of where this is now proposed.	41	Refer to the Dry Forest RHCA thinning section beginning on page 9 of Appendix N. Further explanation is found in the Hyrdrology and Fisheries sections. No Mechanical Equipment Zones are proposed to be between 75' and 100' wide. PACFISH allows silvicultural treatments in RHCAs that benefit the RHCA. Reducing the risk of severe wildfire, like Wheeler Point, would be a benefit to the RHCA. The Kahler Project proposes to fall non-commercial sized trees into streams to increase woody material. Also, trees that support stream banks will not be cut.

Heiken	Doug	14	28	Basal area retention should be higher in RHCAs to ensure that dead wood is recruited at biologically optimal levels for aquatic, riparian, and upland species. Untreated skips should be well-distributed across units, but RHCAs are a good place to put extra skips.	41	Refer to the Dry Forest RHCA thinning section beginning on page 9 of Appendix N. Further explanation is found in the Hyrdrology and Fisheries sections. No Mechanical Equipment Zones are proposed to be between 75' and 100' wide. PACFISH allows silvicultural treatments in RHCAs that benefit the RHCA. Reducing the risk of severe wildfire, like Wheeler Point, would be a benefit to the RHCA. The Kahler Project proposes to fall non-commercial sized trees into streams to increase woody material. Also, trees that support stream banks will not be cut.

Artley	Dick	1	9	The vast majority of old growth stands are not open park-like stands devoid of biodiversity as you appear to want here.	42	The Terrestrial Wildlife Specialist Report acknowledges that there is a range of late and old structure habitat in the dry upland forest potential vegetation group and states that: "While only structure is considered here for the purposes of identifying late and old structure habitat, a number of other factors actually affect the quality and effectiveness of these stands for providing habitat to late and old structure associated wildlife species. These factors include large diameter tress, large diameter snags and downed wood, stand complexity/heterogeneity, and trees with broken tops, decay/hollows (resulting from disease or other factors), wind/ice/fire damage, mistletoe brooms, and other features indicative of decadence." (page 9). The commenter is noting discussion of effects to old forest single-stratum stands under the no action alternative; these stands would not have a homogeneous appearance or closed canopies. Historically, they would have had open canopies, and heterogeneous stand composition (clumpiness). See Silviculture Report. Edits have been made to the Terrestrial Wildlife Specialist Report and EIS based on fuels specialist input.

Artley	Dick	1	36	you lament the fact that existing management direction includes fire suppression. Have you told supervisor Martin that if he wants to save the forest's wildlife he must amend the forest plan to clearly indicate the Umatilla National Forest will never again suppress fires? Competent wildlife biologists know natural disturbance events like fire, insect activity and disease are beneficial to most wildlife species.	43	The EIS and Terrestrial Wildlife Specialist Report (Appendix M) acknowledge that insects, disease, and fire are important disturbance factors that promote the creation or maintenance of habitat for a number of species. Edits have been made to the Terrestrial Wildlife Specialist Report and EIS based on fuels specialist input.
Artley	Dick	1	10	are you trying to tell me that if the area isn't logged the current green trees will stop dying and thus create new snags	44	On page 135 of the EIS (Snag Replacement Section, No Action discussion), it is stated that a high severity fire in uncharacteristically dense dry upland forest (in terms of tree density and extent across the landscape) could result in a high proportion of overstory mortality. Once those snags created by a fire event fall, it would require a long period of time to grow trees large enough to be useful to a suite of snag-dependent wildlife species. Edits have been made to the Terrestrial Wildlife Specialist Report and EIS based on fuels specialist input.

Artley	Dick	1	12	please explain why there are any elk on the Umatilla NF given the fact that it hasn't all been logged to eliminate fire. There will be 0.3 miles of new system road built for this sale. Why does that not increase open road density?	45	While approximately .4 miles of road would be constructed, it would be closed to full sized motorized vehicles. The new segment of road would replace an existing segment of road that is open to OHV travel. This road is in poor condition, with a portion lying on private land with no road use agreement/easement. As .4 miles of existing OHV trail would be closed and decommissioned, there would be no net increase in open road or open trail density under the Kahler Project. Refer to Appendix J for additional information. Edits have been made to the No Action section based on information provided by the fuels specialist.

Artley	Dick	1	13	you use the it will all burn up excuse to reject No Action again.	46	The Terrestrial Wildlife Report and EIS acknowledge that habitat quality for some species would decrease while it would improve for others (FEIS, Pileated woodpecker section, No Action discussion, page 162). Value judgements are not made with regard to the "winners and losers" in these situations; expected impacts are described in the context of historical conditions in the dry forest potential vegetation group. Edits have been made to the EIS and Wildlife Report (Primary Cavity Excavators and Pileated Woodpecker sections) based on input of the fuels specialist.

Artley	Dick	1	11	Oh No! We have another "it will all burn up and destroy it all" argument. How simple it would have been to say: "Currently, the downed wood habitat is functioning properly. It has been functioning properly for thousand of years without logging, thus if the Responsible Official selects No Action, it will likely function properly for another thousand years."	47	Pages 136 and 137 of the draft EIS describe potential impacts associated with the No Action Alternative. This section states that there will be multiple factors that affect downed wood densities in the analysis area. Some activities and events would reduce dead wood, while others would increase downed wood densities. In the event of a large scale, mixed severity fire with more passive crown fire and higher flame lengths than would have been expected historically in the dry upland forest potential vegetation group, potential impacts to downed wood resources are described. No value judgements as to whether these changes are beneficial or detrimental are given. Edits have been made to the Terrestrial Wildlife Specialist Report and EIS based on fuels specialist input.

Artley	Dick	1	17	Either behave like s professional wildlife biologist when you rewrite your No Action effects (making sure not to describe the effects of Proposed Action as God's gift to wildlife) or move aside for someone else.	48	Effects of the No Action and action alternatives are described in the EIS (pages 126-205) and Terrestrial Wildlife Specialist Report (Appendix M). Edits have been made to the wildlife effects analysis based on information provided by the fuels specialist.
Artley	Dick	1	18	For each species omit all the text except the first sentence and modify this sentence by removing: "In the short term", "Within the next five years", and "In the short term (0 to 5 years)." Of course You will have a difficult time reflecting reality so I have helped you. Please see the yellow highlighted areas for each of your disclosures. Also never write "high-severity wildfire."	49	Fire severity is a relative measure of the degree of overstory mortality. High severity would indicate that a high proportion of the overstory would experience immediate or delayed mortality due to fire effects. The severity of a fire depends on the fire intensity and the degree to which ecosystem properties are fire resistant. Therefore, fire severity is a function of the ecosystem being burned and not simply an index of fire intensity. Terms like â€œcatastrophicâ€ are value-based, and do not account for the value of high and mixed severity fires to wildlife. Edits have been made in the EIS and Wildlife Report to reflect information provided by the fuels specialist.

Artley	Dick	1	19	"Animals, as well as plants, can benefit from fire. Some individual animals may be killed, especially by catastrophic fires, but populations and communities are rarely threatened. Many species are attracted to burned areas following fires - some even during or immediately after the fire." Congressional Research Service Report "Forest Fire/Wildfire Protection" February 14, 2005 http://www.coloradofirecamp.com /congressional_research/forest-fire-wildfire-effects.htm	50	"Catastrophic" is a value-based term that does not acknowledge the inherent value of burned stands to wildlife. The Terrestrial Wildlife portion of the EIS and Appendix M (Terrestrial Wildlife Specialist Report) acknowledges that fire is a vital component of dry and moist upland forest potential vegetation groups and that multiple species, including Lewis', white-headed, and American three-toed woodpeckers, as well as other cavity excavating birds depend on post-fire (high severity burned) stands for nesting and foraging. Refer to pages 126, 128, 154, 172, 178, 183, and 199 in the EIS and pages 7, 10, 54, 60, 73, 114, 115, 119, 134, 136, 137, 142, 144, 163, 166, and 170 in the Terrestrial Wildlife Specialist Report.

Artley	Dick	1	20	"Recently burned areas represent an important type of habitat that many species of animals have evolved to utilize. Snags (standing dead trees) provide critical nesting and foraging habitat for birds and small mammals, and as they decay and fall, create additional habitat for small mammals and terrestrial amphibians as coarse woody debris." Campbell, John L. Ph.D, Dan C. Donato, Joe B. Fontaine J. Boone Kauffman Ph.D., Beverly E. Law Ph.D., and Doug Robinson "Biscuit Fire Study." Oregon State University Department of Forest Science Terrestrial Ecosystem Research and Regional Analysis. 2003. http://zircote.forestry.oregonstate.edu/terra/biscuit.htm	51	See response to Comment 1-19.

Artley	Dick	1	21	"We do not need to be afraid of the effects of wildland fire in our forests. Fire is doing important and beneficial ecological work," said the report's author, Dr. Chad Hanson, a forest and fire ecologist and Director of the John Muir Project. "It may seem counterintuitive, but the scientific evidence is telling us that some of the very best and richest wildlife habitat in western U.S. forests occurs where fire kills most or all of the trees. These areas are relatively rare on the landscape, and the many wildlife species that depend upon the habitat created by high-intensity fire are threatened by fire suppression and post-fire logging." Hanson, Chad Ph.D. February 2, 2010 "New Report Debunks Myth of 'Catastrophic Wildfire' " http://johnmuirproject.org/documents/Myth%20of%20Catastrophic%20Wildfire%20Media%20Release.pdf	52	Refer to Response #50 (Comment 1-19).

Artley	Dick	1	22	"Contrary to what you may think, a forest fire does not reduce everything to a lifeless ash. Instead, it leaves behind a landscape of blackened trees interspersed with remnants of green, intact forest. Post-fire specialists such as wood-boring insects quickly colonize the dead trees (snags), attracting an array of woodpeckers." "Identifying the ecological value of a post-fire structure and the characteristics that make it attractive to wildlife is important." Nappi, Antoine Ph.D., Pierre Drapeau Ph.D., Jean-FranÃ§ois Giroux Ph.D. and Jean-Pierre Savard Ph.D. "Snag use by foraging black-backed woodpeckers (Picoides articus) in a recently burned eastern boreal forest." The Auk 120(2): 505-511. 2003. http://www.borealcanada.ca/research_arc_hot_e.cfm	53	Refer to Response #50 (Comment 1-19).
Artley	Dick	1	23	Opposing Views Attachment #8 contains 26 more science conclusions showing that post-fire conditions benefit wildlife.	54	Refer to Response #50 (Comment 1-19).

Warness	Lindsay	2	2	I support the work done in the OFMS stands to place these stands on the path to becoming OFSS, this type of stand is deficit in the project area (and throughout the forest). These types of stands are needed to increase habitat for the White-headed woodpecker as well as provide a natural fire break. Removing late seral species from these stands is appropriate and will help to restore the natural range of variability within the project area.	55	Impacts to late and old structure habitat (specifically OFSS) are disclosed in the EIS on pages 127-133. Impacts to white-headed woodpecker and its habitat (OFSS as well as dense dry forest stands) are also described in the EIS on pages 178-183.

Warness	Lindsay	2	8	One of the major concerns about this project is elk habitat with regards to disturbance. I support Alternative 2 as it will provide more forage opportunities for this area and I suggest that the Forest Service consider more seasonal road closures within the project area during the hunting season to mitigate disturbance.	56	Impacts to elk and elk habitat are disclosed on pages 141-154 in the EIS. The primary concern with regard to elk habitat in the Kahler project area is the impact that harvest activities will have on cover habitat that is used by elk during late summer and periods of high human disturbance and the resulting impact on the distribution of elk in the analysis area and on adjacent private lands. Regarding the proposal to close roads during hunting season, such closures were not designated for this area in the District Access and Travel Plan. They also were not provided to the public for review under the Kahler project. Incorporation of these measures would require an additional public review period, which may occur at the discretion of the Responsible Official.

Coulter	Karen	4	26	These large Douglas and Grand firs > 21" dbh are not particularly young. They are probably mostly at least 100-140 years old and thus not artifacts of effective fire suppression or "fir encroachment" but naturally in these stands. They are also the next (and scarce) gene replacement old growth trees.	57	Refer to the Supporting Kahler Forest Vegetation Report particularly the rationale for using an age threshold of 150 years at breast height to identify old trees (pages 99 and 100).

Warness	Lindsay	2	9	Is the difference in actions between alternative 2 and alternative 3 significant enough to have an impact on Elk behavior in the project area? Are the prescriptions different enough to have an impact? It states in the EIS on page 218 that elk are likely to spend more of their time on the adjacent private lands during hunting season, what is the cover to forage ratio for the private lands?	58	The differences between Alternatives 2 and 3 are described in the EIS on pages 141-154. While Alternative 3 would retain larger patches of cover across the landscape for elk and other species associated with dense dry forest conditions, it is likely that elk would spend a greater proportion of their time, and longer periods of time, on private lands adjacent to the Forest, or on NFS lands adjacent to the Kahler Project area due to reductions in cover in the project area. Cover levels on private lands are unknown. In response to treatment, elk would likely re-distribute themselves due to a reduction in dense stands where they would be able to escape disturbance. Road closures would perhaps slow this response to some degree, but the lack of available cover would ultimately result in elk movement toward private property or areas outside the Kahler analysis area. Elk choose to linger on private lands where disturbance is low (non-existent or highly controlled hunting pressure), despite low quality forage in these lower elevation areas.

Coulter	Karen	4	1	Billed as "dry forest restoration", the Kahler project would actually heavily log 9,435 acres (proposed action, alternative 2) or 8,629 acres (alternative 3), with both alternatives logging an unspecified numbers of scarce large trees over 21 "dbh in violation of the existing Forest Plan.	59	In the forest vegetaion report, refer to section "Consistency with the Forest Land and Resource Management Plan", particularly subsection "wildlife standard" (item 6 in forest plan amendment #11).

Warness	Lindsay	2	10	What is the historical range of variability for pileated woodpeckers in the area? Were they present in the area historically? I'm concerned that we are arbitrarily keeping habitat that was created due to the lack of appropriate management on the landscape (fire exclusion, timber harvest, etc.) in lieu of managing this landscape to better accommodate species that rely on the single story old forest.	60	Effects on the pileated woodpecker are disclosed on pages 163-170 in the EIS. Additional information regarding the ecology of the pileated woodpecker is available on pages 87-97 in the Terrestrial Wildlife Specialist Report. The "historic range of variability" for pileated woodpecker was not analyzed for the Kahler project. Analysis of management indicator species utilizes a source habitat approach to analyze impacts to habitat availability and to assess viability. Pileated woodpecker source habitat (based on structure and composition) includes late-seral stages of the subalpine, montane, and lower montane forests (Wisdom et al. 2000), in particular the old-forest single- and multi-strata stages of grand fir-white-fir, interior Douglas-fir, western larch, western white pine, western red cedar-western hemlock. Pure ponderosa pine forest in a single stratum condition is generally not considered suitable for this species. The pileated woodpecker does, however select for ponderosa pine and western larch for nesting. As is described in the Vegetation Report, the historical range of variability for vegetation indicates that 20 to 45 percent of the dry upland forest potential

Vandehey	Roberta	6	8	Stop thinning stands to select which trees should be there. Let nature do it because that way the stand correctly selects the best trees that really belong in a stand. The weaker, or ones that get "crowed out" become soil-building material. The remaining multi-species stand of the strongest and most suited trees is less likely to attract bug infestations or disease that can wipe out an entire stand of single, or restricted species, chosen by human "specialists." Not only that, the taxpayer does not need to pay to get the job done.	61	Thank you for your comments

Vandehey	Roberta	6	18	Junipers are an introductory species for pine and should be left. The pine micro-site themselves on the north side of the junipers, thus benefiting from the shade, higher humidity, the browse protection, and even get watered by the "nurse" juniper. The junipers have one deep tap root that brings up deep water that is otherwise useless to small pine seedlings, releasing it near the surface to "water" the pine trees micro-sited next to them. This was commonly documented on my own property just prior to the Wheeler Point fire, particularly in a harsh south slope growing site. Pine were finally getting going, self-micro sited on the north side of approximately 50 % of the junipers.	62	Thank you for your comment

Vandehey	Roberta	6	28	Wheeler Point Fire area habitat restoration depends on the old growth stands of trees and all of the rest of the natural undisturbed stands of mixed species trees that extend from the westernmost edge of the Wheeler Point fire area to the west boundary of the West End Umatilla National Forest. The Project proposes to log, thin, and probably burn, as well as spray these so far relatively undamaged and natural habitat areas left after the 1996 fire. That entire area represents a critical habitat buffer area necessary to be left as is and hopefully made roadless to offset the 54,000-acre habitat lost to the Wheeler Point Fire contiguous to its east. This area is critically important to "leave alone" for the animals, birds and fish.	63	Thank you for your comment, your position will be considered when a decision regarding Kahler is made.
Vandehey	Roberta	6	13	As a neighboring landowner we absolutely object to your proposals to log at all in or around the Wheeler Point Fire Burn area to our north, west and east. The animals and we need what little is left up there and feel safer from fire if it is left alone!	64	Thank you for your comment

Warness	Lindsay	2	11	There is discussion of Marten on this project, is this specie one that would have been historically present in the Kahler Basin Project? I do not support maintaining marten habitat in areas that they would not be historically present on the landscape. It is more important to maintain a healthy, resilient landscape that can withstand fire and drought.	65	Impacts to marten source habitat are disclosed in the EIS on pages 170-172. Additional information regarding the ecology of this species is provided in Appendix M (Terrestrial Wildlife Specialist Report). The wildlife report states that it is unlikely that this species is present in the analysis area. As commercial harvest would occur in source habitat, and there would be a Forest Plan amendment to swap Dedicated Old Growth acres, the impacts to this species are considered; small scale and larger scale skips would benefit other species that are known or suspected to occur in the analysis area.

Warness	Lindsay	2	12	I support commercial harvest in the RHCAs of class 4 streams as it is ecologically appropriate to work towards increasing the hardwood component in these areas. It is important for the Forest Service to do what is right on the land. Managing these Class 4 RHCAs is appropriate and will reduce/mitigate the fire danger and allow for prescribed fire to play a role in managing this ecosystem. The risk of not managing these areas is too high. I do not support using them for wildlife corridors because there are large amounts of acreage that are not going to be managed that will better serve this purpose.	66	RMO direction can be found in DEIS page 113 under PACFISH. Impacts to connectivity habitat are disclosed in the FEIS beginning on pages 132. Connectivity corridors provide for movement between late and old structure stands and Forest Plan designated old growth stands. Connectivity corridors must meet several criteria in order to meet the requirements of the Eastside Screens. In many cases, drainages provide habitat that are better suited to meeting these requirements than other stands. Generally, untreated stands do not provide appropriate structure or density to provide for connectivity of late and old structure and old growth.

Warness	Lindsay	2	15	Please also analyze removal of diseased trees that are 21" in diameter or greater. I caution against using definitive statements such as "there will be no other 21" trees removed." This removes any flexibility that your silviculturalist and sale administration have when designing the sale. Please ensure that there is flexibility in the final NEPA document.	67	Removal of additional large diseased trees that provide these features would not be consistent with the purpose and need, which is to move stands toward a late and old structure condition. A number of species present on the Umatilla National Forest require late and old structure habitat for denning, nesting, foraging, and other purposes. These species include pileated woodpecker, white-headed woodpecker, Lewisâ€™ woodpecker, northern goshawk, Vauxâ€™s swift,and others. While only structure is considered here for the purposes of identifying late and old structure habitat, a number of other factors actually affect the quality and effectiveness of these stands for providing habitat to late and old structure associated wildlife species. These factors include large diameter tress, large diameter snags and downed wood, stand complexity/heterogeneity, and trees with broken tops, decay/hollows (resulting from disease or other factors), wind/ice/fire damage, mistletoe brooms, and other features indicative of decadence.

St.Martin	Amanda	3	5	I am very concerned by the proposed heavy logging in recreational areas, including Fairview Campground and Tamarack Mountain Lookout. If these areas are virtually clearcut (as the current plan proposes,) their value as scenic, peaceful places where people can enjoy the rare experience of solitude would disappear. Logging in the forest surrounding these places would decrease its value as high quality elk and deer habitat, and therefore become useless to area hunters who currently utilize the area. I am opposed to any proposal that includes logging in these valuable recreation areas.	68	As stated on pages 304-307 of the FEIS, the proposed treatments would change the visual charactor of Fairview Campground and Tamarack Lookout. Mitigation would reduce the negative visual elements associated with harvest, with the goal of maintaining scenic integrity. The direct, indirect, and cumulative impacts on elk are disclosed in the EIS on pages 140-153. The proposed harvest activities would reduce cover for elk in the E1 management areas. Corresponding effects on hunting are described on pages 309 and 310 of the FEIS.

St.Martin	Amanda	3	6	The DEIS fails to analyze potential impacts to listed species such as the Canada lynx, and species that are currently candidates for a change in listing, such as the Pacific fisher, that may very well be in the project area. Other wildlife species at risk due to heavy logging and loss of suitable old growth habitat within the project area include the Pileated woodpecker, elk, Great Gray owl, Northern Pygmy owl, Black-backed woodpecker, and Neotropical songbirds dependent on dense, mixed conifer forest with multiple canopy layers and large, complex tree structure. I am also very concerned by potential impacts to dispersing Gray wolves in the project area, due to significant reductions or displacement of elk and deer populations, who will lose large amounts of thermally and visually important cover. The EIS must analyze these potential impacts to wildlife in greater detail. Any	69	The impacts on ESA listed and Region 6 Sensitive Species are disclosed in the FEIS beginning on page 53. Additional information regarding Forest Service direction related to ESA listed species and R6 Sensitive species, as well as a descrition of other species considered but eliminated from a full analysis is available in Appendix M, the Terrestrial Wildlife Specialist Report, on pages 121-128. Fisher are not documented or suspected to occur on the Umatilla National Forest. While potential lynx habitat is present on the Umatilla National Forest, the Forest is classified as unoccupied habitat. There is no suitable lynx habitat in the Kahler analysis area. The gray wolf is analyzed in the FEIS beginning on page 186. Impacts to pileated woodpecker, elk, black-backed woodpecker (a member of the Primary Cavity Excator group, a Management Indicator on the Umatilla National Forest), and Neotropical migratory birds are disclosed in chapter 4 of the FEIS pages 140 through 204.

Vandehey	Roberta	6	16	Re-establish beaver habitat, with a goal of re-establishing beaver occupation and beaver dams that will raise the water table and conserve water supplies to watershed Steelhead streams.	70	Beavers would be active along perennial streams with well developed riparian shrub communities. Since treatment activities are not proposed within the Riparian Habitat Conservation Areas along perennial streams, beaver habitat would not change.
Vandehey	Roberta	6	20	. Leave large, contiguous un-logged and un-thinned areas for wildlife to provide survival from over-hunting, which is a serious problem for the Wheeler Point Fire area and adjacent surviving forest stands.	71	Impacts on elk are described in the EIS on pages 141-154. Alternative 3 addresses this concern to some degree by maintaining larger patches of untreated habitat distributed across the landscape. Alternative 4 also addresses this concern to a degree due to the fact that it was developed with Alternative 3 as a starting point. Additional issues and concerns (>21 inch tree removal, riparian treatment, road use) were addressed under Alternative 4 that retained additional cover and dense dry forest habitat for elk and other wildlife.

Vandehey	Roberta	6	21	Plant extensive shrub areas to re-establish burned-out and over-grazed native species necessary for a healthy deer population. Deer are browsers of woody shrubs, not grass. Cattle eat everything, leaving nothing for the native animals.	72	While planting shrubs to improve wildlife habitat is beyond the scope of the Kahler project, proposed commercial thinning in dense mixed conifer stands is expected to improve forage for elk and promote forb and shrub growth. Shrub-steppe enhancement treatments would also address encroachment of conifers into historic (based on examination of 1930's aerial photos) shrublands utilized by elk, deer, and other wildlife.
Vandehey	Roberta	6	22	5. Plant extensive populations of native fruit-baring shrubs for the birds.	73	The planting of shrubs in the RHCAs will be determined after harvest. Also, opening up the tree crowns will allow for native shrub recruitment.

Vandehey	Roberta	6	23	Leave thicker stands for habitat, protection and escapism for game animals.	74	As designed, the Kahler project would leave skips where no management would occur within the unit to provide for heterogeneity; these areas would be available for the foraging, nesting, and cover for wildlife associated with dense dry forest habitat. Category 1, 2, and 3 RHCAs would also be buffered from treatment, providing additional untreated areas that will provide for small-scale variability within stands.

Vandehey	Roberta	6	29	The stand of old growth timber north of my northern border that your Project targets for logging, thinning, a new road, etc. is the only place that I have ever seen a Palliated Woodpecker anywhere in Eastern Oregon over the past 50 years. If you log it as your Project intends to do, there will be no more Palliated Woodpeckers as well as there will be the loss of a whole bunch of other old growth-dependent birds species. Please See Attachment # 2 entitled Avian Population Trends in the Pacific Northwest, by Brian E Sharp, Ecological Perspectives.	75	Impacts to pileated woodpecker are described in the EIS on pages 163-170. Impacts to late and old structure habitat are described on pages 127-133. Pileated are know to occur throughout much of the Kahler analysis area. The Kahler Project would impact pileated woodpecker source habitat. At the Forest scale, this project would not affect the viability of the pileated woodpecker. It is likely that overall use of the Kahler area by pileated woodpecker may be reduced due to the predicted reduction in the quantity, size, and distribution of pileated woodpecker source habitat.

McClure	Steve	8	8	Hunting and tourism are major draws for the local area. The Forest should focus on creating more forage for the large ungulates within the area. Creating habitat such as stand initiation will create more forage in the project area. Additional treatments to create/improve forage would be appropriate for the area.	76	Impacts to elk and elk forage are described in the EIS on pages 141-154. Although the proposed activities are expected to improve forage for elk, these improvements would be largely seasonal. As grasses in more open stands would cure out earlier in the year, there would be less late-season (summer and early fall) forage for elk, which when combined with decreased cover would likely reduce hunting opportunities on public lands.
McClure	Steve	8	13	It is important to create more OFSS on the landscape and proposed treatments in the Kahler Basin area are appropriate because these treatments will not only benefit our local economies but also increase habitat for the threatened Whiteheaded woodpecker.	77	Expected impacts on the Region 6 Sensitive white-headed woodpecker are described on pages 178-183. While old forest single stratum stands are selected by white-headed woodpecker, a heterogeneous landscape with one-third of the forested acres in a moderate and high density condition provides a wide range of foraging opportunities during years with poor cone production.

McClure	Steve	8	16	We encourage the Forest Service to look at the effects of this project on wildlife on a forest-wide scale because this scale will better represent the true viability of the wildlife.	78	The forest scale is the appropriate scale for some analyses, including viability of management indicator species. However, examination of other wildlife species and their habitat at the larger Forest scale would make it difficult to determine site-specific impacts to individuals, their habitat, and their distribution across the landscape.

Coulter	Karen	4	5	We are very concerned by the proposed logging of 2,332 acres (alternative 2) or 2,166 acres of "other undeveloped lands" that have never been logged before. There is very little forest that has been left intact for wildlife, fish habitat, recreational values, scientific study, and carbon storage to slow climate change. Many rare and listed wildlife species such as Wolverine, Lynx, and Gray wolf are very sensitive to human disturbance, which also significantly reduces useable elk habitat. The best fish habitat for listed species such as Bull trout, Chinook salmon, and Steelhead trout exists in never logged areas.	79	The Forest Plan details the decisions already made regarding which managment activities, if any, are appropriate on which lands through its management area allocations. Kahler proposes only those treatments allowed by the respective management areas. Impacts to elk habitat and gray wolves are described on pages 141-154 and 188-189 of the EIS. The ecology of the wolverine and lynx are described on pages 127-128 and 124 in the Terrestrial Wildlife Specialist Report (Appendix M). This portion of the report provides the rationale for not fully analyzing effects to these species. The Wildlife Report and EIS has been updated to reflect changes in the status of the North American Wolverine that have occurred since the draft was written.

Coulter	Karen	4	6	We are very concerned by the proposed heavy logging of project area recreational areas, including Fairview Campground and Tamarack Mountain Lookout and recreational cabin. Both of these areas would be unrecognizable as the scenic, peaceful places they are now after the virtual clearcutting of forest proposed, as described in the DEIS. Many user-created dispersed camps, including hunting camps, and the surrounding forest would also be heavily logged and lose their value as viable or high quality elk and deer habitat as well as recreational aesthetics.	80	The concern regarding changed visual quality is noted. Effects to visual quality are listed on pages 304 -307 of the EIS and the effects are consistent with the Forest Plan. Analysis did not place a value judgement on the changes in visual quality, that is left for the Decision-maker. Impacts to elk and elk habitat are described on pages 140-153 of the EIS.

Vandehey	Roberta	6	5	With the total deforestation, that south-facing ridge responds to the February sun like a reflective mirror, resulting in extreme temperature inversions and a total melt-off of the snow by the end of February. As a result, Alder Creek and Wheeler Creek have their May runoff in February and by May; the stream flows are what would be normal for late July. By the time the Red Band Trout need the flow to migrate in late spring, the flow is reduced by up to maybe 90%. Logging any remaining trees in the burned area, or the margins to the West or East, or South would be a huge mistake. Trees need to be planted, not logged!	81	The Kahler Project proposes to reforest approximately 5,000 acres in the area of the Wheeler Point Fire (EIS, Table 2-3, p.29). The "reflective mirror" aspect of comment 6-5 is referring to a phenomenon called "albedo". Albedo is the diffuse reflectivity or reflecting power of a surface. It is the ratio of reflected radiation from the surface to incident radiation upon it. It is as a percentage and is measured on a scale from zero (for no reflection of a perfectly black surface) to 1 (for perfect reflection of a white surface). When an area's albedo changes due to snowfall, a snowâ€“temperature feedback results. A layer of snowfall increases local albedo, reflecting away sunlight, leading to local cooling. In principle, if no outside temperature change affects this area (e.g. a warm air mass), the lowered albedo and lower temperature would maintain the current snow and invite further snowfall, deepening the snowâ€“temperature feedback. Stream surveys were conducted on Alder Creek in 1992, 2007, and 2013. Stream surveys were also conducted on two unnamed tributaries to Alder Creek in 1994 and 2013. According to these surveys Alder Creek is classified as a Class III which indicates that it is

Coulter	Karen	4	50	Page 26 * How can tree species composition, forest structure, and forest density possibly be modeled with any accuracy for 2065? This is ridiculous and misleading and does not account for predictable disturbances such as wild fire, drought, insect defoliation, and any future logging (generally the Forest is on a 20-30 year logging rotation, not a 50 year rotation - way too short allow for trees to reach their optimum growth or to preserve wildlife habitat and ecological integrity.) This is by definition inaccurate science and demonstrates a lack of professional integrity.	82	Modeling for Kahler Dry Forest Restoration was statistically validated. For further information refer to Forest Vegetation Modeling and Database Creation, a process document for Kahler Dry Forest Restoration. Also refer to the Essential FVS guide,a peer reviewed document, section 6.4 found at the following website: http://www.fs.fed.us/fmsc/ftp/fvs/docs/gtr/EssentialFVS.pdf AND http://www.fs.fed.us/fmsc/fvs/documents/validation.shtml The analysis for a 50-year period will be modified from the Forest Vegetation sections and report.

Coulter	Karen	19	244	Again, it is impossible to predict with any accuracy the structure of the forest in 2065 - about 50 years out. This modeling does not incorporate the effects of natural disturbances such as wildfire, insect defoliation and mortality or of future logging, which will be planned unless there is a major shift in policy.	82	Modeling for Kahler Dry Forest Restoration was statistically validated. For further information refer to Forest Vegetation Modeling and Database Creation, a process document for Kahler Dry Forest Restoration. Also refer to the Essential FVS guide,a peer reviewed document, section 6.4 found at the following website: http://www.fs.fed.us/fmsc/ftp/fvs/docs/gtr/EssentialFVS.pdf AND http://www.fs.fed.us/fmsc/fvs/documents/validation.shtml The analysis for a 50-year period will be modified from the Forest Vegetation sections and report.

Coulter	Karen	4	67	*Wildlife species at risk to heavy logging and loss of suitable or old growth habitat in the project area include: Pileated woodpecker, elk, potential accipiter hawks (Northern goshawk, Cooper's hawk, Sharp-shinned hawk), potential Pacific fisher, dispersing Gray wolves, foraging or dispersing Canada lynx, Great Gray owl, Northern Pygmy owl, Rocky Mountain elk, Blackbacked woodpecker, and Neotropical songbirds dependent on denser forest and mixed conifer forest with multiple canopy layers and large trees.	83	The gray wolf is analyzed in the FEIS beginning on page 186. Impacts to pileated woodpecker, elk, black-backed woodpecker (a member of the Primary Cavity Excavator group, a Management Indicator on the Umatilla National Forest), and Neo-tropical migratory birds are disclosed in chapter 4 of the FEIS pages 140 through 204 . Project design criteria would be used to protect raptor nests that may be encountered to meet Forest Plan direction (WL5 and WL6, FEIS design criteria). The fisher is not documented or suspected to occur on the Umatilla National Forest, therefore impacts were not analyzed for this species. The other species listed in the comment are neither Sensitive or ESA listed; there is no requirement to analyze the impacts for these species in the Biological Evaluation for this project.

Coulter	Karen	4	7	We are concerned by potential impacts to dispersing Gray wolves in the project area due to significant potential reductions or displacement of elk and deer populations in the project area from further reduction of thermal cover in winter range below Forest Plan standards as well as reduction of cover in summer range.	84	Impacts to the gray wolf (with respect to impacts on potential prey) are described in the FEIS on pages 186-188. Wolves are not currently known to be resident in the Kahler area; the FEIS has been updated with new information regarding the occurrence of wolves on the south zone of the Umatilla National Forest.
Coulter	Karen	4	8	The Kahler Draft Environmental Impact Statement (DEIS) fails to analyze potential impacts to listed species (e.g. Canada lynx) and species that are candidates for uplisting (e.g. Pacific fisher) that may be in the project area.	85	The fisher is not documented or suspected to occur on the Umatilla National Forest, therefore impacts were not analyzed for this species. Refer to page 124 in the Terrestrial Wildlife Specialist Report (Appendix M) for a discussion of the lynx. This species is not known to occur on the Umatilla National Forest. The Umatilla has been classified as unoccupied suitable habitat for the lynx; there is no suitable lynx habitat in the Kahler planning area based on vegetative structure, composition, and snowpack.

Coulter	Karen	4	9	We are opposed to proposed construction of "temporary" roads and many miles of re-opening of closed roads, both of which create lasting impacts of increased access for fur trappers, illegal firewood cutting, livestock, off road vehicles, and invasive exotic plant introduction and dispersal.	86	Efforts would be made to restrict non-permitted use of closed roads and temporary roads constructed in order to implement the proposed vegetative treatment activities. Refer to Design Element RD2 on page 27 of the FEIS. Design criteria (NW-1) describes treatment of noxious weed infestations in Kahler project area before and after project activities which will reduce the risk of weed spread with existing road system. The other design criteria for noxious weeds (NW 2-9) will also reduce the risk of weed spread with roads. The invasive plant effects analysis in Chapter 4 beginning on page 298 acknowledges that although the design criteria for noxious weeds will reduce the risk for weed spread, the risk cannot be completely eliminated.

Coulter	Karen	4	11	Connectivity corridors for wildlife, Late and Old structure stands, dedicated old growth, areas never logged before, and large trees should not be logged.	87	Impacts to connectivity corridors, late and old structure, and Dedicated Old Growth are described on pages 133-135, 127-133, and 126-127, respectively. Additional information regarding these habitat types are provided in the Terrestrial Wildlife Specialist Report (Appendix M) and Chapter 3 (affected Environment) of the EIS.
Coulter	Karen	4	22	The Forest Service needs to stop over-managing the Forests through Forest Plan amendments to allow them to violate the existing Forest Plan standards and direction. We are strongly opposed to Forest Plan amendments designed to allow violations of the existing Forest Plan. These amendments are not necessary, are cumulatively very significant, and do not address site-specific needs.	89	Direct, indirect, and cumulative impacts on Dedicated Old Growth, late and old structure, and elk are described in the EIS on pages 126-127, 127-133, and 141-154. Most of these concerns are addressed in the No Action Alternative and Alternative 4.
Coulter	Karen	4	28	HEI and cover standards should not be pushed further below Forest Plan minimums.	90	Alternative 4 was developed, in part, to address concerns regarding elk cover and HEI. Impacts to cover and HEI associated with all of the alternatives are described in the EIS on pages 141-154.

Coulter	Karen	4	30	The least the Forest Service could do is to stay out of the dedicated Old Growth! Really this is disgusting that the FS would do a Forest Plan amendment just to log 11 more acres of old growth, even though that completely contradicts their stated goal of increasing and maintaining structure! The Forest Service needs to learn to modify their silvicultural desires to respect ecological needs and public values such as large trees, aesthetically pleasing recreational sites, abundant and diverse wildlife and fish, etc.	91	Impacts to Dedicated Old Growth and replacement of treated old growth acres with adjacent acres containing appropriate structure and composition are described on pages 125 and 126 of the FEIS. The portion of Dedicated Old Growth (Management Area C1) proposed for treatment is immediately adjacent to the Tamarack Lookout Tower, cabin, and communication site. Treatment was proposed to improve sight lines from the tower so it can function as designed, as well as to protect vital infrastructure in the event of a uncontrolled fire. Sixteen acres outside the northern edge of the C1 area with similar old growth habitat would be redesignated as Dedicated Old Growth under the proposed Forest Plan amendment, actually increasing the size of this C1 patch by 4 acres.

Coulter	Karen	4	34	Please don't use prescribed fire in pleated woodpecker or American marten habitat or riparian drainages characterized by large firs, spruce, and/or moist PAGs.	92	Impacts associated with burning in pileated woodpecker and marten habitat are described on pages 163-170 and 170-172. As these landscape burns would be low intensity with low flame lengths, impacts to pileated and marten source habitat are expected to be relatively minor. It is expected that an occassional single tree or small group of trees may torch, but these occurrences would create future foraging and nesting structures for this species and other primary cavity excavators.

Coulter	Karen	4	53	â€¦."would fall below the Forest Plan standard in the E1 West under these alternatives. In the C3 management area, satisfactory cover, total cover, and HEI would be reduced further below Forest Plan standards under these alternatives. Forest Plan amendments would be required to implement the proposed activities in the E1 West and C3 management areas. These amendments would change the standards for total cover, satisfactory cover, and HEI to the post-treatment levels described below in Table W-09 for the duration of the project." Page 210 * These are significant impacts of cover loss for elk and deer, potentially threatening their population viability in the project area - especially in winter range and the West side of the project area. This is not acceptable. (see tables 4-52 and 4-53.)	93	Alternative 4 was designed, in part, to address concerns regarding elk cover and HEI. Impacts to elk and elk habitat are described on pages 141-154 of the EIS. This portion of the EIS describes potential impacts to elk distribution in winter and summer range habitat at different times of the year. The Forest scale is the appropriate scale for assessing viability of Management Indicator Species.

Coulter	Karen	4	54	In other words, populations of gray wolf prey would be expected to change within the project area. This impact to potential dispersing Gray wolves needs to be analyzed. Listed species' viability needs to be protected even if they are not known to be reproducing (denning) in the area. A radio-collared wolf has already been photographed in Wheeler County, so Gray wolf presence is not that unlikely. * Therefore wolves could start using the Winter Range, as it has only 0.5 miles of road per square mile. * "There are no ongoing or reasonably foreseeable future activities, actions, and events that would affect potential wolf habitat or potential prey resources in the analysis area." Yeah, right you aren't planning to log here again? Do you think we're stupid? * This is an illogical cumulative effects conclusion for Gray Wolves. It is not known for sure that they're not using the area (not present) and of	94	Refer to pages 141-154 and 186-190 for a description of expected impacts on elk and gray wolf. At present, there are no resident wolves known to occur on the Heppner Ranger District, based on communication with the Oregon Department of Fish and Wildlife. It is not expected that population numbers of elk would be impacted by the proposed activities. Distribution of elk may shift during high disturbance periods to adjacent private lands or elsewhere on the Forest. Given the territory size of a pack of wolves, it is unlikely that a change in distribution would appreciably impact this species, if a pack were to become established in the area. The EIS has been updated based on new information provided by the Oregon Department of Fish and Wildlife for the adjacent North Fork John Day Ranger District. At this time, there are no reasonably foreseeable future activities proposed in the Kahler analysis area that would affect this species; speculating about unknown future vegetation treatments would not be appropriate.

Kelley	Brian	13	35	During scoping, HCPC requested that at least one alternative be developed that would not use any temporary roads or any closed roads requiring reconstruction. We recommend that potential units that can only be accessed with temporary roads should be dropped from the project and considered as wildlife refugia, or else be pre-commercially treated. Regarding the re-opening closed roads, unless they are roads which are currently causing resource damage and therefore need to be restored, HCPC recommended that the units that would be accessed using closed roads requiring reconstruction (e.g. brush clearing, blading etc) be treated as wildlife refugia or else pre-commercially treated. HCPC also requested that any alternatives that propose temporary road building include an analysis of the trade-offs associated with the purported benefits of the treatment versus the negative	95	Please refer to the discussion under; Alternative Considered but Eliminated from Detail Study, Open Roads Only Alternativeon page 27 of the EIS. Also, Alternative 4 was developed, in part, to respond to the concern regarding temporary roads.

Vandehey	Roberta	6	26	On your maps, all roads on my private property south and west of your boundary should show as closed, as there are no roads on my property open for travel. Those roads should include the 056, 057, the 058, the 052, the 053, the 068, the 069 Roads. Presently you show all of these roads as open, so they entice trespass hunters to use them, which they do!	96	These maps have been updated to not show the private roads.

Vandehey	Roberta	6	27	NO NEW ROADS SHOULD BE PROPOSED FOR THE WHEELER POINT FIRE AREA AND CERTAINLY NOT RIGHT AROUND MY PROPERTY BOUNDARIES AS YOU APPARENTLY HAVE SAID YOU WILL DO IN YOUR PROJECT PROPOSAL! IF YOU ADD THE ONE THAT APPEARS TO CONNECT WITH THE 056 ROAD NORTH OF MY NORTH PROPERTY LINE, THAT IS THE LAST THING THAT I, AS A BELEAGUERED LANDOWNER FIGHTING YOUR HUNTERS, NEEDS! We do not need trespass hunters delivered to us by road! We have not allowed hunting on this property for nearly 50 years, so we do not appreciate supplying your Forest trespass hunters with our animals, complements of your roads.	97	See comments on this road in the Travel Action Plan pages 10-13 for management of existing roads. During field review, some roads were found to be longer than mapped and two roads that were located that were determined to be a Forest Road. Road 056 has been managed as closed and will continue to be after its proposed use in the Kahler project. Forest Road â€“ (FSM 7700). A road wholly or partly within or adjacent to and serving the National Forest System that the Forest Service determines is necessary for the protection, administration, and utilization of the National Forest System and the use and development of its resources.
McClure	Steve	8	9	It may be appropriate to include additional seasonal road closures to mitigate the disturbance to the large ungulates during hunting season, but we do not support year around permanent closure of any roads.	98	The proposed closure are to support the Heppner Access and Travel management plan goal of 1.5 mi/sq mi. See Travel Action Plan page 11

Vandehey	Roberta	6	24	Close more roads, such as the 060 Road, the 050 Road, the 063 Road, the 068 Road, the 064 Road, the 062 Road, the 032, the 033, the 034 and 035 Roads. As well as all other roads that dead end against a private property line!	99	Three National Forest System Roads are proposed for closure in the action alternatives next to this private property: Road 2500060, 2500063, and 2500068. This would move motorized access back aproximatly 0.5 miles from the property line in question. Road 2500050 was added to Alternative 4 proposed closures (see Travel Action Plan, page 12).
Vandehey	Roberta	6	25	Create more roadless areas for both animal survival and human recreation.	100	Although not "Roadless" approximatly 16 miles of National Forest roads have been proposed for closure (see Travel Action Plan, Appendix J).
Coulter	Karen	4	55	At what point do elk populat[ions] start crashing on the District and in the project area due to lack of adequate cover? Why is this not analyzed re: both elk and gray wolf viability in the project area?	101	Refer to the response to Comment 4-54. Impacts to elk and elk habitat are described on pages 141-154 of the EIS. This portion of the EIS describes potential impacts to elk distribution in winter and summer range habitat at different times of the year. The viability of elk (a Management Indicator Species) is assessed at the Forest Scale.

Coulter	Karen	4	56	We are not convinced that there are no goshawk in the project area.	102	Impacts on goshawk and their habitat are described on pages 194-198 in the EIS. Additional information is provided in the Terrestrial Wildlife Specialist Report (Appendix M) on pages 156-162. The Wildlife Report confirms that goshawk were observed during species-specific surveys and layout; however, no active or inactive goshawk nests were observed. It is possible that a goshawk nest is present in the analysis area; design measures (WL5, EIS page 19) would be implemented to protect nests and nest stands when they are encountered.

Coulter	Karen	4	57	We want all logging in suitable goshawk nesting habitat dropped and reduced in foraging habitat. Canopy closure and basal area retained in sale units should be higher than proposed - at least 40% canopy closure should be retained and all commercial size logging in the LOS and the DOG should be dropped, along with the planned logging of large trees (> 21" dbh) and RHCAs. This will also benefit Pileated woodpecker, American marten, and other species dependent on large live trees, large and dense snags, and abundant down large wood.	103	The gray wolf is analyzed in the FEIS beginning on page 186. Impacts to pileated woodpecker, elk, black-backed woodpecker (a member of the Primary Cavity Excator group, a Management Indicator on the Umatilla National Forest), Goshawk, Late and Old Structure, Dedicated Old Growth, American Marten, and Neotropical migratory birds are disclosed in chapter 4 of the FEIS pages 125 through 204. Please refer to these sections of the EIS or the Terrestrial Wildlife Report (Appendix M) for additional information.

Coulter	Karen	4	63	We are strongly opposed to the logging and roading of "other undeveloped lands" and want all sale units with logging or roading in these undeveloped areas dropped. Dropping these areas would benefit elk, marten, gray wolf, pileated woodpecker, and other species not analyzed such as Canada lynx (which I saw very close to the SW border of the project area.), and Pacific Fisher. Dropping these sale units would also greatly benefit recreation, biodiversity, ecological integrity, and carbon storage.	104	Effects on elk, marten, gray wolf, and pileated woodpecker are descibed in the EIS on pages 140-153, 170-171, 186-188, and 162-169. Refer to the terrestrial wildlife report and previous responses regarding the Canada lynx and Pacific fisher. Effects on recreation are described on pages 304-310 of the FEIS. While some forms of recreation could be negatively affected by the proposed activities within undeveloped polygons, other forms would benefit from the improved road conditions and reduced dead wood on the ground.

Kelley	Brian	13	3	A stated Need for the project is to: "Address issues in big game habitat including the existing extent and distribution of cover, the quantity and quality of forage, and disturbance associated with roads and trails open to full-sized vehicles and OHVs" (DEIS page 3). Despite this need, Forest Plan Amendments are being proposed for the project because the existing Habitat Effectiveness Index and cover standards for big game are at or below Forest Plan Standards.	105	All of the action alternatives would impact cover levels that are already below Forest Plan standards to move dry forest stands toward a density, structure, and composition more similar to what occurred in the analysis area historically. As is often the case in land management, there are species and habitats that benefit, and others that do not with all actions. The expected direct, indirect, and cumulative impacts on elk, their habitat, and their distribution are described in the EIS on pages 141-154.
Coulter	Karen	4	37	Please consider substituting noncommercial thinning for commercial logging in needed elk cover, naturally denser areas (no slopes, drainages, higher elevation) and in Pileated woodpecker, goshawk, and marten suitable habitat, and LOS, and DOG areas.	107	Please refer to the proposed action. Also refer to "Summary: Desired Outcomes Related to Porposed Silvicultural Activities" section on the Forest Vegetation Report. Each management area within the Kahler dry forest restoration project also has a set of desired future conditions.

Kelley	Brian	13	9	HCPC is particularly concerned about the impacts that extensive and heavy cutting would have on elk habitat. Proposed logging and thinning treatments would decrease cover where elk habitat is already below or barely meeting Forest Plan standards. These proposals to log where elk habitat would be below Forest Plan standards would require Forest Plan amendments. Additionally, proposals to commercially log within Class IV Riparian Habitat Conservation Areas (RHCA) would further reduce habitat for elk in areas that otherwise would provide cover adjacent to the heavily logged areas. It is also an important factor that the industrial forest land adjacent to the Kahler project area has been heavily logged in recent years. (Kahler Forest Pathologist report p. 1).	109	Refer to the response to Comment 13-3. The additional loss of cover associated with RHCA treatment acres are accounted for in the elk analysis and Habitat Effectiveness Index runs. Impacts associated with specific RHCAs on elk are not assessed. Refer to the elk effects discussion on pages 141-154 in the EIS. Riparian Management Objectives direction can be found in DEIS page 113 under PACFISH.

Kelley	Brian	13	16	Additionally, as noted above, proposals to commercially log within Class IV Riparian Habitat Conservation Areas (RHCA) would further reduce habitat for elk in areas that otherwise would provide cover adjacent to other heavily logged areas.	110	The additional loss of cover associated with RHCA treatment acres are accounted for in the elk analysis and Habitat Effectiveness Index runs. Impacts associated with specific RHCAs on elk are not assessed. Refer to the elk effects discussion on pages 140-154 in the FEIS. Riparian Management Objectives direction can be found in EIS page 84.

Coulter	Karen	4	64	Page 273 * [Referring to Table 4-61] Drop "temporary" road building in undeveloped lands. * ["â€¦.most areas of other undeveloped lands are less than 1,000 acres, so the sense of solitude would likely be nonexistent due to intruding sights and sounds from the surrounding managed areas. Areas of other undeveloped lands greater than 1,000 acres (four areas totaling 6,626 acres)"] this is not always true - solitude can be found readily outside of hunting season.	111	As shown in Table 3-33 on page 107 of the FEIS, 78 percent of the undeveloped land polygons were smaller than 100 acres. Map I-4 shows that the areas less than 100 acres are bounded by roads, so when present, sounds of motors and other human-related noise would carry into the interior of these polygons preventing a sense of solitude. There were 8 polygons between 127.9 acres and 567.2 acres in size. Map I-4 in Appendix I shows many of these polygons to be long and narrow, with polygon's 5 and 29 having a fingers radiating out from a contiguous core as a result of surrounding past harvest. Since solitude encompasses not only physical human encounters, but also the sights and sounds of a managed landscape, it is the professional opinion of the Recreation Specialist that these polygons do not offer opportunities for solitude. Finally, the commentor herself infers that solitude does not exist in the project area during hunting seasons.

Coulter	Karen	4	48	Some of these conclusions don't seem to follow logically from the data and seem to be biased toward increasing logging - eg. the predictions don't necessarily indicate that tree growth would be less overall with more precipitation or that tree mortality would increase overall. Nor is there any clear indication that the upper extent of perennial streams would decrease.	112	Refer to the EIS section titled "Climate Change" on page 110.

Kelley	Brian	13	21	HCPC has grown increasing concerned about the impacts of widespread reduction of wildlife cover proposed by this project. Despite the stated needs of the Kahler project to address wildlife concerns, the project's impacts to big game and other wildlife habitat seems to be negative. Furthermore, this project and its impact on big game must be looked at the landscape scale. Here, it is important to note, that industrial forest land adjacent to the Kahler project area has been heavily logged in recent years. (Kahler Forest Pathologist report p. 1). Additionally, quality elk and deer habitat is important in the Kahler project area because of concerns about damage to adjacent private lands and agriculture. Proposed logging and thinning treatments would decrease cover where HEI is currently below or barely meeting Forest Plan standards. HCPC has encouraged the Forest Service to	113	Expected impacts to elk, elk habitat, and the distribution of elk in and outside the analysis area are described in the EIS on pages 141-154. The analysis acknowledges that treatment activities are likely to result in elk moving off Forest or to other areas on the Forest due to a reduction in cover, especially during the late summer and fall. Road closures proposed under all action alternatives, and the reduction in treatment acres under Alternatives 3 and 4 would partially mitigate for impacts to cover habitat.

Kelley	Brian	13	22	"When the impacts to cover habitat, HEI, the road system, and security habitat are combined, Alternative 3 would have less impact on elk and their habitat than Alternative 2. Alternative 3 would provide larger patches of cover distributed across the landscape, generally result in more acres of security habitat (cover and forage being available, and reduce disturbance to a greater level than would Alternative 2." (DEIS Terrestrial Wildlife Specialist's Report and Biological Evaluation, Kahler Dry Forest Restoration Project, page 159). During scoping comments for this project, HCPC requested an alternative that would leave untreated blocks where existing cover conditions are of high quality. Alternative 3 proposes to address the "significant issue" of elk habitat by dropping some acreage of commercial thinning /logging (DEIS page 13). However, this acreage is reduced by only 8.5%	114	Alternative 4 was developed, in part, to respond to this concern. Road closures proposed under all of the action alternatives and a reduction in treatment acres under Alternatives 3 and 4 would partially mitigate for impacts to cover habitat. The Responsible Official will assess the degree to which the alternative addresses the key issues, and has the ability to select an alternative as is, create a hybrid alternative, or direct the Interdisciplinary Team to develop and analyze additional alternatives.

Kelley	Brian	13	23	HCPC urges the Forest Service to protect wildlife connectivity needs throughout the project area and surrounding landscape. These protections should exceed the minimum requirements and not just satisfy the basic minimum. The functionality of riparian areas as wildlife corridors should also be considered. Movement to and from large core habitat areas should be consciously planned for.	115	Connectivity habitat is discussed on pages 133-135 of the EIS. As higher basal area retention and more skips would be provided within connectivity habitat; it is expected that the intent of the Eastside Screens and Forest Plan standards would be met following implementation. Where riparian areas provided the best available connections between late and old structure and Dedicated Old Growth, they were identified as connectivity corridors. Consideration of connectivity also extended outside the boundaries of the analysis area, as required by the Screens and Forest Plan.

Kelley	Brian	13	25	Upon review of 22 years of scientific recommendations it was found that the most frequently cited climate change adaptation strategy for biodiversity management is to increase connectivity (e.g. design corridors, remove barriers for dispersal, locate reserves close to each other, and reforestation). This allows species to adapt through migration, dispersal and movement, but also requires reduction of stressors. Effective National Forest Service planning and management of public lands should incorporate measures for identifying and protecting wildlife corridors while simultaneously reducing stressors.	116	Refer to response to Comment 13-23.

Coulter	Karen	4	62	["In the long-term, the proposed harvest and thinning together with past harvest and prescribed burning would benefit recreationists by creating a more open forest environment."] Obviously the FS person writing this does not really know or love this area. This is not "restoration" or benefitting recreation but mass and extreme degradation of existing natural values. * ["Even with extensive past management in the analysis area, outdoor recreation use, in general, has steadily increased over the years."] This is a completely inadequate and misguided cumulative effects analysis.	117	Thank you for pointing out that the cumulative effects analysis for recreation was inadequate. It has been amended as displayed on page 310 of the FEIS.

Kelley	Brian	13	28	The Kahler project DEIS indicates that thinning is proposed in forest stands and travel corridors surrounding the Tamarack Fire lookout site. Commercial thinning would require a forest plan amendment as approximately 11 acres slated for treatment immediately surrounding the Tamarack lookout site are designated Dedicated Old Growth/C1 Management Area. HCPC recommends that affected acres of Dedicated Old Growth (Management Area C1) be replaced with adjacent or nearby stands of high quality old growth character of an equal or greater net acreage.	118	Affected acres would be replaced with adjacent habitat in a similar structural condition and composition. Refer to pages 126-127 in the EIS for a description of the direct, indirect, and cumulative impacts of the proposed activities and old growth replacement. There would be a net increase in Dedicated Old Growth habitat under all the action alternatives (+4 acres).

Kelley	Brian	13	29	Additionally, some trees that are 21 inches in diameter or larger may be felled or topped (DEIS page 25). In scoping, HCPC requested that the DEIS thoroughly describe the rationale and prescriptions for these proposed cuttings of trees over 21 inches and explore options to limit or eliminate cutting these large trees. We did not find this information in the DEIS other than the general rationale for treatment of the forests near the administrative site. It is worth noting that large trees such as those over 21" dbh will generally be the most fire-resistant trees in the forest.	119	Proposed activities in the 11 acres surrounding the lookout would be less intense than treatments on the 3 acres immediately adjacent to the lookout, cabin, and communication site. The primary emphasis for treatment in the existing C1 is clearing of site lines from the lookout and slowing a fire should it occur in the vicinity. Impacts to large trees (>21 inches dbh) would result from activities designed to clear site lines from the tower to improve fire sighting capabilities for fires occurring on public and/or private lands. This rationale will be added to the FEIS.

St.Martin	Amanda	3	7	I am opposed to the use of prescribed fire in suitable Pileated woodpecker and Pacific fisher habitat, and/or during the Spring reproductive season. These burns can harm young animals, fledgling birds, and sensitive plants that have not yet seeded, as well as reduce much-needed soil moisture just before the natural dry season.	120	Design Features/Monitoring/Mitigation Common to Action Alternatives in Kahler EIS refer to the mitigations in place to limit soil exposure (PF7) and encourage the use of prescribed fire in late summer/fall. If landscape burning occurs in the spring, it should be implemented prior to May 15th (WL11) to reduce potential impacts to ground and near-ground nesting birds. Landscape underburning in the Kahler prescribed fire units is designed to allow up to 50% of the total area to remain unburned to achieve underburn objectives, such as creating and/or maintaining diverse habitats across the landscape (WL12; Kahler Purpose and Need; Kahler Fire and Fuels Report). Potential impacts to migratory birds in relation to burning are disclosed in the FEIS beginning on page 198. As was stated above, a portion of the proposed burn acres are expected to be unaffected by low-intensity underburning, which will preferably occur in the late summer or fall. In addition, design criteria will be implemented that will reduce the potential for impacts to migratory birds should spring burning occur (WL11 and WL12). Impacts on pileated woodpecker and marten source

Coulter	Karen	4	12	We are opposed to the use of prescribed fire in suitable Pileated woodpecker, Pacific fisher habitat, and possible American marten habitat and during the Spring reproductive season, which can harm young animals, fledgling birds, and sensitive plants that have not yet seeded, as well as reduce needed soil moisture just before the dry season.	121	Design Features/Monitoring/Mitigation Common to Action Alternative 2, 3, and 4 in Kahler EIS refer to the mitigations in place to limit soil exposure (PF7) and encourage the use of prescribed fire in late summer/fall. If landscape burning occurs in the spring, it would be implemented prior to May 15th (WL11) to reduce potential impacts to ground and near-ground nesting birds. Landscape underburning in the Kahler prescribed fire units is designed to allow up to 50% of the total area to remain unburned to achieve underburn objectives, such as creating and/or maintaining diverse habitats across the landscape (WL12; Kahler Purpose and Need; Kahler Fire and Fuels Report). Potential impacts to migratory birds in relation to burning are disclosed in the EIS on pages 199-205. As was stated above, a portion of the proposed burn acres are expected to be unaffected by low-intensity underburning, which will preferably occur in the late summer or fall. In addition, design criteria will be implemented that will reduce the potential for impacts to migratory birds should spring burning occur (WL11 and WL12, page 20 of EIS). Impacts on pileated woodpecker and

Coulter	Karen	4	35	We are opposed to doing prescribed fire during the spring reproductive season and ask that this be avoided by burning before full snowmelt has taken place to protect young mammals, fledgling songbirds, sensitive plants, and soil moisture reserves for the dry season.	122	Design Features/Monitoring/Mitigation Common to Action Alternatives in Kahler EIS refer to the mitigations in place to limit soil exposure (PF7) and encourage the use of prescribed fire in late summer/fall. If landscape burning occurs in the spring, it would be implemented prior to May 15th (WL11) to reduce potential impacts to ground and near-ground nesting birds. Landscape underburning in the Kahler prescribed fire units is designed to allow up to 50% of the total area to remain unburned to achieve underburn objectives, such as creating and/or maintaining diverse habitats across the landscape (WL12; Kahler Purpose and Need; Kahler Fire and Fuels Report). Potential impacts to migratory birds in relation to burning are disclosed in the EIS on pages 199-205. As was stated above, a portion of the proposed burn acres are expected to be unaffected by low-intensity underburning, which will preferably occur in the late summer or fall. In addition, design criteria will be implemented that will reduce the potential for impacts to migratory birds should spring burning occur (WL11 and WL12, page 20 of EIS). Impacts on pileated woodpecker and

Artley	Dick	1	45	"Most of the trees that should be removed to reduce accumulated fuels are small in diameter and have little or no commercial value." "Mechanically removing fuels (through commercial timber harvesting and other means) can also have adverse effects on wildlife habitat and water quality in many areas. Officials told GAO that, because of these effects, a large-scale expansion of commercial timber harvesting alone for removing materials would not be feasible. However, because the Forest Service relies on the timber program for funding many of its activities (including reducing fuels) it has often used this program to address the wildfire problem. The difficulty with such an approach, however, is that the lands with commercially valuable timber are often not those with the greatest wildfire hazards." Government Accounting Office "Western National Forests: A Cohesive	123	Thank you for your comment.

Warness	Lindsay	2	7	I support the work in RHCAs within the Kahler Basin Area. However, the reasoning behind this work is not clear. Please explain how this work will move these areas towards meeting their riparian objectives. Please explain the difference between Riparian Habitat Conservation Areas (RHCA) and Riparian Areas within the project area.	124	RMO direction can be found in DEIS page 113 under PACFISH. Riparian zone vs. Riparian Habitat Conservation Area A riparian zone or riparian areais the interface between land and a river or stream. Riparian zones are significant in ecology, environmental management, and civil engineering because of their role in soil conservation, their habitat biodiversity, and the influence they have on fauna and aquatic ecosystems, including grassland, woodland, wetland or even non-vegetative. In some regions the terms riparian woodland, riparian forest, riparian buffer zone, or riparian strip are used to characterize a riparian zone. Riparian habitat conservation areas (RHCA) are portions of watersheds where riparian-dependent resources receive primary emphasis, and management activities are subject to specific standards and guidelines. RHCAâ€™s include traditional riparian corridors, wetlands, intermittent streams, and other areas that help maintain the integrity of aquatic ecosystems influencing the delivery of coarse sediment, organic matter, and woody debris to streams, providing root strength for channel stability, stream shading, and protecting water quality (Naiman et al. 1992).

Vandehey	Roberta	6	10	Stop burning to remove under storage, because all that does is open up an otherwise developing mature stand that will ultimately limit its own under-storage and reduce the fire danger. Large old growth forests have historically proven that they have "clean floors" that resist fire. Thinned stands slow up the natural process, with immediate invasion of fire-hungry grass and yet more thicket-forming seedlings that will just need to be removed by humans again. The worst fire danger is the opening up of a stand that increases the fire hazard fueled by grass that comes into the opened stand. If you do that to feed the elk, don't. They do not belong here!	125	The purpose and need for action includes " Reestablish the character of a frequent fire regime to the landscape to aid in maintaining open stand conditions and fire-tolerant species, improve big game forage, and reduce conifer encroachment."

Artley	Dick	1	79	The Kahler timber sale will cause major damage to amenity natural resources. This plunder and irreversible damage is described by over 400 scientists in the Opposing Viewpoint Attachments. Forging ahead with the timber sale with full knowledge of the likely resource damage that the sale will cause indicates 1) weighing the relative value of the natural resources in the area against timber outputs has not been done, and 2) they have not been harmoniously coordinated. Also, since outdoor recreation, watershed, wildlife and fish are adversely affected by the sale, you obviously consider timber more important that these 4 other resources. Request for changes to be made to the final NEPA document: Include the source literature for particularly relevant science quotes contained in the Opposing Viewpoint Attachments in the References section of the final EIS and cite the quotes contained in	126	Some aspects of outdoor recreation, watershed, wildlife and fish would be adversely affected by the activities proposed in Kahler, while other aspects of those same resources would benefit from the proposed activities (i.e. there would be a decline in primitive recreation opportunities, but an increase in motorize recreation opportunities). Both the adverse and beneficial effects are described in the EIS, as well as the specialist reports in the accompanying appendices.

St.Martin	Amanda	3	2	The proposed action (Alternative 2) includes logging in Category 4 (Intermittent Stream) Riparian Habitat Conservation Area buffer zones. These zones are designed to protect streams from the impacts of logging.	127	There are a number of PACFISH Goals (p. C-3) and Objectives (p. C-4) that would be furthered by harvest in RHCAs. These activities are described in Standards and Guides TM-1b, FM-1, and FM-4. The Kahler Project is designed to avoid impacts to streams with the use of Best Management Practices. See Hydrology Report, page 503 in Draft EIS. At the time of this analysis, regional direction is that undeveloped lands less than 5,000 acres do not need to be analyzed for wilderness values. Riparian Management Objectives direction can be found in DEIS page 113 under PACFISH.
Solomon	Laurie	5	4	Logging in intermittent streams as alternative 2 would allow, and logging in Riparian Habitat Conservation Areas, is unacceptable in some of the best habitat for listed fish species such as the Steelhead Trout and Chinook salmon as well as Bull Trout.	128	Class IV streams are classified as "intermittent" which means that water only flows during rain or runoff events. Therefore there are no fish in these Class IV streams. Riparian Management Objectives direction can be found in DEIS page 113 under PACFISH.

Coulter	Karen	4	15	This DEIS fails to disclose that there is current science indicating that even pure Ponderosa pine forests has historic stand replacement and mixed severity fire, and fails to disclose scientific controversy over fire regime classification and the efficacy of logging to reduce fire risk. Nor does the DEIS acknowledge that denser forests with lower vigor trees are not always "symptoms of impaired forest health and deteriorating ecosystem integrity	129	Refer to existing conditions in the Fire and Fuels report where HRV is discussed, as well as fire regimes and current vegetation, and fire regime condition classes. Note that Dry Forests often received low to mixed severity fires, where high mortality can occur in various size patches within a larger fire area. Also refer to the mixed severity fire definition found within the Forest Vegetaion Report.
Coulter	Karen	4	58	Page 265 * This is a ridiculously inadequate analysis of potential impacts to recreation. What about effects to elk and deer hunting, user created dispersed (and logged) camps, scenic and aesthetic values after heavy logging, etc. Clearly you FS folks don't care about recreation in the area, but we do.	130	The section referred to in this comment is only the beginning of the recreation effects discussion. It is followed by sections related to visual quality, camping, trails and dispersed recreation, and potential wilderness and other undeveloped lands. The title of the section refered to is misleading and has been corrected in the FEIS to read "Recreation Opportunity Spectrum", in reference to related standards detailed in the Umatilla National Forest Land and Resource Management Plan.

Warness	Lindsay	2	16	Please look at using Designation by Prescription or Designation by Description for the layout of this project. With the shrinking budgets for the Forest Service, it is imperative that more is done with less and these are two tools that would help to reduce costs.	131	Thank you for your comment, though not applicable until after the NEPA decision has been made. Designation by description and designation by prescription are decisions made on the contract level, as part of project implementation.
Coulter	Karen	4	59	We are strongly opposed to logging in Fairview Campground!!! Please don't log our campground and Springs area! Proposed logging would decimate its values and destroy my continued fond memories of the special place. It would not be the same at all.	132	Concern noted. Mitigation measures to protect the spring, visual quality, and other values within the campground (VQ7-VQ13) are listed on page 26 of the FEIS. It is the Forest Service's intent to balance making the campground more fire resilient with retaining visual quality and privacy within the campground.

Kelley	Brian	13	32	The scientific literature suggests that mechanical fuels treatments aimed at reducing fire severity have so much inherent uncertainty in their effectiveness that the application should be limited and the most damaging activities such as temporary road building should be avoided (Crist et al. 2009, Noss et al. 2006, Rhodes et al. 2008).	133	For fire-adapted ecosystems to function as desired in the future, multiple treatments over time will be imperative. In a 2012 study on the ecological effects of fuel reduction treatments, results showed that single entry mechanical treatments did not serve as surrogates for fire. Rather, restoration to pre-settlement consitions required repeated treatment over time (McIver, J., Stephens, S. et al). The combination of thinning and burning shift diameter distributions toward larger trees; however, no single entry will mitigat the history of fire exclusion and fuel accumulation in dry coniferous forests (Youngblood 2010). Therefore, single entry mechanical treatments are not the final treatment for the Kahler treatment units proposed in the action alternatives. Multiple prescribed fire entries every 10 to 15 years post-treatment is recommended to maintain the Kahler analysis area. In doing so, stand densities may be better managed and fire tolerant species would be favored. This would allow for a more fire resistant forest over the long term. (Kahler Fire and Fuels Report, Desired Conditions). For more information pertaining to requirements and best practices connected to proposed

Kelley	Brian	13	33	The numerous negative effects of roads are one of the primary sources of aquatic and watershed damage on a continental scale. Additional road construction is inimical to reducing road effects. It also inexorably adds to the currently insurmountable backlog in needed, but deferred, road maintenance on existing roads (USFS et al., 1993; USFS, 2000b; Beschta et al., 2004). Temporary roads are not temporary in impact. Temporary roads left in a state of non-use can have impacts on forests and soils that last for decades. The public often continues to use these roads long after implementation of camouflaging and other activities designed to leave them in a state of non-use. As a result, soil compaction/disturbance and sedimentation impacts will continue to persist. The permanent impacts of temporary road construction have been thoroughly	134	Roads used will have standard road maintenance performed as part of the timber sale contract, reducing the backlog of deferred maintenance. Use of closed roads and temporary roads for harvest will allow collection of money through the timber sale to be used to better decommission or close them. Also see response #136 as it relates to temporary roads.

Kelley	Brian	13	34	Additionally, the re-opening of closed or unclassified roads for access, and then re-closure following treatment activities has very serious ecological impacts. Extensive and intensive road reconstruction greatly increase road impacts on watershed systems, as documented, very graphically, in Karr et al (2004). Reconstruction impacts are extremely significant because the elevated sedimentation they cause is already ubiquitous water quality problem throughout the West and a major cause of the loss of aquatic biodiversity.	135	Roads will only be reconstructed as necessary for timber haul and to protect road investments and resources. Best Management Practices would be used to reduce impacts to water quality.

Artley	Dick	1	76	Supervisor Martin, if you were really concerned about aquatic species' health you would indicate in the final EIS that all newly constructed temporary roads will be obliterated after use and apply the obliteration method that returns the ground to the natural angle of repose and eliminates the running surface. Not doing so clearly indicates you have no intent of using the road temporarily. Comment: Roads that will be used again in the future must be constructed to system road standards with surfacing and a ditch to reduce sediment generation. If the final EIS does not clearly indicate that your proposed temporary roads will be obliterated such that a running surface no longer exists, it will show you plan to allow these temporary roads to pump sediment for decades until the so-called temporary road is used again for the next timber sale. Please become familiar with the	136	Temporary roads are not necessary for long-term resource management. Design criteria (Roads RD2 page 27 FEIS) states that â€œto the degree possible given topography and available vegetation, obliterate temporary roads used during implementation."

Coulter	Karen	4	61	"Proposed harvest along Highway 207 (A4-Viewshed 2) would again result in open, scattered trees (27-48 basal area). Treated stands would convert from multi-storied, dense, mixed conifer to single-storied, large trees"â€¦. o "The emphasis on leaving late, old structure ponderosa pine would increase visual diversity along"â€¦. o "Skyline corridors would not be evident on completion of the project due to the open nature of the remaining stand (prescribed basal area of 48)." * These are extreme impacts not just to recreation and "visual quality" but to the quality of our lives out here. I've lived here 23 years and value these places deeply. The sense of place would be lost.	137	The desired future condition for A4 management areas such as along Highway 207 envisioned a "park-like, near natural appearance with big trees in the foreground" (FEIS 99). The effects singled out by this comment indicate that the A4 area would move toward the desired future condition already identified by the Forest Plan. The Recreation Specialist agrees that the view of the landscape would change as a result of the proposed activities, but does not attempt to place a value judgement on that change.
Artley	Dick	1	94	Supervisor Martin, your happiness index must be off the charts. Once again you propose to trash big game habitat to provide opportunities for maximum corporate profit.	138	Direct, indirect, and cumulative impacts of the proposed activities on elk are disclosed in the EIS on pages 141-154.

Artley	Dick	1	95	Proposing to log dedicated old-growth to increase volume is insane!!! You sicken me Supervisor Martin.	139	Rationale for this proposal is provided in the EIS (Chapter 1, Purpose and Need), Fuels Report, and Wildlife Report. Please refer to these reports for further information regarding the impacts associated with this proposal.
Artley	Dick	1	101	How do you know there is a shortage of big game forage and its poor quality?	140	Habitat conditions were determined by professional, on-the-ground observations. The direct, indirect, and cumulative impacts of the proposed activities are described on pages 141-154 of the EIS. Thinning of forested stands and burning would stimulate the growth of herbaceous vegetation desired by elk.
Artley	Dick	1	102	How dare you claim you want to improve big game conditions when the first 3 proposed forest plan amendments are needed to violate NFMA by trashing big game Habitat Effectiveness Index my modifying (a.k.a. logging) cover.	141	The direct, indirect, and cumulative impacts of the proposed activities are described on pages 141-154 of the EIS. The need referred to speaks specifically to improvement of big game forage. Impacts to cover, distribution, and other features are described in the EIS on the above pages and in the Terrestrial Wildlife Specialist Report (Appendix M).

Artley	Dick	1	103	This appears in 90% of the timber sales. Isn't it inconsistent to pretend to be concerned about big game when your first 3 amendments allow you to trash their habitat at for volume? Yep, you are right. Riparian plants do not exist where they are shaded by conifers. Explain how you know encroaching western juniper and conifers suck up all the water available for native vegetation.	142	Historic aerial photos were used to assess the degree to which conifers have encroached into historic grassland and shrubland habitat. Proposed shrub-steppe units were delineated based on this assessment. Removal of conifers would reduce shading, and reduce potential undesireable impacts to fire-intolerant shrubs when fire is allowed to burn in these areas.
Jerome	Irene	15	3	There is also a reference to "thinning" western juniper that is "7 to 21 inches in diameter". Since when do we "thin" juniper? Although there are some niche markets it is not considered a commercial species within the industry. And are you removing juniper that is 21 inches in diameter? Why are you not removing juniper that is 22 inches and greater?	143	Juniper less than 21 inches dbh (and not exibiting characteristics indicative of old growth) may be removed in commercial thin and shrub-steppe units where they have encroached into these areas. Based on recon of the area, it was determined that few juniper greater than 21 inches dbh are less than 150 years old; the decision was made to retain the 21 inch diameter limit for this species since an amendment to cut juniper larger than 21 inches dbh had not been scoped to the public.

Jerome	Irene	15	9	Absolutely Douglas-fir and grand fir (and probably selected ponderosa pine as well) 21 inches at dbh and greater should be removed as appropriate. Much of this ecosystem is very dry and artificial "rules" such as leaving all trees 21 inches and greater is not only arbitrary it will not allow the purpose and need of promoting and saving OFSS to be met.	144	Removal of ponderosa pine lareger than 21 inches dbh would not be consistent with the purpose and need of the project, maintain or move stands toward an old forest conditon in the dry upland forest PVG. Large diameter trees, snags, and dead wood are key features of old forest stands.

Jerome	Irene	15	12	It does not appear that there is enough difference between Alternatives 2 and 3 to have any significant effects on elk behavior. Further, at one of the initial Umatilla Collaborative meetings a representative from ODFW clearly admitted that this area supports far more elk than it ever did historically and that many areas now have more cover than they did historically. Is the HEI even meaningful in this instance? Please provide additional rationale. Are there other ways to mitigate disturbance to elk, such as seasonal road closures, etc.? With regard to "reduction of satisfactory and total big game cover" current best available science certainly supports this as published in the "Blue Mountains Elk Nutrition and Habitat Models" published in September of 2012.	145	The Habitat Effectiveness Model is the Forest Plan standard for analyzing impacts to elk and their habitat in project level analyses. Elk are a social issue. Despite the fact that elk were less abundant in the Kahler area historically, there is a demand at the State and Forest level for elk and elk habitat. The vast majority of Forest users visit the forest to hunt big game, including elk. For this reason, assessing impacts to elk is relevent with regard to impacts to the human environment. The new Eastside Elk Model is currently in the Beta testing phase, but has not been released for general use. Currently (January 2015), researchers at the Pacific Northwest Research Station are exploring variations in the nutrition portion of the model and standardizing the road classification portion of the disturbance model. As the model has not been released for general use, the HEI model, which is the Forest Plan standard, was used in this analysis.

Jerome	Irene	15	13	Will snag densities be managed on a landscape scale or on an individual unit scale? Since Kahler is a "landscape scale" project and only about 37 percent of the area will receive actual treatment, and since the Wheeler Point Fire burned through this area, snag densities should be more than adequate at this time and not managed on an acre by acre basis.	146	The Forest Plan states that snags will be managed at the individual unit (40 acre) scale. Snags are also assessed at the watershed and Forest scales to determine how current and expected conditions compare to the reference condition/historical conditions. Much of the planning area outside of proposed treatment units is composed of grassland and shrubland habitats that would not be expected to provide snag habitat. As well, stand initiation structural stages generally do not provide snag structure either. The Wheeler Point Fire occurred in 1996. Much of the resulting pulse of snags was salvaged and did not provide for the needs of snag-associated wildlife. The majority of snags in that portion of the fire area that were not salvaged have largely fallen to the ground. Refer to the EIS, Chapter 3 (Affected Environment) and the Terrestrial Wildlife Specialist Report (Appendix M) for a description of the existing condition in the analysis area; the existing condition accounts for all of these past events that have affected snag habitat.

Storm	Rex	16	5	21" Diameter limit waiver important. We agree that harvesting trees over 21" dbh must be a necessary component to implement this project-to accomplish all the stated resource objectives. We strongly support your efforts to restore the project area toward the historic range of variability and to reduce mistletoe disease problems; but this simply cannot be accomplished without harvesting 21"-plus trees. Furthermore, we urge you to change the proposal to expand the 21"-plus limit-to include harvest of some additional large trees beyond the currently-defined specs-at the Silviculturist's professional discretion and written prescription. There are trees subject to imminent mortality, forest health problem, or safety issue, which would warrant removal. Please consider 21"-plus waiver language to allow practical Silviculturist prescription that would facilitate practical operations	147	Removal of ponderosa pine larger than 21 inches dbh would not be consistent with the purpose and need of the project, which is to maintain or move stands toward an old forest conditon in the dry upland forest PVG. Large diameter trees, snags, dead wood, and complex structure are key features of old forest stands. Those large trees that are diseased, hollow, have other defects, or that are expected to die in the near future often provide the best habitat avaiuable for a wide suite of cavity excavating birds and other wildlife. Given expected impacts to snag recruitment folloing treatment, it would be ecologically appropriate to retain these trees for wildlife benefit. Please refer to the Primary Cavity Excavator section in the EIS (pages 154-157).

Artley	Dick	1	69	Glyphosate is driving the Monarch butterfly species to extinction. https://mail.google.com/mail/?shva=1#inbox/148043eb3ca4fb6b Please don't do something tragic just because the USFS says you can. It's time for independent thinking isn't it? Monsanto spends millions $ each year on their ongoing PR campaign. Don't believe it. You are not exempt from the provisions of the Administrative Procedures Act. Under the APA, a court may set aside an agency action if the court determines that the action is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. Â§ 706(2)(A); see also Marsh, 490 U.S. at 375-77 (arbitrary and capricious standard applies to agency findings which involve agency expertise). Here's an excerpt from this opinion: "Consequently, we may reverse the decision as arbitrary or capricious only if the agency relied on factors	148	This comment is outside the scope of the Kahler EIS. No native plants important for monarch butterfly habitat are treated with herbicide on the Umatilla National Forest.

Heiken	Doug	14	11	Big game plan amendment We urge the FS to accomplish restoration goals within the parameters of the LRMP. The FS is proposing a forest plan amendment allowing reduction on wildlife cover values where cover is already below LRMP standards. Before amending the cover standards, the FS should carefully consider the full range of values that benefit from maintaining those big game cover standards, not just big game, but also water quality, numerous other wildlife, snags and dead wood habitat, carbon storage, scenic values, limiting cumulative effects, landscape diversity, pyrodiversity, etc. The DEIS notes that recent wildfire has reduced cover values in the planning area. This fire and its effects on habitat should factor into the FS's thinking in a variety of ways, for instance: * Fuels are already reduced in the fire area, so maybe some of that needs is already met and treatments do not	149	Direct, indirect, and cumulative impacts on elk and elk habitat are described in the EIS on pages 141-154. While the focus in this section is cover for big game, the value of dense dry forest and moist forest stands to other species, including the pileated woodpecker, primary cavity excavators, goshawk, and even the white-headed woodpecker (normally thought of as requiring old, open stands) are described in the EIS (Chapters 3 and 4) and the Terrestrial Wildlife Specialist Report (Appendix M).

Heiken	Doug	14	32	Oregon Wild supports thinning of stands overstocked with small young trees when such projects are well planned and designed to accomplish comprehensive restoration objectives and carefully implemented to avoid unintended consequences. One of the key considerations is to find the optimal mix of treated and untreated patches within and between stands. This is because thinning benefits some aspects of late successional forest conditions such as large trees and vegetation diversity, but thinning also has adverse effects on other aspects of late successional forests such as dead wood recruitment, biomass accumulation, wildlife cover, soil quality, and microclimate conditions. In order to achieve all the objectives for optimal late successional forest conditions, restoration projects must contain both thinned and unthinned patches. Finding the right mix should not be an accident	150	Direct, indirect, and cumulative impacts on elk and snags/primary cavity excavators are described in the EIS on pages 140-154. Based on field observations, suggested skips were identified in some units by the District Wildlife Biologist. These included skips larger than two acres where appropriate.

Heiken	Doug	14	33	The DEIS recites some of the recommendations for restoration of white-headed woodpecker habitat, including stand density reduction. But the DEIS seems to oversimplify the habitat requirements of WHWP (e.g., "Species adapted to late and old structure, single-strata ponderosa pine stands (e.g., white-headed woodpecker â€¦" DEIS p 199). It is important to recognize that white-headed woodpeckers prefer a mosaic of both open and closed forests. This is another way to help find the right mix of treated and untreated areas within and between harvest units. Mellen-Mclean et al (2013) says "Landscapes with a mosaic of open habitat for nesting in close proximity to closed-canopy forests which provide foraging habitat seem to be important for White-headed woodpeckers (Hollenbeck et al. 2011, Wightman et al. 2010, Latif et al. 2012). Closed-canopied forests with cone-producing pine	151	The direct, indirect,and cumulative impacts on the white-headed woodpecker are described in the EIS on pages 178-183. The effects analysis notes the importance of dense dry forest stands and providing a mosaic of dense and open stands for this species. Additional content has been added in the FEIS and Terrestrial Wildlife Report regarding the habitat preferences of this species. Additional analysis is also provided for the No Action alternative based on input from the fuels specialist that addresses the commentor's concern.

Heiken	Doug	14	34	Snags and dead wood are essential features of the complex old forest we are striving to protect and restore. Snags and dead wood should be managed at ecologically optimum levels, not minimum levels. Eastside Screens require restoring HRV and since there is a significant shortage of snags across the landscape as a result of logging and other management actions, the FS needs to retain more green trees in order to recruit more snags and dead wood to move the system toward HRV. An overzealous hazard tree program applied to a dense road network can have a significant cumulative effect on snag habitat across the landscape. Danger tree removal should be done conservatively from the standpoint of conserving snag habitat. The focus should be on well-travelled roads and imminent hazard trees that lean toward the road and are likely to hit it. The FS should not rely on the outdated	152	Direct, indirect, and cumulative impacts to snags are described on pages 134-136 of the FEIS. Basal area targets incorporate retention of additional green trees to create a buffer for potential mortality that may occur during prescribed burning; these trees would also be available to other disturbance agents for snag creation. The analysis does not rely on the potential population method; the EIS and Terrestrial Wildlife Report agree with the commentor that this is an outdated and inaccurate method for determining wildlife needs. An assessment is made in the analysis whether current Forest Plan minimum snag densities will be met. The bulk of the analysis examines stand level impacts and compares the existing snag density class distribution at multiple spatial scales (multiple watersheds, Forest) to historic/reference conditions provided by the DecAID Advisory Tool. Snag modelling was done for selected units to project snag densities into the future; the basis for these runs was post-harvest stands with basal area retention as described in silvicultural prescriptions. Green tree replacements and potential impacts are described on pages 135-136 of the FEIS.
Solomon	Laurie	5	5	Virtual clear-cutting will heavily impact the scenic qualities of the widely used Fairview Campground and Tamarack Mountain lookout and recreational cabin.	153	Please refer to the response to Comment 4-6.

Kelley	Brian	13	31	Undeveloped Lands Lower-elevation forests that have not experienced the same logging and road-building regime as other federal lands are relatively rare and have high value conservation. Restoration using fire alone is generally appropriate in these stands. Logging and mechanical thinning should be limited to previously logged sites. Any potential wilderness areas should not be logged.	154	About 9.3 percent of the Heppner Ranger District (EIS 103) has low elevation forests that are protected from harvest within the Texas Butte Inventoried Roadless Area (6,900 acres), Skookum Inventoried Roadless Area (7,700 acres) and the Potamus Inventoried Roadless Area (5,400 acres). The Skookum IRA is approximately 9.5 miles east of the Kahler project area, while Texas Butte IRA is about 11 miles to the northeast. An inventory of lands within the Kahler project area was conducted to determine whether any acres met the criteria for potential wilderness (FSH 1909.12 Chapter 71.1). No Potential Wilderness Areas were identified (FEIS 271, Appendix I, Map I-5). Since the Kahler project area contains no IRA or PWA, it is appropriate to apply treatments based on the associated management areas that were designated in the Forest Plan.

Kelley	Brian	13	24	All undeveloped lands, previously un-logged lands and any areas with potential wilderness quality should be protected. While not all species would be covered by this approach, these areas are likely natural wildlife corridors where extra large buffers or some other approach would help plan for day-to-day wildlife movement and dispersal needs.	155	Effects to lands with wilderness characteristics and other undeveloped lands are discussed on pages 310-316 of the FEIS . The Forest Plan details the decisions already made regarding which managment activities, if any, are appropriate on which lands through its Management Area sections. Kahler proposes only those treatments allowed by the respective Management Areas.
Coulter	Karen	4	65	Page 272 * We are strongly opposed to the logging and roading of "other undeveloped lands" and want all sale units with logging or roading in these undeveloped areas dropped. Dropping these areas would benefit elk, marten, gray wolf, pileated woodpecker, and other species not analyzed such as Canada lynx (which I saw very close to the SW border of the project area.), and Pacific Fisher. Dropping these sale units would also greatly benefit recreation, biodiversity, ecological integrity, and carbon storage.	156	See response to Comment 13-24

Heiken	Doug	14	24	The NEPA analysis should reflect the growing scientific evidence (described in the attached supplemental material) indicating the significant value of roadless areas smaller than 5,000 acres and larger than 1,000 acres. Recent scientific literature emphasizes the importance of unroaded areas greater than 1,000 acres as strongholds for the production of fish and other aquatic and terrestrial species, as well as sources of high quality water. Commercial logging and/or road building within large unroaded areas threatens these significant ecological values. NEPA requires disclosure and analysis of relevant environmental factors. As shown in the scientific information cited above, the presence of large (>1,000 acre) unroaded areas represents a relevant environmental factor. Even if these areas are not eligible for wilderness, they are nonetheless	157	Environmental characteristics of other undeveloped lands is discussed on pages 106-109 of the FEIS.

Vandehey	Roberta	6	4	Alarmingly, your Project proposal is now planning to log those last unburned stands, including many old growth native pine, fir and tamarack between my north line and the Wheeler Point ridge, and the stands to the west of Notch Road. If this happens, my Unnamed Branch and West Branch of Alder Creek that heads up in that stand of old growth trees will ultimately go dry also.	158	Prescriptions are designed to leave sufficient trees after the Kahler project to provide shade for the snow pack. Kahler is designed to reduce the widespread tree mortality from fires like Wheeler Point in the unburned parts of the Watershed. It is not expected that the Kahler Project would cause any creeks or springs to dry up. Also, the unburned units in T7S, R24E, sections 16, 20, and 21 are dropped in Alternatives 3 and 4.
Vandehey	Mike	10	2	the spring for my domestic water supply have their origin in your proposed logging Area. they have already dropped off producing water by about 70%, in my opinion, due to Fire and over logging in the past.	159	See Response 158.

Vandehey	Roberta	6	15	Plant healthy populations of native shrubs and hard and soft woods for stream shade, animal habitat, erosion control, etc.	160	Riparian planting was considered for inclusion in the Kahler project, but would be most effective after harvest and prescribed burning to avoid damage to newly planted shrubs and trees. Riparian planting will likely be proposed in the future. In addition, the DEIS proposes to plant conifers on approximately 5,000 acres in the Wheeler Point Fire area, some of which could occur in treated RHCAs (Table 2-4).

Artley	Dick	1	55	Federal officials who knowingly take action that will place public health and safety in jeopardy by "concealing" important information violate 18 U.S.C. Â§ 1001 and are thus subject to up to 8 years in prison. The DEIS does not indicate how the herbicide formulations you plan to use to treat noxious weeds. Withholding such important information about toxic chemicals from the public is not a trait of a public servant. All herbicides are not the same. Of course they are all toxic. Most formulations of herbicides containing glyphosate are very toxic â€¦ some are potentially lethal. Syracuse Environmental Research Associates updated of their 2006 report addressing glyphosate safety in 2011. It is titled "Glyphosate Human Health and Ecological Risk Assessment" was completed on March 25, 2011 under USDA Forest Service Contract: AG-3187-C-06-0010 and submitted to Paul	161	Treatment of noxious weeds within the Kahler planning area is implemented in accordance with the 2010 Umatilla National Forest Final EIS (Invasive Plant Treatment Project). This document incorporates the use of intergated pest managment (IPM) to effectively reduce/eliminate noxious weed infestations and provides site-specific analysis for use of the 10 herbicide formulations approved for use in the 2005 Region 6 Final EIS (Preventing and Managing Invasive Plants) which amended the Umatilla National Forest Land and Resource Management Plan. These ten herbicide formulations are used in accordance with Forest Plan standards, and project design features developed to minimize the potential adverse impacts from invasive plants treatment. The effectiveness of the project design features is addressed throughout Chapter 3 of the Umatilla National Forest Invasive Plant Treatment Project Final EIS (2010).
Artley	Dick	1	72	Glyphosate is driving the Monarch butterfly species to extinction. https://mail.google.com/mail/?shva=1#inbox/148043eb3ca4fb6b	162	Refer to Response 148.

Artley	Dick	1	61	Supervisor Martin, you cite your 2010 Umatilla National Forest Invasive Plant Treatment Record of Decision as the basis for your conclusion that herbicides containing glyphosate are safe if used according to label directions. Once again, The Monsanto Corporation composed the text of the label directions and printed the label directions. Roundup was Monsanto's top selling product in 2013. That year Monsanto's earnings were 14.87 billion dollars. When the judge reads your 2010 Umatilla National Forest Invasive Plant Treatment Record of Decision and compares it's safety conclusions with the information authored by hundreds of independent Ph.D. chemists that describe the tragic health problems caused by these toxic herbicides in Opposing Views Attachment #9a which will carry the most weight?	163	The Umatilla National Forest Invasive Plants Treatment Project ROD (2010) provides rationale for utilizing a suite of herbicides and other tools for the treatment of invasive plant infestations, while at the same time minimizing potential adverse impacts and maximizing cost-effectiveness. Many members of the public voiced their concerns about the use of herbicides regarding the potential for unintentional exposure to people, non-target vegetation, soils, water, fish and wildlife. Other members of the public expressed concern that limitations on herbicide use would result in higher costs or lack of effectiveness. Noxious weed treatments authorized with the 2010 ROD incorporate appropriate project design features to minimize the potential adverse effects of herbicide use.

Artley	Dick	1	74	Syracuse Environmental Research Associates updated of their 2006 report addressing glyphosate safety in 2011. It is titled "Glyphosate Human Health and Ecological Risk Assessment" was completed on March 25, 2011 under USDA Forest Service Contract: AG-3187-C-06-0010 and submitted to Paul Mistretta, COR USDA/Forest Service, Southern Region. The report points out not all glyphosate formulations are the same. Table 2: Glyphosate Formulations Identified by the Forest Service (pages 281 and 282) identifies 53 different herbicide formulations containing glyphosate. Table 5: Classification of formulations (page 287) shows the toxicity of the different formulations presented by toxicity levels and confidence. Unfortunately, Supervisor Martin, your 2010 Umatilla National Forest Invasive Plant Treatment Record of Decision indicates glyphosate may be applied without describing the	164	Please refer to Response #190

Vandehey	Roberta	6	14	Exclude streams, intermittent streams, and wetlands from grazing or logging.	165	Grazing issues are beyond the scope of the decision for this project, but are discussed in the Cumulative Effects Analysis. Harvest is not proposed around springs, ponds, wetlands, and perennial streams. Intermittant streams would have heavy equipment exclusion zones that are from 75' to 100' wide, but logs may be dragged out or lifted out of the zones by equipment located outside the zone.
Coulter	Karen	4	60	"Harvest within Fairview Campground (A6-Developed Recreation) would result in a fully stocked, but very open stand. The prescribed basal area of 34 would equate to approximately 34 12" diameter trees per acre." * This is B.S. Visual quality would be degraded for decades at least for the rest of my life living here! "Recovery" is not just the disappearance of slash and soil disturbance but the loss of the trees and diversity. The spring flow will probably be lost also.	166	Effects to visual quality are described on page 304 of the FEIS. As stated, the timbered portion of the campground would be very open and park-like. As used in the paragraph, "recovery" was in reference to anticipated soil disturbance. WQ25 and VQ8 (FEIS 18 and 21) are mitigation measures designed to protect the spring within Fairview Campground. According to the hydrology specialist, it is not expected that the Kahler Project will cause the spring within the campground to dry up.

Storm	Rex	16	9	Treatment of residual debris too limiting/prescriptive. The NEPA decision document language should accommodate a full range of modern slash treatment technologies; rather than needlessly prescribing a narrow set of specifically-limiting methods. Please make required removal of unmerchantable material from the sale area as optional-as removal is typically not economically viable, and is market-based. The NEPA decision must not self-limit these sorts of operational decisions.	167	EIS Chapter 1 Connected Actions, Treatment of Residual Fuels highlights mechanical, removal of debris to an off-site location, and/or burning, as a means to dispose of residual fuels as a result of proposed actions. Removal of unmerchantable material is one method that is proposed as an option. It is not required.
Artley	Dick	1	5	A competent hydrologist would have stated "since the ground disturbance associated with logging and road construction will not occur, the water quality and riparian habitat would not be adversely impacted." "Sedimentation from road use" will increase.	168	See FEIS page 254 for impacts analysis for hydrology.
Heiken	Doug	14	36	Prescribed fire should be just as variable as logging. A mosaic of conditions, including unburned patches and even small patches of torching, should be the goal.	169	Thank you for your comments. The overall goal for implementing prescribed fire in the Kahler planning area will be to achieve a mosaic of conditions as you describe.

Artley	Dick	1	44	"It is well established that logging and roadbuilding often increase both fuel loading and fire risk. For example, the Sierra Nevada Ecosystem Project (SNEP) Science Team (1996) concluded that "timber harvestâ€¦. has increased fire severity more than any other recent human activity" in the Sierra Nevada. Timber harvest may increase fire hazard by drying of microclimate associated with canopy opening and with roads, by increases in fuel loading by generation of activity fuels, by increases in ignition sources associated with machinery and roads, by changes in species composition due to opening of stands, by the spread of highly flammable non native weeds, insects and disease, and by decreases in forest health associated with damage to soil and residual trees (DellaSala and Frost, 2001; Graham et al., 2001; Weatherspoon et al., 1992; SNEP	170	For fire-adapted ecosystems to function in the future, multiple treatments over time will be imperative. In a 2012 study on the ecological effects of fuel reduction treatments, results showed that single entry mechanical treatments did not serve as surrogates for fire. Rather, restoration to pre-settlement conditions required repeated treatment over time (McIver, J., Stephens, S. et al). The combination of thinning and burning shift diameter distributions toward larger trees; however, no single entry will mitigate the history of fire exclusion and fuel accumulation in dry coniferous forests (Youngblood 2010). Therefore, multiple prescribed fire entries every 10 to 15 years post-treatment is recommended to maintain the Kahler analysis area. In doing so, stand densities may be better managed and fire tolerant species would be favored. This would allow for a more fire resistant forest over the long term (Kahler Fire and Fuels Report, Desired Conditions). Disclosed in the Fire Behavior section of the Kahler Fire and Fuels Report are the modeled impacts of fire occurring in each alternative. The short-term effects of the proposed action alternatives are captured through increased

Artley	Dick	1	43	"The current focus on 'fuels' is, in itself, misguided because almost anything in a forest will burn, given the right conditions. Any fire specialist will tell you that the principal factors affecting fire are temperature and moisture, not fuels. No legislation will prevent or even reduce fires in the vast areas of the national forests and to pretend so is fraudulent." Partridge, Arthur Ph.D., Professor Emeritus, University of Idaho Testimony to the Agriculture, Nutrition and Forestry Committee United State Senate. Hearing to Review Healthy Forests Restoration Act, HR 1904 June 26, 2003 http://www.univision.co.za/offer-day-oA2A392Cr1N3B2x_2F2du3g3-music.shtml	171	In the Kahler Fire and Fuels Report, Existing Conditions, Fire Behavior section, it states, fire behavior is determined by fuel, weather, and topography. Fuel is the only element that can be manipulated to influence fire behavior characteristics. Fine fuels and small woody fuels are the major contributors to fire spread rates by carrying the ignition and flaming front of a fire (Rothermel 1983). Small woody fuels influence the rate of spread and fire intensity (Agee 1993). Large fuels do not contribute greatly to fire spread, though they do remain burning after the fire front has passed (Andrews 1986) and contribute to fire duration, fire residency, and fire severity.

Artley	Dick	1	75	The DEIS fails to evaluate project impacts to climate change and climate change impacts to forest resources and ecosystem services in the sale area. Chapter 4 of the DEIS does not consider direct, indirect and cumulative effects to and from climate change. Where have you been? This analysis has been required in USFS NEPA documents for years. Do you really think the WO would have 4 staff members and each Region have at least 1 staff member to advise USFS employees on climate change requirements and protocol if you could choose to ignore climate change in your NEPA documents? Are you aware that the WO has a separate climate change office? I suggest you call these employees to learn your responsibilities. Dave Cleaves, Climate Change Advisor to the Chief, 202-205, 1278 Greg Kujawa, Senior Staff Asst, 202-205, 1420 Wilma Fant, Staff Asst., 202-205,	172	The FEIS addresses this topic in the Climate Change section in Chapter 4.

Jerome	Irene	15	11	In reading the comments from various stakeholders that live adjacent to the Wheeler Point Fire area, it is clear that these folks do not support any type of action. The photos that they provide appear to be sites that are very marginal and probably not timber sites to begin with, however this must be clearly discussed and articulated. Further, it appears that after the Wheeler Point Fire that enormous amounts of grass were seeded that virtually eliminated the opportunity of trees to establish.	173	We thank you for your comments
Artley	Dick	1	96	The USFS's much touted "parklike stand" is devoid of biodiversity because, among other things, climax tree species (with a low mill value) have been extirpated. This P&N statement comes word-for-word straight from the USFS playbook. You are so obedient Supervisor Martin.	174	Refer to the Purpose and Need for Action. Also refer to the glossary section in the Supplemental Forest Vegetation Report (Appendix N) where words such as "biodiversity", "climax", "dry upland forest" and "restoration" are defined.

Heiken	Doug	14	7	Conserve Large Trees We support clear limitations on the removal of large trees, i.e.,: * large-young white fir and Doug fir; * interacting with the canopy of larger and older pine and larch; * retaining large-young WF/DF when not in direct completion with desired pine and larch trees; * removing large-young trees on only a subset of the instances where this condition occurs.	175	Thank you for your support regarding removal of large young trees.

Heiken	Doug	14	10	Conserve Old Trees Regardless of Size We urge the FS to identify and retain all trees with old-growth characteristics even if they are less than 21" dbh. Some refer to these small-old trees as "Tillebo trees" because (as you know) the late Tim Lillebo was a big advocate for protection of old trees regardless of size. Old growth characteristics include thick bark, colored bark, flat top, asymmetric crown, broken top, forked top, relatively large branches, etc. These trees have important habitat value and human values regardless whether they are 21" dbh. Allow natural processes of succession and mortality turn some of these medium and large trees into ecologically valuable snags and down wood. The agencies often use this technique to identify and retain old-growth juniper trees and the same can be used to protect old growth pine, larch, Douglas fir and other species. Van Pelt, R. 2008. Identifying Old Trees and Forests In	176	Maintain and promote old trees (>150 years old) throughout the project area (EIS 3) is one of the needs for action in the Kahler project area. The USFS will continue to use best science as it becomes available.

Heiken	Doug	14	4	The logging prescriptions (marking guides, and basal area retention figures) are not specified in the DEIS making it difficult to know whether the FS plans to leave enough trees to meet objectives for wildlife cover, ecological processes, and long-term recruitment of snags and dead wood.	177	As noted on page 3 of the Supporting Forest Vegetation Report " Between skips and gaps, the matrix area will be thinned to a variable density with minimum amounts of residual basal area varying with a unitâ€™s plant association (at least 25-60 ft2/acre of basal area will be retained after thinning; see tables 16 and 48)." Retained basal areas will fluctuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the Supporting Forest Vegetation Report. Additional factors are considered when site specific prescriptions are completed after an alternative has been chosen.

Heiken	Doug	14	12	Basal Area Retention Basal Area retention is an important ecological consideration that must be disclosed quantitatively in the NEPA analysis. The DEIS discloses a wide range of possible retention levels but this does not provide assurance that enough trees are being retained to meet ecological needs for live and dead trees now and in the future. Basal area retention should be variable but not be too low in any one unit. Enough trees need to be retained to retain and recruit large and old trees and snags now and in the future. Basal area targets should be adjusted higher to account for the following actors: * Prescribed basal area retention should be weighted to accommodate relatively greater retention in stands with large trees and desirable clumps of trees that contribute to LOS structural conditions. * All things being equal, large and old trees are more sustainable and resilient than small	177	As noted on page 3 of the Supporting Forest Vegetation Report " Between skips and gaps, the matrix area will be thinned to a variable density with minimum amounts of residual basal area varying with a unitâ€™s plant association (at least 25-60 ft2/acre of basal area will be retained after thinning; see tables 16 and 48)." Retained basal areas will fluctuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the Supporting Forest Vegetation Report. Additional factors are considered when site specific prescriptions are completed after an alternative has been chosen.

St.Martin	Amanda	3	12	The basal area for any logging that takes place must be significantly higher, such as a minimum of 60-80 square feet (instead of 30-40,) to preserve essential forest structure, biodiversity of plants and wildlife, and recreational values	177	As noted on page 3 of the Supporting Forest Vegetation Report " Between skips and gaps, the matrix area will be thinned to a variable density with minimum amounts of residual basal area varying with a unitâ€™s plant association (at least 25-60 ft2/acre of basal area will be retained after thinning; see tables 16 and 48)." Retained basal areas will fluctuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the Supporting Forest Vegetation Report. Additional factors are considered when site specific prescriptions are completed after an alternative has been chosen.

Heiken	Doug	14	13	The DEIS does not make explicit recommendations about stocking levels, except to say "units will be thinned to a variable density with an average residual basal area that is determined by the unit's plant association." (DEIS p 7). According to DEIS Table 172 (Appendix L, pdf page 151) stocking by PAG could be anything from low stocking to high stocking. In fact, the table shows four different stocking levels for each forest type.	178	Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the forest vegetation report. Additional factors are considered when site specific presciptions are completed after an alternative has been chosen. Table 48 of the Supplemental Forest Vegetation Report displays suggested stocking levels based on predominant plant associations of Kahler Planning Area. Note that each potential vegetation type has 4 stocking levels: Maximum density, full stocking, upper limit, and lower limit. Notes for that table, including definotions, follow the table in the document.

Heiken	Doug	14	14	During scoping the FS indicated an interest in reducing stand density lower than is appropriate to meet the full suite of ecological objectives, including wildlife cover, perpetuating mortality processes that create and sustain valuable habitat features, etc. We are concerned that the agencies' stocking guides were created and intended to be used as a tool to avoid mortality which is clearly inconsistent with ecosystem management. ("To preclude serious tree mortality from mountain pine beetle, western dwarf mistletoe and perhaps western pine beetle, stand densities should be maintained below the upper limit of the management zone" Powell 1999, https://fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev7_016034.pdf) Healthy forests require dead trees, sometimes in abundance, in order to meet the needs of diverse wildlife and provide full suite of	179	Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the forest vegetation report. Additional factors, such as snag recruitment, canopy cover, and species diversity are considered when site specific presciptions are completed after an alternative has been chosen.

Heiken	Doug	14	15	A comprehensive restoration approach requires focusing not just on live trees, but also on the full suite of ecological processes including density dependent mortality processes that create and recruit snags and dead trees as a valuable feature of eastside forests. We urge the agency not to manage for tree vigor and minimum stocking levels because it will not provide enough green trees for recruitment of snags through time. This is a critical issue given that the current standards for snag habitat are outdated and fail to provide adequate levels of snags and dead wood, and adequate levels of green trees needed to recruit those snags through time.	180	Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the forest vegetation report. Additional factors, such as snag recruitment, canopy cover, and species diversity are considered when site specific presciptions are completed after an alternative has been chosen.

Heiken	Doug	14	16	According to scoping, some of the prescriptions anticipated bring basal area down to 30-40 ft2/acre. This is too low. We urge the FS to retain at least 60-80 ft2/acre of basal area. 30-40 ft2/acre might be OK in small patches within units as part of a variable prescription, but the average over a unit must be much higher than that in order to ensure adequate cover for wildlife, and adequate dead wood recruitment through time. Variable density thinning is good. Consider 60 or 70 ft2 if desired for diversity in some more productive Plant Association Groups. The clumps of trees proposed to be left may provide for these higher basal areas. We recommended 3-4 clumps per acre of 2-10 individual trees as well as the skips to emulate natural historic stand structures.	181	As noted on page 3 of the Supplemental Forest Vegetation Report " Between skips and gaps, the matrix area will be thinned to a variable density with minimum amounts of residual basal area varying with a unitâ€™s plant association (at least 25-60 ft2/acre of basal area will be retained after thinning; see tables 16 and 48)." Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the forest vegetation report. Additional factors, such as snag recruitment, canopy cover, and species diversity are considered when site specific presciptions are completed after an alternative has been chosen.

Heiken	Doug	14	30	To maintain natural variability at the within-patch scale, we urge the FS to retain clumps of trees, especially medium and large trees. We urge the FS not to shift species composition to aggressively. It will be desirable to retain some diversity of tree sizes and tree species "Gaps" should not be mini-clearcuts but rather should retain live and dead tree legacies. This would help make good white-headed woodpecker habitat now and in the future. Size of unthinned "skips" could be increased beyond 2 acres if deemed important by wildlife biologist, but still within the 10-15%.	182	Variable density thinning with skips and gaps; and variable density thinning using individuals, clumps, and groups are two methods of thinning discussed in the Forest Vegetation Report. In both methods, retention or encouragement of tree clumps is proposed. Skips and gaps are discussed in the first thinning approach.

Heiken	Doug	14	25	Mistletoe It is OK to remove small trees infected with mistletoe as part of the variable density thinning prescription, but large trees infected with mistletoe should be retained. Removing mistletoe trees makes little sense from an ecological perspective because (i) large infected trees provide valuable habitat both as large trees, and future snags, (ii) mistletoe is endemic so treatments are not very effective, and (iii) the mistletoe infection actually increases the value to wildlife. Many species use mistletoe brooms for nesting, roosting, feeding, and cover from predators.	183	The value of mistletoe infected trees to wildlife for denning, nesting, and other uses is well known. Stand prescriptions describe the desired condition of stands, including the presence of mistletoe infected trees, particularly where they are isolated or have low mistletoe rating scores. Under both of the action alternatives, all mistletoe infected pine and western larch larger than 21 inches dbh and Douglas-fir that are greater than 150 years old (based on visual assessment) will be retained. In addition, design measures will be implemented that retain smaller diameter mistletoe infected trees for their value to wildlife and overall stand complexity. Refer to Design Measure VG5 for a description of how mistletoe infected trees will be provided for under the action alternatives. Changes have been incorporated into this design measure between the draft EIS and Final EIS.

McClure	Steve	8	11	We suggest that the Forest Service review and discuss the objectives and mitigation measures more thoroughly in the EIS to truly address the cumulative effects (both beneficial and potentially detrimental) of this project.	184	Cumulative effects analysis for the various resources were updated for the FEIS.

Reichgott	Christine	18	3	Chapter 2 (page 9) includes a brief description of proposed activities within RHCAs, however it is not clear from the description provided what specific actions are proposed within the RHCAs. In Chapter 3 (page 32) the reader is directed to page 9 of the Forest Vegetation Report for information about treatments that would have a direct effect on riparian areas. It would be helpful if the FEIS would identify for the reviewer where to find the Forest Vegetation Report. It is not clear from the text in Chapter 3 whether this report is available in the appendices, and the Table of Contents does not include a list of the appendices. We were able to locate the Forest Vegetation Report in Appendix L. We also note, however, that page 9 of the Forest Vegetation Report does not provide detail related to treatments that would have a direct effect on riparian areas. In the Final EIS, we recommend that the DEIS (in	185	Riparian Management Objectives direction can be found in FEIS page 83.

Coulter	Karen	4	4	The proposed action (alt. 2) would even go further and log in category 4 (intermittent stream) Riparian Habitat Conservation Area (RHCA) buffer zones intended to protect streams from logging impacts.	186	See response 41, to comment 4-40.
McClure	Steve	8	10	We support removing some merchantable trees from the Riparian Habitat Conservation Areas (RHCAs). These areas should not be excluded from management as long as the riparian objectives to improve channel function and floodplain connectivity or restoration of hardwood are met. The mitigation measures to reduce the risk of sedimentation are appropriate.	187	Thanks for the support.

Kelley	Brian	13	4	Additionally, the Decision Framework for the project asks "Will harvest occur in Class IV Riparian Habitat Conservation Areas (RHCA)" (DEIS page 3). Yet there is no action alternative developed that does not propose harvest (logging) in the RHCAs. Significantly, the difference between the amount of commercial logging proposed in RHCAs for Alternative 2 and Alternative 3 is only 25 acres-less than 4%.	188	Alternative 4 was developed, in part, to address this concern.
Kelley	Brian	13	13	Both Alternative 2 and Alternative 3 propose to log more than 600 acres of Class IV Riparian Habitat Conservation Areas (RHCA). RHCA buffers were established to protect riparian areas, fish and watersheds from the effects of logging. HCPC opposes proposals to reduce these buffers and the protections that they provide.	189	PACFISH allows silvicultural treatments in RHCAs that benefit the RHCA. Reducing the risk of a severe wildfire, like Wheeler Point, would be a benefit to the RHCA. That is the rationale for harvest in RHCAs.

Artley	Dick	1	57	Supervisor Martin, please read your documents that verify glyphosate safety again that are listed below. You will notice they are out of date (** years old), thus, they do not contain recent scientific research results clearly showing herbicides containing glyphosate are potentially lethal. You will notice that the References section of your 2010 Umatilla National Forest Invasive Plant Treatment Record of Decision does not contain any of the source documents for the research conclusions contained in Opposing Views Attachment #9a. You will notice the References section of the 2010 Umatilla National Forest Invasive Plant Treatment Record of Decision do not contain these source documents either. Why do you propose to take such risks based on a document that selectively included source literature favorable to glyphosate application? Have you explored how the SERA	190	This comment is outside the scope of the Kahler project. Invasive plant treatments are consistent with the 2010 Invasive Plant Treatment EIS. However we do acknowledge the importance of staying alert for new information and there is documentation in Appendix G (Invasive Plants) in the Kahler Final EIS describing why the updated risk assessment for glyphosate does not contain information that triggers a need to supplement the existing invasive plant EIS from 2010.

Artley	Dick	1	58	Supervisor Martin, as you will learn below even casual exposure to herbicides that contain glyphosate is shown in the lab to cause cancer in mammals. Of course now you are wondering what you can do to disprove these science conclusions. You might not even believe that glyphosate is unsafe. I suggest you search the WEB for the 2 words "glyphosate" and "cancer." When you do you will get 79,600 hits. They can be a\read at: http://www.bing.com/search?q=glyphosate+cancer&qs=n&form=QBLH&pq=glyphosate+cancer&sc=2-17&sp=-1&sk=&cvid=a9a7e18786764443aa59079d8144f559	191	Please refer to Response #190.
Jerome	Irene	15	2	The proposed action states that there will be the option of selecting young Douglas-fir and grand fir that are less than 150 years old for removal. Do trees instantly go from "young" to "old" at the magic age of 150? How was this age figure derived? Please clarify.	192	Refer to the Supplemental Forest Vegetation Report section titled "Rationale for Using an Age Threshold of 150 Years at Breast Height to Identify Old Trees".

Coulter	Karen	4	14	There is nothing inherently unnatural or historically uncharacteristic about cyclical spruce budworm and Douglas fir tussock moth forest defoliation or a stand replacement fire in a Ponderosa pine/Douglas fir/Grand fir forest ranging from hot dry through warm dry to cooler, moister forest types, as with the Kahler project area.	193	Dry Forests often received low to mixed severity fires, where high mortality can occur in various size patches within a larger fire area. Also refer to the mixed severity fire definition found within the Supplemental Forest Vegetaion Report.

Artley	Dick	1	59	Opposing Views Attachment 9a contains statements by hundreds of well respected Ph.D. scientists who describe their research findings on the safety of herbicides containing glyphosate. Their research indicates glyphosate containing herbicides clearly kill fish at very small concentrations and are linked to the following health problems in mammals (including humans): * birth defects, * non-Hodgkin's lymphoma (a form of cancer), * mitochondrial damage, * cell asphyxia, * miscarriages, * attention deficit disorder, * endocrine disruption, * DNA damage, * skin tumors, * thyroid damage, * hairy cell leukemia (another cancer), * Parkinson disease, * premature births, * decrease in the sperm count, * harm to the immune system in fish * death of liver cells, * severe reproductive system disruptions * and chromosomal damage. Comment: Supervisor Martin,	194	This comment is outside the scope of the Kahler project EIS.

Artley	Dick	1	62	Supervisor Martin, why do you reference the following SERA risk reports in the 2010 EIS and not include them in an Appendix or provide the public with a link to the electronic version of these documents. Do you know which corporation funded the SERA safety studies? Did SERA know what their results would be before the analysis? Can you guess? Are you still unsure about Monsanto's glyphosate safety? Please read this article in the April 2013 issue of Entropy magazine: http://www.mdpi.com/1099-4300/15/4/1416 We know Glyphosate-containing herbicides are potentially lethalâ€¦ but there is more. Within the last few days new research results have been made public. Roundup is responsible for the massive monarch butterfly population reduction. See: http://www.bing.com/search?q=monarch+decline+Monsanto%E2%80	195	The comment is outside the scope of the Kahler EIS. SERA risk assessments are available online at http://www.fs.fed.us/foresthealth/pesticide/risk.shtml

Artley	Dick	1	63	Supervisor Martin, why do you reference the following SERA risk reports in the 2010 EIS and not include them in an Appendix or provide the public with a link to the electronic version of these documents. Do you know which corporation funded the SERA safety studies? Did SERA know what their results would be before the analysis? Can you guess? Are you still unsure about Monsanto's glyphosate safety? Please read this article in the April 2013 issue of Entropy magazine: http://www.mdpi.com/1099-4300/15/4/1416 We know Glyphosate-containing herbicides are potentially lethalâ€¦ but there is more. Within the last few days new research results have been made public. Roundup is responsible for the massive monarch butterfly population reduction. See: http://www.bing.com/search?q=monarch+decline+Monsanto%E2%80	196	See Response #195

Artley	Dick	1	64	Supervisor Martin, why do you reference the following SERA risk reports in the 2010 EIS and not include them in an Appendix or provide the public with a link to the electronic version of these documents. Do you know which corporation funded the SERA safety studies? Did SERA know what their results would be before the analysis? Can you guess? Are you still unsure about Monsanto's glyphosate safety? Please read this article in the April 2013 issue of Entropy magazine: http://www.mdpi.com/1099-4300/15/4/1416 We know Glyphosate-containing herbicides are potentially lethalâ€¦ but there is more. Within the last few days new research results have been made public. Roundup is responsible for the massive monarch butterfly population reduction. See: http://www.bing.com/search?q=monarch+decline+Monsanto%E2%80	197	See Response #195

Artley	Dick	1	71	Glyphosate is driving the Monarch butterfly species to extinction. https://mail.google.com/mail/?shva=1#inbox/148043eb3ca4fb6b Please don't do something tragic just because the USFS says you can. It's time for independent thinking isn't it? Monsanto spends millions $ each year on their ongoing PR campaign. Don't believe it. You are not exempt from the provisions of the Administrative Procedures Act. Under the APA, a court may set aside an agency action if the court determines that the action is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. Â§ 706(2)(A); see also Marsh, 490 U.S. at 375-77 (arbitrary and capricious standard applies to agency findings which involve agency expertise). Here's an excerpt from this opinion: "Consequently, we may reverse the decision as arbitrary or capricious only if the agency relied on factors	198	Refer to Response 148.

Artley	Dick	1	66	The choice is yours Supervisor Martin. Can you now understand that the evidence overwhelmingly indicates some glyphosate herbicides are potent carcinogens? There are thousands of sites on the WEB that clearly indicate glyphosate is potentially lethal. Incredibly, you depend on a single document endorsed by the USDA declaring that glyphosate is safe. The USDA has supported the use of toxic manufactured chemicals for decades. They still support GMO crops modified to withstand massive amounts of science clearly showing human health is affected. You can kill humans, fish and terrestrial wildlife using trumped-up USDA safety studies or you can believe independent science in Opposing Views Attachment #9a. Have you ever watched a child deal with cancer? If you still choose to ignore this warning then you must act according to NLRB rules. Private industry must notify workers when	199	Refer to Response 190.

Artley	Dick	1	67	The choice is yours Supervisor Martin. Can you now understand that the evidence overwhelmingly indicates some glyphosate herbicides are potent carcinogens? There are thousands of sites on the WEB that clearly indicate glyphosate is potentially lethal. Incredibly, you depend on a single document endorsed by the USDA declaring that glyphosate is safe. The USDA has supported the use of toxic manufactured chemicals for decades. They still support GMO crops modified to withstand massive amounts of science clearly showing human health is affected. You can kill humans, fish and terrestrial wildlife using trumped-up USDA safety studies or you can believe independent science in Opposing Views Attachment #9a. Have you ever watched a child deal with cancer? If you still choose to ignore this warning then you must act according to NLRB rules. Private industry must notify workers when	200	Refer to Response 190.

Artley	Dick	1	68	The choice is yours Supervisor Martin. Can you now understand that the evidence overwhelmingly indicates some glyphosate herbicides are potent carcinogens? There are thousands of sites on the WEB that clearly indicate glyphosate is potentially lethal. Incredibly, you depend on a single document endorsed by the USDA declaring that glyphosate is safe. The USDA has supported the use of toxic manufactured chemicals for decades. They still support GMO crops modified to withstand massive amounts of science clearly showing human health is affected. You can kill humans, fish and terrestrial wildlife using trumped-up USDA safety studies or you can believe independent science in Opposing Views Attachment #9a. Have you ever watched a child deal with cancer? If you still choose to ignore this warning then you must act according to NLRB rules. Private industry must notify workers when	201	Refer to Response 190

McClure	Steve	8	5	Climate change should be a large factor in all projects. We are concerned that the Forest Service's project does not adequately account for climate change. This area is moisture limited with regards to growing capacity and we are concerned that leaving too many trees on the landscape will contribute to the susceptibility of the forest to insects, disease and wildfire.	202	Refer to the Climate Change section in Chapter 4 of the FEIS for information regarding Climate Change and the influences from the Kahler Dry Forest Restoration Project. Retained basal areas will fluctuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the Supplemental Forest Vegetation Report. Table 16 displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler Planning Area.

Artley	Dick	1	89	Without exception, road construction and reconstruction is an activity that causes damage to some important natural resources in the forest. New road construction is particularly detrimental to aquatic and wildlife resources. Chief Dombeck's statement below supports this fact. "Roads often cause serious ecological impacts. There are few more irreparable marks we can leave on the land than to build a road."	203	New system road construction considers existing resource issues. The new system road would replace an existing, poorly-maintained road and OHV trail that crosses a stream channel. Most Temporary roads are existing on the landscape. See Transportation Action Plan Page 37. While the effects of roads left on the landscape are similar to the Dombeck statement; it is not true for most properly placed temporary roads that are obliterated following activities. Direct, indirect, and cumulative impacts of this project and past, present, and future activities (with regard to the road system) are discussed in the downed wood, elk, Primary Cavity Excavator/snag, pileated woodpecker, marten, three-toed woodpecker, white-headed woodpecker, Lewis' woodpecker, gray wolf, intermountain sulphur, goshawk, and Neotropical Migratory Bird sections of the Wildlife Report and EIS. The IDT agrees with the Chief. In order to reduce the impacts of existing roads, the Heppner District implemented Access and Travel Management Planning in 1993, which closed many roads. In 2008, Heppner restricted OHVs to open roads and trails. The Kahler Project proposes to build a new road, re-

St.Martin	Amanda	3	14	This increases access for illegal firewood cutting, livestock, off road vehicles, and invasive plant introduction/dispersal, all of which have lasting, detrimental impacts on the area that decrease its value as wildlife habitat and recreational public forest land	205	Most Temporary Roads exist and all will be decommissioned after use by the Timber Sale. An additional 16 to 16.9 miles of road closures is proposed in Alternative. Transportation Action Plan Page 37. KV dollars are also used decommission roads and improving closures as funds allow, to reduce illegal use.
Artley	Dick	1	91	Request for changes to be made to the final NEPA document: Analyze a no road construction and reconstruction alternative in detail in the final NEPA document.	206	An Open Roads Only alternative was considered but it was determined that it would not address the purpose and need for the project. The new system road is proposed to reduce resource impact (Appendix J).
Artley	Dick	1	90	Since best science and Chief Dombeck agree that there are few more irreparable marks we can leave on the land than to build and reconstruct roads, this is a valid reason to analyze a "No New Roads" alternative in detail.	207	A Open Roads Only Alternative was considered and determined it would not address the purpose and need for the project (FEIS, Appendix J).
St.Martin	Amanda	3	8	I am opposed to proposed construction of "temporary" roads and the re-opening of many miles of closed roads.	209	Most Temporary Roads exist and all will be obliterated after use by the Timber Sale. An additional 16 to 16.9 miles of road closures is proposed in Alternative. Transportation Action Plan, Appendix J.

Artley	Dick	1	14	Perhaps you should read some REAL science authored by independent scientists not connected to the USDA that discusses how in most cases fires do not slow down when they encounter logged areas, and in some cases the intensity and rate of spread increase.	210	Disclosed in the Fire Behavior section of the Kahler Fire and Fuels Report are the modeled impacts of fire occurring in each alternative. The short-term effects of the proposed action alternatives are captured through increased fire behavior as a result of the fuel loads generated by logging activity. Long-term effects of the action alternatives project that the stands are less likely to support passive crown fire than the no action alternative. The Design Criteria and Mitigations section of the Kahler EIS discusses the practices put in place to mitigate for the effects of the proposed action alternatives.
Vandehey	Roberta	6	32	Replace fish blockage culverts on downstream Steelhead streams Wheeler Creek, Alder Creek, and all tributaries.	211	Thank you for sharing your knowledge of specific culvert passage problems. Replacement of culverts posing fish barriers is ongoing across the Umatilla National Forest. It is prioritized based on habitat quality and fish distribution and is done as funds allow. We will consider replacement of these culverts in the future, but this activity is beyond the scope of the Kahler project.

Storm	Rex	16	6	Road reconstruction important. We agree that opening and reconstructing temporary roads must be a necessary component to implement this project-to accomplish all the stated resource objectives. We strongly support your efforts to implement proposed harvest treatments in the project area; but this simply cannot be accomplished without improving an effective transportation system that includes forest roads-whether "temporary" or otherwise classified. Roads are an important part of the logging/transportation plans-and are identified in the Umatilla Forest Plan as important attributes of these management areas. The NEPA decision document language should accommodate a full range of modern road access technologies; rather than needlessly prescribing a narrow set of specifically-limiting methods. Forest roads are necessary; please fully disclose where and what they	212	See Transportation Action Plan, Appendix J.

Heiken	Doug	14	31	Good to not build new roads and to decommission temporary roads. But please exhaustively analyze alternate options to new temporary road construction. In other Collaboratives we were able to significantly reduce the number of temporary roads actually needed to access Units. Consider fisheries biologist and hydrologist input for opportunities to improve watershed conditions which may include culvert changes.	213	Most temporary roads exist and all will be obliterated after use by the timber sale. An additional 16 to 16.9 miles of road closures is also proposed in the alternatives (Transportation Action Plan, Appendix J).

Artley	Dick	1	77	Supervisor Martin, if you were really concerned about aquatic species' health you would indicate in the final EIS that all newly constructed temporary roads will be obliterated after use and apply the obliteration method that returns the ground to the natural angle of repose and eliminates the running surface. Not doing so clearly indicates you have no intent of using the road temporarily. Comment: Roads that will be used again in the future must be constructed to system road standards with surfacing and a ditch to reduce sediment generation. If the final EIS does not clearly indicate that your proposed temporary roads will be obliterated such that a running surface no longer exists, it will show you plan to allow these temporary roads to pump sediment for decades until the so-called temporary road is used again for the next timber sale. Please become familiar with the	214	Please refer to Response #136
Vandehey	Roberta	6	33	Replace watering holes in waterways with off waterway water tanks, limiting water loss to down-watershed Steelhead streams.	215	Outside of the scope of the Kahler project.

Coulter	Karen	19	99	How is the building of "temporary roads" and the reopening of closed roads justified when the existing road density exceeds Forest Plan road density objectives? Why are Forest Plan standards not discussed?	216	Draft EIS page 25 shows proposed Road Density with Alternatives that move open road densities towards Travel Planning goals of 1.5 mi/sq. mile. Transportation Action Plan section, Access and Travel Management, Appendix J shows for proposed road closures and roads proposed for decommissioning as funds allow. Forest Plan suggested 2 miles/sq. mile.
Coulter	Karen	19	98	Highlighted: "None of the new temporary roads would be located in RHCAs, and there would be no new stream crossings. Alternative 2 would use 1.5 miles of existing temporary roads in RHCAs. Alternative 3 would use 0.5 miles of existing temporary roads in RHCAs."] "Existing temporary roads" implies re-use of so-called "temporary roads" and failure to obliterate them. (DEIS pg. 126)	217	Temporary roads : These are roads proposed for the Kahler project that will be under permit or other authorization and decommissioned upon the termination of the authorization. These Roads are not necessary for long-term resource management.

Coulter	Karen	19	100	Neither action alternative should be planning to use roads within RHCAs, including "existing temporary roads" which were not supposed to be open for re-use (thus the "temporary road designation). Why should we trust the Forest Service to obliterate and not re-use planned new "temporary" roads when they evidently failed to obliterate or remove from using previous "temporary" roads? * [Highlighted: "â€¦increase the total road density slightly, but because of rounding, it would remain at 3.9 miles per square mileâ€¦"] There should be no skid trails used within RHCAs.	218	System Roads are proposed for closure and decommission See Draaft EIS Page 25. Most Temporary Roads exist and all will be decommissioned after use by the Timber Sale. Transportation Action Plan Page 10-11 and Draft EIS page 25. KV dollars are also used decommission roads and improving closures as funds allow, to reduce illegal use. Temporary Road â€“ (FSM 7700) A road necessary for emergency operations or authorized by contract, permit, lease, or other written authorization that is not a forest road and that is not included in a forest transportation atlas.

Artley	Dick	1	65	I suggest you read 18 U.S.C. Â§ 1001 and the Administrative Procedures Act. The courts are aware of the USDA's illegal herbicide use. Please see the sample of court cases below. Ignoring this clear evidence violates the APA. In Californians for Alternatives to Toxics, et al. v. Michael Dombeck, Civ. S-00-2016 LKK/JFM (2001), Judge Lawrence Karleton presiding in the United States District Court for the Eastern District of California made the following findings: "The Forest Service cannot proceed with the plan until it assesses how use of the herbicides would affect the spread of noxious weeds and considers new information that calls into question earlier Forest Service findings that use of the herbicides would not harm humans and wildlife."	219	This comment does not warrant changes to the project or analysis. The Forest Service has assembled updated scientific information about herbicides, including risk assessments completed by SERA. Region 6 has explored how various management alternatives that include different herbicide ingredients and different standards for their use, and considered how these standards might affect the spread of invasive plants. The mitigation measures and herbicide use buffers go beyond the herbicide label to reduce the potential for impacts.
Vandehey	Roberta	6	19	Eliminate cattle competition for wildlife feed.	220	Thank you for your comment. This comment is outside the scope of the Kahler project.
Heiken	Doug	14	26	The EA does not specify a width for the non-mechanical stream buffer. This should be at least 50 feet.	221	No skid trails would be closer to streams than 75' to 100 ft' depending upon slope within the RHCA (EIS, p. 21).

Coulter	Karen	19	6	[Highlighted: "Proposed treatment units are present in identified connectivity corridors."] * Drop all commercial sale units in identified connectivity corridors. Connectivity is sparse and fragmented as it is, without logging these corridors, and heavy logging to low basal areas is planned for the majority of the sale area, leaving wildlife in insufficient hiding, thermal, and dispersal cover.	222	Direct, indirect, and cumulative impacts on connectivity habitat are discussed in the EIS (pages 133-135) and Terrestrial Wildlife Specialist Report (pages 16-19). The importance of connectivity habitat is recognized; design measures will be implemented to provide for higher basal area retention in connectivity corridors and to provide more untreated skips in these areas (see EIS Chapter 2, page 20, Design Measure WL16).

Coulter	Karen	19	7	[Highlighted: "Current direction for green tree replacement (GTR) densities are based on the requirements described in the Eastside Screens (USDA 1995), which requires that all sale activities maintain green replacement trees of = 21 inches DBH (or whatever is the representative DBH of the over story layer if it is less than 21 inches), at 100% potential population levels of primary cavity excavators."] * (trees) Is this # of GTR per acre, or what? * Re: Table 3-19 *This is a very low level of leave trees and should not form the basis for the number of trees left in the Kahler project.	223	Green tree replacement objectives are given in trees per acre. This has been clarified in the Final EIS. These levels are minimum levels, generally applicable to regeneration harvested stands. As the Kahler Project does not propose to regeneration harvest any of the proposed stands, these values would not be applicable.

Coulter	Karen	19	8	Wait a minute - This CVS data was used from exactly where on the Umatilla National Forest? From how many plots distributed where? From what year? Only in 2002? How could this be accurate at all for measuring down wood density for the Kahler area?!	224	CVS plots in the Kahler Creek-John Day River, Upper Rock Creek, and Wall Creek Watersheds were used to derive downed wood densities at the analysis area scale. The analysis points out that there is a random distribution of dead wood across the analysis area, and that values derived from CVS plots are average values. It is not expected that all stands proposed for treatment in the Kahler Project would have dead wood densities that meet these levels. CVS plots were last measured in 2002; as a result, there have most likely been additionas and losses to downed wood at the CVS plot scale and at random sites within the analysis area. However, at the scale of the three watersheds that make up the downed wood analysis area, it is expected that estimates for downed wood density would be valid. A total of 266 dry upland forest CVS plots and 27 moist upland forest CVS plots were used to calculate average snag and downed wood densities for the analysis area.

Coulter	Karen	19	9	Page 67 * [Highlighted: "Current Vegetation Survey estimates of downed wood densities used in this analysis are not statistically valid at smaller scales (project scale) or for a specific site within the watershed."] * Yet above (same page -67) the Forest Service admits that the CVS data need is not statistically valid at the project scale -so why is potentially inaccurate data being used? Based on our field surveying of the project area, there's generally nowhere near that much down wood greater than 12" diameter per acre in the project area.	225	The analysis area for downed wood in the Kahler area includes three watersheds. At this scale, these estimates of avaerage downed wood densities are valid. At scales smaller than a single watershed or for specific stands, these densities are not valid. "Project scale" in the comment refers to specific areas in the Kahler Project area that would have treatment applied to them. To clarify this statement, the "project scale" reference has been removed from the EIS and Wildlife Report. When calculating the density of downed wood at individual CVS plots, the calculated density is for pieces of the minimum length required to meet for the Forest Plan. While the average density in the dry upland forest is 18.4 pieces per acre, each piece is 6 feet long, resulting in a total of 110 lineal feet in dead wood with a minimum large end diameter of 12 inches. Within the analysis area, a wide range of downed wood habitat conditions exists; some stands have very little to no wood, while others have levels much greater than the Forest Plan standard.

Coulter	Karen	19	10	* [Highlighted: "The Rocky Mountain elk was selected as a MIS to be an indicator of general forest habitat and winter ranges. It is assumed that if good habitat is provided for elk and their population is maintained at some desired level, that adequate habitat is also being provided for other species that share similar habitat requirements (USDA 1990, page 2-9)."] * So why is the Forest Service proposing to eliminate suitable elk habitat to such an extent through Kahler project logging that elk would be displaced from the area? This is not meeting Forest Service responsibility under NFMA and the Umatilla Forest Plan to protect the viability of Management Indicator species, and this other species with similar habitat needs. Page 71	226	Direct, Indirect, and cumulative impacts on elk are disclosed in the EIS on pages 141-154. The approporiate scale for assessing the viability of a species is the Forest level. Viability of the Rocky Mountain elk is assessed at this scale in the analysis. Elk will continue to use the affected area; there are expected to be shifts in distribution during some periods due to project impacts.

Coulter	Karen	19	11	The Umatilla Forest Plan is very outdated -particularly with regard to ensuring the viability of management indicator species. Why didn't the Forest Service use and cite more updated science in the wildlife section of the DEIS?	227	Pages 50-51 of the EIS and pages 87-97 of the Wildlife Specialist Report cite more recent literature that discusses the habitat requirements, threats, special habitat features, and other factors relating to pileated woodpecker and their management. The quoted portion is taken directly from the Forest Plan.
Coulter	Karen	19	12	This is much less acreage of suitable habitat than a nesting pair of Pileated woodpeckers require, based on every Evelyn Bulls research. Under ideal habitat conditions a pileated pair needs over 900 acres.	228	Refer to the Response #227 (comment 19-11), the EIS, and Wildlife Report.
Coulter	Karen	19	13	American Marten are known to need far more suitable habitat in contiguous acres than 160 acres! Martens are known to have home ranges of at least 1,500 acres.	230	Pages 106-111 of the Terrestrial Wildlife Specialist Report (Appendix M) cite more recent literature that discusses the habitat requirements, threats, special habitat features, and other factors relating to marten and their management. The quoted portion is taken directly from the Forest Plan.

Coulter	Karen	19	14	[Highlighted: "(Canada Lynx) â€¦ there is no suitable habitat in the analysis areaâ€¦"]. It is not true that there is no suitable habitat for Lynx in the project area -there is for summer foraging and dispersal. * There are snowshoe hares on the Heppner District of the Umatilla. I've seen them. * This is too narrow of a description of suitable Lynx habitat. Lynx have historically been in Eastern Oregon in the Malheur and probably in the Umatilla. * However I have had a positive daylight sighting of a Lynx adjacent to the Kahler project area on private land and another possible sighting of two Lynx adjacent to the Kahler project area in the summer of 2014. There should be in depth analysis of effects to Lynx as they are likely hoeing the Umatilla National Forest on the Heppner Ranger District, and in the Kahler project area.	231	Please refer to page 55 in the EIS or page 124 in the Terrestrial Wildlife Report (Appendix M) for the discussion of lynx. The Umatilla National Forest as a whole is classified as unoccupied habitat. The US Fish and Wildlife Service also does not list the lynx as a species with the potential to occur in the affected counties. The Kahler area does not contain appropriate habitat (structure, composition, snow load, etc.) for lynx.

Coulter	Karen	19	15	The wolverine should have been analyzed in depth for this project as they are known to have home ranges of 150 square miles (not mentioned in the DEIS), have historically accrued in this area (there would need to be a stuffed wolverine in the Fossil, OR museum) and there have been sightings and dead wolverines found on the Malheur National Forest, an adjacent Forest. Further, the species is listed as a region 6 sensitive species and it may soon be uplisted to threatened. The snow tracking surveys in the 1990's on the Heppner District were confined to ___ or roads and were very limited and inadequate. * [Highlighted: "Confirmed observations of wolverine have occurred in the last several decades in lower elevation areas of Oregon."] * [Highlighted: "Potential foraging habitat is present in the analysis area."] * [Highlighted: "â€¦ no low disturbance backcountry	232	Refer to pages 57-58 in the EIS or pages 127-128 in the Wildlife Specialist Report for a discussion of the wolverine. Updates have been added to the EIS and Wildlife Report regarding the status of this species. It was dropped from consideration as a Threatened species under the ESA. Areas that are considered potential foraging habitat (forested stands) are present in the Kahler area; however they are considered poor quality. Back country habitats typically associated with wolverine occupancy are those lying at higher elevations, typically in wilderness areas. The Kahler area does not contain these areas, extensive subalpine forest, or potential denning habitat. For these reasons, the wolverine was not fully analyzed in the EIS; there would be a "No Impact" determination for this species.

Coulter	Karen	19	16	Page 82 * Lewis woodpeckers have been nesting on my land (1/4 mile of the project area to the south and within Wheeler fire's perimeter) for at least three years and White headed woodpeckers have been foraging on my land (which was burned) since the fire.	233	Comment noted.

Coulter	Karen	19	17	Page 83 * There is a legal obligation to protect the viability of listed species -especially the Endangered listed species like the Grey Wolf. This obligation does not end if there is no denning habitat in the area or it is considered "marginal" habitat. * [Highlighted: "Currently, the gray wolf is considered aâ€¦ federally listed as Endangered west of State Highway 395. The wolf is classified as Endangered in the Kahler analysis area."] * These are convenient assumptions for eradicating wolves, which ODFW is known to do. Pointing to the paragraph that starts with, " There are currently eight wolf packs known to occur in northeast Oregonâ€¦" * [Highlighted: "Unconfirmed sightings of gray wolves have occurred on the District in the past several years."] There was a photograph taken of a radio collard wolf (OR 7) in Wheeler county.	234	Impacts on the gray wolf are discussed on pages 188-189 in the EIS. There are currently no known resident wolves on the Heppner Ranger District. This section has been updated regarding new information pertaining to wolf occupancy on the adjacent North Fork John Day Ranger District. As wolves are a habitat generalist, impacts to potential prey are also assessed.
Coulter	Karen	19	19	Who wrote this, the Forest Service? Referencing to "North American Bird Conservation Initiative 2010".	235	The reference for the document is available in the Literature Cited section of the Wildlife Report and EIS.

Coulter	Karen	19	18	[Highlighted: "No active or historic northern goshawk nests are known to exist in the analysis area."] * Actually there was a nesting pair of goshawks in the project area prior to the Wheeler Point Fire within the fire perimeter. * [Highlighted: "Goshawk were observed at several locations, including Units 23 and 99."] * Drop all sale units where goshawks have been seen and surrounding suitable habitat. See our survey sheets also.	236	No goshawk nest records are present in the Wildlife database of record, which contains incidental observations, sites (such as known and histroic nests), and surveys. Impacts to goshawk are discussed on pages 194-198 of the EIS. Efforts are ongoing to find nests and other features that may be present in proposed treatment units. If a nest is located, Forest Plan standards would be met and design measures implemented to protect these features and associated post-fledging areas.
Coulter	Karen	19	71	[Highlighted: "All ground disturbing activities included in the list of past, present and reasonably foreseeable activities for the Kahler project in the EIS (Chapter 3) are relevant to cumulative effects analysis for DSC."] So why aren't the actual on-the-ground potential cumulative effects discussed? What would be the effects to streams, water quality, fish, amphibians, riparian plants, ect.?	237	See Response 362 regarding streams and water quality. Also, see the Soils Report. Class IV streams are classified as "intermittent" which means that water only flows during rain or runoff events. Therefore there are no fish in these Class IV streams. Riparian Management Objectives direction can be found in DEIS page 113 under PACFISH.

Coulter	Karen	19	28	[Highlighted:"â€¦ the remaining 22,917 acres (about 69.8 percent) are developed and managed (contain evidence of past harvest and forest roads)."] Page 98 * The Kahler project area has already been heavily logged and roaded ("developed") and really needs the "other undeveloped lands" that still exist to protect fish runs, water quality, soils, wildlife habitat, carbon storage, and recreational values in the area.	238	As discussed in the response to comment 19-26 and 19-31, the Forest Plan already made the decision where management is and is not appropriate.
Coulter	Karen	19	1	Only 5.1 miles of that habitat are accessible to steelhead due to a 12 foot high waterfall on Henry Creek."] Where is this 12 foot high waterfall?	239	The waterfall on Henry Creek is located just inside the forest boundary.

Coulter	Karen	19	221	Pileated woodpecker area management Indicator species for other species' habitat needs, including secondary cavity users Pileated nest and roost holes. They cannot be dismissed as unnecessary, inconvenient, or out of place. We found Pileated woodpeckers in suitable habitat in the Kahler area, which means it had large and old growth live Grand fir and Douglas fir for foraging and nearby old growth Ponderosa pine for nesting as well as sufficient canopy closure. Pileated woodpeckers tended to be in riparian drainages and higher elevation moist mixed conifer, where they naturally occur. See our survey sheets and photos. * Again the Forest Service switches to the Forest scale of analysis to artificially minimize	240	This species is not dismissed in the EIS as unnecessary or not belonging in the Kahler project area. This species is present, and was historically present in pockets of dense dry forest and other wetter areas. Impacts are assessed in the EIS on pages 163-170. Large, old Douglas-fir and grand fir, and trees less that 21 inches dbh that exhibit old growth characteristics would be retained in proposed treatment units. Proposed activities will aid in moving existing stands toward or to maintain existing old forest single stratum ponderosa pine stands, and will provide for heterogeneity. Where available in proposed units, dense Douglas-fir and grand fir pockets would be a priority for retention as untreated skips.

Coulter	Karen	19	3	10' wide pool should have 96 such pools per mile? * What are all these numbers? [In reference to 2nd row, 2nd column] * ? [In reference to the last row in the 2nd column "<10, mean wetted width divided by mean depth."] * ? [[In reference to the footnote "**To calculate the standard pools/mile using ICBEMP value of 0.028 for specific widths 147.8/channel width = standard pools/mile."]	241	I believe you are referring to the Interim Riparian Management Objectives (RMOs), which are simply objectives (standards) from which we measure change. As long as we are not moving away from RMO's we are meeting the objectives. The value 10 relates to the wetted width of the stream. Therefore a stream 10' wide should have 96 pools/mile to meet the RMOs. The top row of numbers refer to the stream width and the row directly below those values corresponds to the number of pools/mile to meet the RMOs. The wider the stream the less pools per miles. PACFISH RMOâ€™s are intended to apply to fishbearing Rosgen (1996) C-type channels. These types of channels are most commonly found in low-gradient channels in wide alluvial valley bottoms, but since the Kahler Project streams/stream reaches are located in narrow, moderate to steep gradient valleys the Interior Columbia Ecosystem Management Program (ICBEMP) pool frequency values were used to determine the number of pools per mile depending on stream width. For example, monitoring protocol for determining pool frequency requires count of only pools greater than 1 meter (~3 feet) deep in low gradient

Coulter	Karen	19	21	[Highlighted: "The majority (87%) of the analysis area is made up of dry upland forest habitats. The dry forest habitat type includes coniferous forest composed exclusively of ponderosa pine, or dry stands co-dominated by ponderosa pine and Douglas-fir or grand fir (Altman 2000)."] Actually the Kahler area is far more variable - especially in riparian drainages on north to northeast slopes, and at higher elevations, than this "dry" forest 87% assumption and description suggests. There are a lot of moist microclimate habitats that are not really dry forest and should not be managed as if they were - see our survey sheets and photos. These include moist Twin flower PAGs and pine, etc.	242	Comment noted. Where available, dense dry forest habitat will be retained in skips to provide habitat for dense forest associated wildlife. These skips will comprise 10-15% of proposed treatment units.

Reichgott	Christine	18	2	Our review of the DEIS has identified some questions and concerns that we recommend be addressed in the final EIS. These concerns relate principally to the level of detail within the DEIS on treatments proposed within the Riparian Habitat Conservation Areas (RHCAs) and the role of monitoring in project implementation. 1 http://www.fs.fed.us/pnw/pubs/pnw gtr897.pdf Equipment Exclusion in RHCAs Table 2-2 provides a skid trail location key (that is heavy equipment exclusion zones or buffers). This table conveys important information for the decision maker and ultimately the sale administrator. The table itself, however, could be reformatted for clarity. It is not entirely clear what criteria are driving the "yes/no" designations in columns 2 and 4. For example, at the top of the table it appears that if the first 100 feet from the stream edge is anything other than 0-20% slope, there can	243	Table 2-2 has been revised for clarity in the FEIS.

Coulter	Karen	19	22	[Highlighted: "In particular, bird species highly associated with snags and old-forest conditions have declined. These species include white-headed woodpecker, Flammulated owl, white-breasted nuthatch, pygmy nuthatch, Williamson's sapsucker, and Lewis' woodpecker."] All of these declining bird species listed (on DEIS pg. 87 par. 2) as associated with snags and old forest conditions are present in the Kahler project area and are likely to decline further if proposed large tree logging and heavy tree logging goes through with the Kahler sale. I have seen all of them in the Kahler project area or adjacent to it with the exception of the Flammulated owl, which I have heard adjacent to it on my land - prior to the Wheeler Point fire.	244	The species listed are associated with large snags and old forest conditions in single stratum stands, which have either been converted to multi-strata mixed conifer stands, or extensively harvested. Moving stands toward an old forest single stratum structure would improve habitat conditions for these species. Proposed treatments would retain large trees (in clumps and singles), complex structure, accentuate existing openings, and retain untreated skips.

Coulter	Karen	19	23	[Highlighted: "â€¦primarily due to timber harvest and fire suppression (Wisdom et al. 2000). Habitat restoration is the primary strategy for conservation of landbirds associated with this habitat type."] Habitat restoration in this case means not logging big trees of suitable habitat and not suppressing fire.	245	Restoration is considered to be activities that move stands into or toward an old forest single-stratum condition. The activities proposed in the Kahler Project would do this. Please refer to the Purpose and Need in Chapter 1 of the EIS. Also refer to "restoration" in the glossary of the Forest Vegetation Report.
Coulter	Karen	19	83	It's important to note that streams, fish, and other aquatic and riparian species are adapted to wildfire (even high severity fire) but not to logging impacts. Why is this not acknowledged and discussed?	246	The impacts of logging and burning on fish and fish habitat are widely known. The activities in the Kahler Project are designed to reduce these these impacts through project design and Best Management Practices. The State of Oregon Department of Water Quality has set the lethal temperature limit for salmonids at 77 degrees F.

Coulter	Karen	19	26	* Given the fact of potential wilderness areas and inventoried roadless areas in the Kahler project area, it is reamable and necessary to protect the undeveloped lands (not logged or roaded) from logging and roading to protect the viability of Management Indicator species, listed species, and wildlife species sensitive to human disturbance and needing denser forest, such as elk. The forest plan, after all, is badly outdates and much inventoried old growth (about 50% on the Heppner District) was lost to logging before the latest inventory (which I took part on the Heppner District in 1992) and the same holds for most previously wild, undeveloped lands existing at the time of the Forest Plan which were not Inventoried Roadless Areas. * [Highlighted: "There are no forest-wide or management area standards specific to other undeveloped lands in the Umatilla Forest Plan. All lands, including undeveloped lands,	247	Regardless of the age of the Forest Plan, it did take into consideration the need for unmanaged areas across the entire Umatilla National Forest. As a result, management areas such as A1 Nonmotorized Dispersed Recreation were delineated (one of which occurs on the east side of the Heppner Ranger District). The Forest Plan also took into consideration the need to produce timber, forage, developed recreation, wildlife habitat, etc and again identified areas on the forest where such management activities would occur. The projects p roposed under Kahler are in compliance with these decisions made by the Forest Plan. Impacts to MIS (elk, the Primary Cavity Excator group, pileated woodpecker, marten, and three-toed woodpecker) and ESA/R6 Sensitive Species are disclosed on pages 141-174 and 174-194 of the EIS.

Coulter	Karen	19	2	This is terrible - some of these streams (major streams) had not been surveyed since 1991, 1992, or 1994. Evidently the Forest Service has been not monitoring them or their resident fish for about 20 years! So apparently surveying only happens when a timber sale is planned, but not for the Wheeler Point post fire sale.	248	With respect to stream surveys conducted in the early 1990's; Davis Creek was surveyed in 1992 and it is a tributary to Henry Creek, however, a 12' high waterfall just inside the forest boundary prevents steelhead from accessing forest streams above the waterfall. Therefore, with no steelhead or designated critical habitat no stream surveys have been conducted on Davis Creek since 1992. Whiskey Creek was surveyed in 1994 and is a tributary to Tamarack Creek, however, since there are no steeelhead or steelhead designated critical habitat in Whiskey Creek no further surveys have been conducted.
Coulter	Karen	19	117	Are there any Redband trout (sensitive listing) in streams in the project area? If so, why aren't effects to Redband trout discussed?	249	Redband trout are not a threatened or endangered species therefore redband trout are not discussed in the DEIS.

Coulter	Karen	19	115	[Highlighted: "There is no need to extend the cumulative effects analysis area beyond the Kahler affected environment because forest vegetation conditions affected by implementation of either alternative 2 or 3 are common and widely distributed throughout the Kahler planning area, which is within the Kahler watershed."] this actually demonstrates the need to analyze cumulative effects beyond just the Kahler project area, as wildlife, fish, soils, water quality, recreational opportunities, etc. Are being and have been decimated by heavy logging and roading across the Heppner District.	251	See Hydrology Appendix in FEIS. Cumulative effects are analyzed at the scale of the Kahler Watershed. Also see Response 362.
Artley	Dick	1	35	you started and ended this paragraph in a competent manner. Then you remembered Martin's direction to always tell the public the No Action effects will be dreadful and disastrous using whatever lies you think the public will swallow. It's sad that you lowered yourself to use the "it will all burn up and be destroyed if it's not logged" nonsense.	252	This comment does not warrant changes to the project or analysis. See 'No Action' effects analysis for Botanical Resources in Chapter 4 on page 294-297 in Kahler FEIS. One sentence explains the potential degradation of rigid sage community in Kahler Creek Butte pRNA from risk of wildfire and resultant ventenata grass invasion.

Artley	Dick	1	56	One again, it's critical that American tax dollars be spent on eradicating noxious weeds safely. It's criminal to risk causing the devastating health problems scientific research conclusions indicate are caused by glyphosate contact. Consider these comments including Opposing Views Attachment #9a as notification that you are covering up glyphosate health risks per section (a)(1) of 18 U.S.C. Â§ 1001 quoted below, therefore you are aware of what you are about to do. (a) Except as otherwise provided in this section, whoever, in any matter within the jurisdiction of the executive, legislative, or judicial branch of the Government of the United States, knowingly and willfully - (1) falsifies, conceals, or covers up by any trick, scheme, or device a material fact; (2) makes any materially false, fictitious, or fraudulent statement or representation; or (3) makes or	253	This comment does not warrant changes to the project or analysis. See responses #161,163.

Storm	Rex	16	3	Effects of Alternative 1- No Action, are not fully-addressed. The DEIS fails to equitably describe the consequences of the "No Action" Alt. 1. The document only articulates what would not happen. It would be more accurate to clearly identify the realistic expected effects of "no action," by stating comparable and commensurate effects into the future-on similar terms as the descriptions of effects stated about Alts. 2 & 3. These expected effects might be simply stated as, "Alt. 1 would increase wildfire intensity, offer no economic contribution, and add long-term wildlife impacts to the landscape."	254	The No Action Alternative provides a baseline for comparison of alternatives to guage trade-offs that invariably occur as a result of management activities. The analysis of the No Action Alternative requires disclosure of these trade-offs for various resource areas and habitats. Perpetuation of the current management situation (with no intervention) would benefit some species, habitats, and resource areas and be detrimental to others. As predicting potential impacts into the future is difficult given the uncertain nature of some activities and events (e.g. wildfire), resource specialists provide a range of potential impacts, including those that may or may not occur as a consequence of taking no action. Direct, indirect, and cumulative effects are disclosed for terrestrial wildlife species in Chapter 4 of the EIS on pages 126-205 and in Appendix M (Terrestrial Wildlife Specialist Report); edits have been incorporated into the No Action discussions in the Wildlife Report based on information provided by the fuels specialist. Effects analysis for 'No Action' Alternative for botanical resources is located on p. 302 in Chapter 4 of the Kahler EIS.

Jerome	Irene	15	18	What are the health risks associated with doing nothing versus providing a project that restores the area? This should compare the health impacts if the area burns due to no treatment versus treatment. What are the S/E benefits of treating stands and returning them to historic levels that allow in-prescription underburns versus the cost and impacts of wildland fire? There are numerous studies and articles related to the S/E impacts to health associated with wildfire. Recent articles that I am providing can provide a quick glimpse of why and how the smoke impacts should be a part of your analysis; http://www.lagrandeobserver.com/News/Local-News/Wildfire-smoke-brings-unhealthy-air-to-Enterprise-and-other-communities http://www.rgj.com/story/tech/environment/2014/07/18/dri-study-might-link-wildfire-soot-climate-change/12865807/	255	This is beyond the scope of the project analysis. Large wildfires typically burn with a higher intensity and burn more acres creating emissions that are higher than that of prescribed fire. Consumption is also higher during wildfires which contributes to the greater production of emissions. Wildfires may also occur under weather conditions which limit smoke dispersal. However, it is not feasible to predict the health issues that may result from a wildfire, as there are too many variables related to when, where, and how a wildfire will burn and what the resulting smoke will do. We predict smoke for prescribed fire, because, for the most part, we can control and/or predict the conditions (fuel moisture, weather, etc.) under which we burn.

Coulter	Karen	19	134	Yet the CI dedicated old growth areas are not supposed to be logged. Suddenly changing analysis to the scale of the Forest instead of the project area or subwatershed does not change this or make logging DOGs acceptable.	256	A Forest Plan amendment will be required to change acres in the vicinity of Tamarack Lookout from the C1 to E1 management area, and to replace these acres in appropriate, adajacent habitat. The scale of the analysis for C1 is the watershed (project area). Old Growth units were designated to provide for a network over the entire Forest to provide for the viability of Management Indicator Species.
Coulter	Karen	19	135	Highlighted: "While it is difficult to accurately assess the actual number of acres that would be blackened, a general estimate would be 70%."] We are opposed to this much under burning in a project area burned by the Wheeler Point Fire and also by later under-burning (which torched patches of the remaining green trees).	257	Underburning would be low intensity ground fires with occassional single or group tree torching. From a historical context, this type of burning is appropriate for the area. Please refer to the Fuels Specialist report for additional information. The fuels report states that approximately 50 to 70 percent of the burn area would actually be blackened. The main goal of burning within the Wheeler Point fire perimeter would be to open the ground to reduce competition for reforestation purposes.

Coulter	Karen	19	136	[Highlighted: "Past timber harvest reduced habitat connectivity and reduced the amount of late and old structure habitat available for designation under the Land and Resource Management Plan as C1 old growth."] Spruce budworm and other insect defoliation or "disease" creation of snags really isn't a problem for the old growth - associated species of birds and other wildlife. In fact, it often improves habitat conditions for them. Why isn't this disclosed?	258	Refer to pages 154-163 (primary cavity excavator group) in the EIS and to the Terrestrial Wildlife Specialist Report (Appendix M), pages 52-87. The value of insect infestations, wildfire, and other disturbance to wildlife are disclosed throughout the document.

Coulter	Karen	19	137	[Highlighted from pages 198 and 199: "Under Alternatives 2 and 3, there would be vegetative treatment in Old Forest Single Stratum stands; commercial thinning within these stands would require a Forest Plan amendment to allow these activities. Commercial thinning in these stands has the potential to affect the quality of thesestands for late and old structure-associated wildlife species. The "clumpy" nature of OFSS stands may be impacted by commercial thinning; existing clumps of young and mature trees may be thinned to meet basal area targets, which would reduce stand heterogeneity. While trees =21 inches DBH (of all species) would not be removed from these stands, young and mature trees less than 21 inches DBH may be removed, reducing the recruitment of trees (and eventually snags) =21 inches DBH in the mid and long term. Large snags	259	Maintenance of existing Old Forest Single Stratum stands would require a Forest Plan amendment due to the fact that treatment is occurring in an old forest structural stage that is currently below the HRV. Potential impacts associated with this activity are disclosed and quoted by the commenter.

Coulter	Karen	19	138	Page 199 * The highlighted paragraph above (on page 198) is a direct contradiction in the same paragraph of the DEIS. Which is it?	260	Unsure of the contradiction the commenter points out. The paragraph discloses that there may be impacts to clumps of trees, heterogeneity, snags, etc. The oldest trees would be retained, including all trees > 150 years old and all Ponderosa pine and larch >21 inches.

Coulter	Karen	19	139	So the DEIS admits (on pages 198-199) that planned commercial logging of old forest single stratum stands would significantly impair their ecological values as OFSS habitat -by reducing stand heterogeneity, reducing recruitment of large snags in the mid- and long-term, by removing existing large snags vital to OFSS -associated species, and by removing large Douglas fir and Grand fir. Therefore this logging should not be done as OFSS habitat is already at a deficit.	261	Currently the old forest structure is well below HRV in the single stratum, and within HRV in the multi-stratum (Table 3-5, FEIS). Harvest will trend the old forest single structure towards HRV. Old forest multi-strata will decrease with harvest, but remain within HRV (Table 4-4, FEIS). The increase in OFSS is from harvest within OFMS or UR (understory re-initiation) stands. To date, stand analysis and field reviews have confirmed very little OFSS within the Kahler Project. The portion of the EIS referenced (LOS section, pages 127-133) does not label impacts as "significant". Potential impacts are described, including potential impacts to existing and future snags, such that the Decision maker has a clear understanding of what will occur in treatment units.

Coulter	Karen	19	140	Increasing growth rates in individual trees is a silvicultural goal for tree farm plantation growing, not a benefit or desired condition to natural old growth and LOS stands or for forest restoration for such stands.	262	Residual trees would have additional light and moisture, which would in turn promote increased growth. In some cases, promoting increased growth of residual trees results in larger trees (and snags and downed wood) faster than would occur in overstocked, resource limited stands. While growth rates may increase, the consequences (reduced snag recruitment, etc.) of treatment activities are also disclosed in the EIS and Terrestrial Wildlife Specialist Report (Appendix M).

Coulter	Karen	19	141	[Highlighted: "â€¦smaller, competing understory and overstory trees and those uncharacteristic of the potential vegetation group would be removed. This may include some Douglas-fir and white fir that exceed 21 inches DBH that are less than 150 years old, based on visual assessmentâ€¦" "In the short term, some larger diameter trees that would provide future snag habitat would be removed."] Removing large diameter trees is not a short-term impact. Based on ICBEMP science and continuing loss of large tree structure since then (eg. to hazard tree removal), there is a huge regional deficit in large tree structure compared to historic conditions in the Blue Mountain region of eastern Oregon. Large trees are needed for associated bird and wildlife nesting and denning structure, including for Pileated and Northern Flicker woodpeckers, Northern goshawk, Great Grey owl,	263	The reference to "short term" impacts has been removed. The importance of large structure is well understood. The Kahler Project does not propose to remove all Douglas-fir and grand fir greater than 21 inches dbh. Only those that are interacting with desireable trees (generally larger ponderosa pine) may be removed. All others would be retained. There are also design measures that provide for retention of Douglas-fir and grand fir >21 inches dbh that are interacting with desireable trees; a portion would be retained as large standing or dead wood (see EIS page 20, Design Measure WL15). They may be girdled, topped, inocculated with disease agents, or felled and left.

Coulter	Karen	19	142	[Highlighted: "Reductions in canopy closure, canopy layers, and shade-tolerant tree species would reduce habitat for multi-strata adapted species currently using these habitats."] Note that the species associated with large tree structure planned for removal tend to be management indicator species (eg. Pileated, Lewis' and White-headed woodpeckers and American martens, focal species (eg Great Grey owl) and species candidates for up listing (eg Pace Fisher) -all need more habitat protection.	264	Direct, indirect, and cumulative impacts on MIS, Lewis' and white-headed woodpecker, and other ESA/R6 Sensitive species are disclosed in the EIS on pages 141-174, 183-187, 178-183, 174-178, and 188-194. Refer to the Terrestrial Wildlife Specialist Report for additional information regarding these species.
Coulter	Karen	19	143	[Highlighted: "Treatment in dry forest multi-stratum old forest stands would increase the proportion of old forest single-strata habitatâ€¦"] We are opposed to converting multi-strata LOS to single stratum LOS as both are needed for wildlife.	265	It is appropriate to move stands in an old forest structural stage that is above HRV into an old forest structural stage that is below HRV, based on the Forest Plan (Eastside Screens).

Coulter	Karen	19	187	We are strongly opposed to re-opening of so many miles of closed roads -58! Re-opened roads are more likely to be used by ATVs and also re-opened again by the FS in future timber sales.	266	#95 Refer to the Alternative Considered but Eliminated from Detail Study, Open Roads Only Alternative, in EIS on page 27. The potential impacts of opening up closed system roads are described in multiple locations in the EA, including the Rocky Mountain Elk section (pages 140-153, FEIS). Design Measures RD1 and RD2 (page 27) would be implemented to reduce motorized use of roads that are reopened for harvest and burning activites.

Coulter	Karen	4	47	The Forest Service is supposed to, and capable of, calculating estimates of greenhouse gas emissions from both fossil fuel emissions and tree carbon storage loss from timber sales like Kahler but refuses to do so, instead focusing on any indication that trees may not grow or survive as well to justify logging. This is biased analysis.	267	Timber management projects can influence carbon dioxide sequestration in three main ways: (1) by increasing new forests (afforestation), (2) by avoiding their damage or destruction (avoided deforestation), and (3) by manipulating existing forest cover (managed forests). Land-use changes, specifically deforestation and regrowth, are by far the biggest factors on a global scale in forestsâ€™ role as sources or sinks of carbon dioxide, respectively (IPCC, Intergovernmental Panel on Climate Change, 2000). Projects that create forests or improve forest conditions and capacity to grow trees are positive factors in carbon sequestration. The proposed action falls into this category.

Coulter	Karen	19	111	[Highlighted: "â€¦ the urban areas of Spray and Winlockâ€¦"] Winlock is an urban area? Give me a break. I live there. There's no town -just an old cemetary and widely scattered residences. Have you people writing this even been there? Please don't elevate Winlock to "urban" status just to justify fuel reduction/ theoretical fire reduction logging. This is just outright deception. Spray is all of 150 people and at least 11 Â¼ miles from the project boundary.	268	The communities of Winlock and Monument are identified as Communities at Risk within the County Wildfire Protection Plan (CWPP) identified boundaries of the Wildland Urban Interface (WUI) adjacent to the Kahler project area. The communities are primarily defined as an Intermix Community where structures are scattered throughout a wildland area; they can either be clustered close together or spread out to one structure per 40 acres. (Kahler Fire and Fuels Report, Affected Environment).
Coulter	Karen	19	164	There are far too many roads in the Kahler project area already and closed roads were closed for good reasons (eg. wildlife security, hydrological connection, redundant with other roads.) It is evident also that the Heppner Forest Service staff plans to re-open and re-use roads earlier promised to be temporary. Therefore we ask that no "temporary" roads be built or re-used and that no closed roads already regenerated or not open for administrative use be re-opened.	269	See Response 95

St.Martin	Amanda	3	4	I am opposed to any proposal that includes logging, road building, or other disturbances in native, never before logged forest areas.	270	Position, No Rationale
Artley	Dick	1	88	Logging Road Construction and Reconstruction cause Significant Ecological Harm. Please Analyze an Alternative in Detail that does not Construct or Reconstruct any New Roads. Such an alternative is not Unreasonable.	271	See Response #95
Coulter	Karen	19	260	This is a ridiculously inadequate analysis of potential impacts to recreation. What about effects to elk and deer hunting, user created dispersed (and logged) camps, scenic and aesthetic value after heavy logging, etc. Clearly you FS folks don't care about recreation in the area, but we do.	272	This is a duplicate from an earlier letter. Please see response to comment 4-58.

Coulter	Karen	4	66	Page 272 * We are strongly opposed to the logging and roading of "other undeveloped lands" and want all sale units with logging or roading in these undeveloped areas dropped. Dropping these areas would benefit elk, marten, gray wolf, pileated woodpecker, and other species not analyzed such as Canada lynx (which I saw very close to the SW border of the project area.), and Pacific Fisher. Dropping these sale units would also greatly benefit recreation, biodiversity, ecological integrity, and carbon storage.	273	This is a duplicate of comment 4-63.
Coulter	Karen	19	262	This is B. S. Visual quality would be degraded for decades at least probably for the rest of my life living here! "Recovery" is not just the disappearance of slash and soil disturbance but the loss of the trees and diversity the sprint flow will probably be lost also. These are extreme impacts not just to recreation and visual quality but to the quality of our lives out here I've lived here 23 years and value these places deeply the sense of place would be lost.	274	This is a duplicate of a comment from an earlier letter. Please see response to comment 4-60.

Coulter	Karen	19	261	We are strongly opposed to logging in Fairview campground!! please don't log our campground and Spring area! proposed logging may decimate its values and destroy my continued fond memories of this special place. It would not be the same at all. Don't any of you forest service staff care about these places? This is horrible.	275	Please see response to comment 4-59.

Coulter	Karen	19	144	We are concerned that the heavy logging (and extensive logging) planned would actually remove a lot of existing snags as hazard trees, with more than "minimal" impacts to wildlife. (See DEIS pg. 199). We are also concerned that planned burning of the entire analysis area, including moist and cold upland forest, would eliminate needed existing heterogeneity across the landscape and associated biodiversity of plants and wildlife. Not all areas would burn at any given time (even over 10 years) with wildfire. We ask that you not burn moist, cool, and cold forest pockets in the project area, including moister mixed conifer stands with old growth and large Grand fir and moist drainages, such as Tamarack creek and most major southwest portion of the analysis area and north central and far west drainages.	276	Monitoring indicates that a small proportion (4 to 6 percent) of existing snags are impacted by hazard tree felling. Please refer to the Terrestrial Wildlife Specialist Report, pages 52-72, for a discussion of the existing condition of snags and primary cavity excavator habitat, and existing monitoring information. Refer to the EIS beginning on page 134 for a discussion of the expected impacts to snags. Under the proposed burning, not all acres would be affected. It is expected that only 50 to 70 percent of burn unit acres would actually be blackened. It is also expected and desired that mortality associated with burning will occur; snags (singles and groups) created by burning provide valuable habitat for dead wood-dependent species and will aid in maintaining and/or moving stands toward appropriate dry forest conditions after implementation.

Coulter	Karen	19	145	[Highlighted: "While there is a potential for mortality of individual green overstory trees, and large-diameter snags and downed wood to be consumed during burning (especially those in later stages of decay),â€¦" "â€¦where pre-burn densities exceed the minimum Forest Plan standards."] It's certainly not necessary to burn within the burn perimeter of the Wheeler Point fire or other recent under-burnings or where areas are deficient in snags and large down wood (under Forest Plan standards). This project should be scaled down significantly in general.	277	Fine scale information regarding snag densities is not available for much of the project area. As stated in the Primary Cavity Excavator/Snag section, a wide range of snag conditions (from zero to very high densities) are currently available on the landscape; this condition would have also been present historically. To restrict low or mixed severity fire from the landscape would perpetuate past fire suppression impacts and limit one of the primary disturbance factors responsible for snag creation historically.

Coulter	Karen	19	146	Highlighted: "Since 1975, there have been 9,640 acres of commercial thinning, 4,084 acres of regeneration harvest, and 4,826 acres of overstory removal in the analysis area. Within harvested stands, large trees were targeted for removal; snags and downed wood (density and average size) were also reduced in these stands. Commercial and regeneration harvest reduced connectivity of late and old structure habitats, causing fragmentation of late and old structure wildlife habitat that was historically large and relatively homogeneous. These impacts are still evident on the landscape currently. Wildfire has also affected late and old structure habitat in the analysis area."] A lot of the heaviest logging in the area may have been prior to 1975, and thus not included in these acreage figures. Planned overstory and large tree removal and logging in already reduced connectivity is contrary to	278	Past activities, including those that occurred prior to the maintenance of reliable records, are accounted for in the existing conditions described in the EIS and Terrestrial Wildlife Report. Refer to pages 3-5 in the Terrestrial Wildlife Report and pages 41-42 in the EIS under "Scale of Analysis" for more information.

Coulter	Karen	19	148	The cumulative effects discussion for late and old forest structural stages is inadequate in that it fails to analiyze the actual effects to LOS forest -dependent species, or even to name those species that would be negatively affected, even though those species that could benefit (if the loss of large trees, large snags, and large down wood is ignored) are named. Thus the cumulative effects analysis is also biased. The species that would be negatively affected include MIS, focal species, and sensitive listed species -eg. pilated and Lewis woodpeckers, goshawks, etc..	279	Please refer to the affected environment section for late and old structure habitat (pages 43-44) and the effects analysis in the EIS (127-133). Also refer to the Terrestrial Wildlife Specialist Report (pages 8-16) for this information. Impacts to a number of late and old structure associated species are disclosed in the EIS and Wildlife Report. Refer to the MIS (pileated woodpecker, marten, primary cavity excavators, three-toed woodpecker), Threatened, Endangered, Sensitive Species, northern goshawk, and Neotropical Migratory Bird sections on pages 141-174, 174-194, 194-198, and 199-205 of the EIS for a discussion of these impacts.

Coulter	Karen	19	149	[Highlighted: "When the expected effects of this alternative are combined with the residual and expected effects of past, present, and reasonably foreseeable future activities, actions, and events in the analysis area, there would be no cumulative reduction of late and old structure habitat in the analysis area. All of the action alternatives would contribute to cumulative effects in old forest stands by reducing canopy closure and structural complexity; this would positively impact some species while negatively impacting others.] this conclusion makes no sense based on the discussion on the previous page (DEIS pg. 200) and is immediately contradicted in the same paragraph!	280	There would be no net loss of old forest habitat under either of the action alternatives. Old forest multi-strata stands would be moved toward more open conditions (reduced canopy closure and structural complexity/layers), which would improve habitat for some old forest species, while reducing habitat quality for others, such as the pileated woodpecker.

Coulter	Karen	19	150	[Highlighted: "Treatment of stands currently in an OFSS structural condition has the potential to cumulatively impact the quality of these stands. Desired features, including snags, tree clumps, medium-sized ponderosa pine, and others would likely be reduced by these activities, further exacerbating past habitat changes resulting from harvest and fire suppression. The negative effects of reduced structural complexity (canopy layers, understory vegetation, felling of snags that are a hazard) could result in reduced use of available habitat by some species."] These listed impacts are also inevitable for logging in existing OFMS forest but this is not disclosed or analyzed. * Why are negatively affected species not listed?	281	Currently the old forest structure is well below HRV in the single stratum, and within HRV in the multi-stratum (Table 3-5, FEIS). Harvest will trend the old forest single structure towards HRV. Old forest multi-strata will decrease with harvest, but remain within HRV (Table 4-4, FEIS). The increase in OFSS is from harvest within OFMS or UR (understory re-initiation) stands. To date, stand analysis and field reviews have confirmed very little OFSS within the Kahler Project. Effects on old forest stands (OFSS and OFMS) are discussed on pages 127-133 in the EIS. Refer to these pages for a description of expected impacts to existing dry forest OFMS stands. There is no reason for not listing species that would experience reductions in suitable habitat by moving dense, overrepresented old forest stands toward a more open late structure condition. These species would include the pileated woodpecker, which is analyzed later in the document (pages 163-170).

Coulter	Karen	19	263	The forest service would destroy this area for all the residents including all of its human neighbors. Heavy logging does not create desirable visual diversity.	282	Please refer to edits made to pages 304-307 of the FEIS. The design feature of using variable density tree thinning with skips and gaps, with up to 15% of each unit remaining untreated (FEIS page 10), would provide visual diversity throughout the harvested area. In addition, mitigation identified on pages 26-27 of the EIS (VQ1-VQ13) are designed to protect visual quality along Highway 207, within Fairview Campground, and at Tamarack Lookout rental cabin. VQ2 specifically addresses visual diversity by requiring that thinning and planting leave irregularly spaced trees and that any planting include at least 2 tree species with no more than 65% in a single species.

Coulter	Karen	19	152	[Highlighted: "Alternative 2 would have a greater impact on habitat used by multi-strata old-growth associated wildlife than the other action alternatives in the short and mid-term since it reduces canopy closure and structural complexity on more acres (400 acres) of dry upland forest OFMS than Alternative 3."] We are strongly opposed to artificially converting existing old forest multi-stratum and moister mixed conifer forest to contrived OFSS. Drop alt. 2's 400' acres of OFMS to OFSS conversion. (See DEIS pg. 201). Species already greatly reduced by past logging that need this OFMS habitat include Pacific fisher and American marten, as well as Northern goshawk and Pileated woodpecker, all of whom are also harmed by the current region 6 emphasis on logging denser forest wherever it exists in eastern Oregon.	283	Proposed treatment activities would move the analysis area toward historic ranges for old forest single strata and multi-strata habitat, which is consistent with Forest Plan direction. Direct, indirect, and cumulative impacts on the pileated woodpecker, marten, and goshawk are discussed in the EIS on pages 163-170, 170-172, and 194-198, respectively. The fisher was not analyzed because it is not known or expected to occur on the Umatilla National Forest.

Coulter	Karen	19	153	Highlighted: "Under this alternative, the most acres of late and old structure habitat would be treated. Fuels created by harvest activities (slash) would increase the risk of large diameter green tree, snags, and downed wood being affected during underburns. Because this alternative would treat commercial-sized vegetation on the most acres and create the most slash, it would also have the greatest risk to these features. Project design criteria would be implemented to reduce these risks."] Logging LOS currently below HRV is not consistent with the eastside screens, or a Forest Plan amendment would not be planned. The eastside screens are part of the Forest Plan, so logging LOS under HRV is also not consistent with the Forest Plan.	284	The Forest Plan would be amended to allow these activities to occur.

Coulter	Karen	19	156	It is impossible to predict the effects to OFSS by the year 2065 (about 50 years into the future!) given tremendous uncertainties regarding future logging, wildfires, etc. so such projections seem disingenuous and designed to downplay immediate ecological impacts.	285	A portion of the change in structure would be immediate. A portion will also require further growth through time to move into old forest stand structures. Modeling for Kahler Dry Forest Restoration was statistically validated. For further information refer to Forest Vegetation Modeling and Database Creation, a process document for Kahler Dry Forest Restoration. Also refer to the Essential FVS guide, section 6.4 found at the following website: http://www.fs.fed.us/fmsc/ftp/fvs/docs/gtr/EssentialFVS.pdf
Coulter	Karen	19	158	Justifying "short term" or immediate impacts based on long term theoretical benefits has been found in courts not to be reasonable analysis.	286	The analysis discloses immediate impacts as well as those that are expected to occur in the future. Effects disclosures are not justification for actions, they describe the impacts, through time, of the proposed activities.

Coulter	Karen	19	159	Obviously logging OFSS under HRV is not consistent with the eastside screens and the Forest Plan, or regional direction, or a Forest Plan amendment would not be required to allow such logging. This is not a site-specific need or a justifiable Forest Plan amendment. Repeated across eastern Oregon forests, it has significant and precedent setting cumulative effects.	287	Direct, indirect, and cumulative impacts of the proposed actiivites, including those requiring a Forest Plan amendment, are disclosed in the EA and the Wildlife Specialist Report. Also refer to the Forest Plan Amendment Related to Eastside Screens Wildlife Standard section of the Forest Vegetation Report.

Coulter	Karen	19	160	[Highlighted: "across the landscape and within the project area with dense stands composed of medium to large trees, corridor widths greater than 400 feet, and by two or more corridors (where these attributes are available). Indirectly, connectivity habitat would change over time. With the existing management direction including fire suppression, stands in the project area would continue to grow into dense, multi-layered stands, improving the quality of connections for some LOS associated species (e.g., pileated woodpecker)."] Actually the proposed action alternative would perpetuate fire suppression through fuel reduction -the goal of the project is fire reduction -and heavy logging (including of large, more fire resistant trees) would encourage more in growth of small, dense, highly flammable trees, increasing fire risk later, and there are no plans stated to discontinue	288	The effects analysis under Alternative 1 (No Action) has been edited in the wildlife report and EIS to reflect information provided by the fuels specialist. Commenter is correct that high severity fire would continue to be possible under all alternatives.

Coulter	Karen	19	161	Connectivity corridors should not be logged in general due to their intended function as wildlife cover (hiding and thermal) for disposal between high quality LOS refugia, but especially should be logged in areas that are naturally denser, such as riparian drainages and moister mixed conifer stands, which probably encompasses most identified connectivity corridors.	289	The best available connections were identified between late and old structure and Forest Plan Dedicated Old Growth stands. At times, these followed drainages. At other times, the most dense and mature stands were located in the uplands. Design measures would be implemented that provide higher basal area retention and encourage the placement of skips in mapped connectivity corridors. Refer to page 20 in the EIS (Design Measure WL16).

Coulter	Karen	19	31	* [Highlighted: "Human influences have had limited impact to long-term ecological processes within the other undeveloped lands. Opportunities for primitive recreation are limited to gathering of wild foods, hiking, hunting, and dispersed camping."] These are reasons that the "other undeveloped" lands are special to me and have unique values, such as better wildlife habitat, natural reference conditions, a sense of wilderness and solitude, and many opportunities for primitive recreation that we engage in, such as hiking, dispersed camping, wildlife observation, plant diversity, and gathering of wildfoods and native medicinal herbs -less or undisturbed settings such as undeveloped lands are better and more valuable for these pursuits.	290	We agree that undisturbed settings benefit the more primitive types of recreation. The Forest Plan identified a number of management areas where such settings are provided, such as the A1 Nonmotorized Dispersed Recreation management area on the east side of the Heppner Ranger District. In addition, Congress set aside 20,000 acres of the Heppner Ranger District in the Skookum, Potamus, and Texas Butte Inventoried Roadless Areas (IRAs). The Skookum and Texas Butte IRAs are about 10 miles from the Kahler project area.

Coulter	Karen	19	165	[Highlighted: "This has resulted in improved connectivity for some multi-strata and dense overstory - associated wildlife." "Commercial and regeneration harvest reduced connectivity of late and old structure habitats, causing fragmentation of late and old structure wildlife habitat. These impacts are still evident on the landscape currently. Wildfire has also affected connectivity habitat within the analysis area."] So based on the discussion of cumulative effects (DEIS pg. 203) the Kahler area still needs more connectivity restored from past impacts -logging existing connectivity.	291	Past activities in the analysis area have created the existing condition. Stands that would have provided connections have been harvested in the past; that is not to say that connectivity is available elsewhere in the analysis area. The EIS and Wildlife Report disclose that connectivity is poor in some areas due to past timber management, fire, natural potential, and other factors.

Coulter	Karen	19	166	Highlighted: "A large proportion of the acres within this fire no longer provides a structure and composition that would satisfy the connectivity requirements of the Regional Forester's Forest Plan Amendment #2 (Eastside Screens, USDA 1995)."] * [Highlighted: "Connectivity habitat would continue to meet the intent of the amended Forest Plan standards under these alternatives. While the density (canopy cover) of connectivity corridors would be reduced,â€¦"] * This (the first thing highlighted) conclusion of no cumulative impact to connectivity ("no cumulative reduction in connectivity") is disingenuous and unprofessional at best. Connectivity habitat apparently would only meet the intent of amended Forest Plan standards -amended in order to violate existing Forest Plan standards. Based on the cumulative effects discussion of DEIS pages 203-204, there is obviously no site	292	The Forest Plan was amended to adopt the Eastside Screens; there would be no amendment under the Kahler project to eliminate the connectivity standards in the Forest Plan. In dry forest habitat, there would continue to be functioning connectivity after treatment; the quality of these stands would change. See discussion on pages 133-135 of the EIS. In terms of dry forest habitat, connectiity corridors would likely provide similar habitat as would have been expected historically.

Coulter	Karen	19	167	This no action discussion of effects to snag replacement trees ignores the obvious that a stand replacement fire has already happened, so the area is not outside of HRV for fire but does currently need more green trees overall, not less. Further alternative 2 and 3 don't necessarily prevent wildfire.	293	The effects analysis under Alternative 1 (No Action) has been edited in the wildlife report and EIS to reflect information provided by the fuels specialist. Commenter is correct that wildfire (mixed severity) would continue to be possible under all action Alternatives.

Coulter	Karen	19	168	Highlighted: "Past harvest activities have directly affected green tree replacements by reducing stand densities. Some of these harvested acres continue to be deficient in green trees and snags due to past harvest methods and the time that has passed since these stands were treated. Past wildfire caused heavy overstory mortality in the western portion of the analysis area, affecting snag dynamics. There is a considerable lag time between when fire-created snags fall and when the regenerating stand contains large enough trees to produce effective snags. "] The cumulative effects discussion for snag/ green tree replacement fails to consider in detail or quantify the loss of near term snag replacement trees from planned logging of large trees (greater than or equal to 21" DBH) and to consider the cumulative effects of this plus the effects of this plus the effects of the Wheeler Point fire and past logging	294	Snag recruitment is addressed in the green tree replacement section and in the primary cavity excavator section. Refer to the primary cavity excavator section (EIS pages 154-163) for the discussion on future snag recruitment.

Coulter	Karen	19	169	[Highlighted: "When the expected effects of these alternatives are combined with the residual effects of past activities, actions, and events, there would be no cumulative increase in acres below green tree replacement objectives."] This conclusion is not substantiated by the earlier discussion -obviously the so-called "shrub steppe enhancement" would cause an increase in acres below green tree replacement objectives -see pg. 204, last par. Versus this "no cumulative increased in acres below green tree replacement objectives" conclusion on DEIS pg. 205. Further, planned logging of large trees would certainly reduce available green tree/ snag replacements below objectives.	295	Shrub-steppe areas were generally grasslands and shrublands with little in the way of overstory trees. As these would not have supported forested vegetation, there would be no requirement to provide green tree replacements. Where large diameter trees (>21 inches dbh), trees older than 150 years, or trees

Coulter	Karen	19	170	Just because some stands have multi-layered canopies ("conditions") doesn't mean they are necessarily experiencing unnatural or harmful stress or competition for resources, or that this will increase insects, disease, or wildfire incidence to unnatural or ecologically harmful levels. Most of the denser stands in the Kahler project area are moister mixed conifer in riparian drainages or at higher elevation (greater snow pack retention) where they would naturally occur.	296	The effects analysis under Alternative 1 (No Action) has been edited in the wildlife report and EIS to reflect information provided by the fuels specialist.
Coulter	Karen	19	171	[Referring to the first paragraph on page 206]. Again, this wildfire scenario used to clarify the "doom and gloom" no action alternatives has already happened in the project area, but the effects analysis fails to take this into account or to consider the ecological benefits of the Wheeler Point fire, despite fire suppression being acknowledged as a problem giving rise to this project.	297	The effects analysis under Alternative 1 (No Action) has been edited in the wildlife report and EIS to reflect information provided by the fuels specialist.

Coulter	Karen	19	27	* [Highlighted: "Other undeveloped lands have intrinsic ecological and social values because they do not contain roads and evidence of past timber harvest. These values are used as indicators of comparison to display effects between alternatives."] Yet there is really little difference between the two action alternatives on this issue. There is no action alternative that would not log or road in the last undeveloped lands in the project area.	298	Because the Forest Plan already made the decisions where management activities are and are not appropriate (see response to comment 19-26), development of an alternative that avoids undeveloped lands was not deemed necessary.

Coulter	Karen	19	29	Areas of this size especially may qualify as potential wilderness areas. * So if these "undeveloped lands" have not been logged or roaded, what is precluding their designation as potential wilderness areas? We field checked some of these areas where logging and/or roading is planned, and they did give a feeling of solitude, were natural-appearing,, had a diversity of plant and animal communities, had good wildlife habitat for Gray Wolves, dispersing Canada Lynx, elk, and other species needing large, undisturbed areas.	299	Potential wilderness inventory procedures have been superceded since this comment was received. For the purposes of the Kahler project the new applicable procedures (no longer called "Potential Wilderness") on are found in Forest Service Handbook 1909.12 Chapter 70 and 71. There is one 8,000 acre area within Kahler where management is not substantially noticeable. The section of the EIS pertaining to PWA and undeveloped lands has been updated to reflect the new direction. Please note that the new process still does not make a land designation determination. See Appendix I regarding the outcome of the new process with regard to the Kahler project.

Coulter	Karen	19	30	These undeveloped lands have special and unique values to use. Sometimes it seems that the Forest Service really doesn't know the Forest they're managing on the ground like we do, or don't care because they're largely new staff transferred or hired from very different ecosystems across the country and have no sense of place here as we do. This is why the Forest Service really needs to consider and respond to site-specific knowledge and concerns by the public.	300	This comment is entirely erroneous in its assumptions. The specialist responsible for the recreation and undeveloped lands analysis moved to the Heppner Ranger District in 1990 and has remained in the area ever since.
Coulter	Karen	19	34	So, where's the analysis of specific effects to these undeveloped lands from the Kahler alternatives? * Why is there no section on effects to undeveloped lands in the environmental effects section of the DEIS? This is inadequate analysis of Kahler alternation effects to other undeveloped lands. The acreages and specific places and characteristics of these places that would be affected by logging and roading are not even discussed.	301	The effects to undeveloped lands are described in Chapter 4 Environmental Consequences, pages 315-320 of the Kahler FEIS.

Coulter	Karen	19	37	[Highlighted: "Future actions are considered to be reasonably foreseeable if Forest Service planning activities (scoping, etc.) have been initiated for them. Based on a review of the Forest's SOPA, no reasonably foreseeable actions potentially affecting vegetation conditions in the Kahler planning area are anticipated over the next 5 years."] This is ludicrous limitation justification for analysis given that the Forest Service plans a logging rotation for the same area to occur in x number of decades and could disclose that scoping initiation is very near term compared to Forest Service long range planning.	302	The Forest Service respectfully disagrees.

Coulter	Karen	19	265	Logging heavily, as proposed down to 30 ft.Â² of facial area for example, logging larch trees, logging in L OS under HRV, logging in a DLG, logging in our HCA's, logging on steep slopes over our HCA's, logging areas never logged before - as proposed will not restore the forest to a more natural state, will not create better wildlife habitat, visual quality, recreation or other benefits and does not represent restoration in anyway. This is truly Orwellian logic to suggest otherwise and reflects a very disturbing lack of professional integrity.	302	The Forest Service respectfully disagrees.

Coulter	Karen	19	172	Avoid burning during the spring reproductive season, in suitable habitat for pileated woodpecker and American marten or Pacific fisher, and in most PAGs and moist riparian drainages. There is no need to burn within the perimeter of the Wheeler Point fire. * Pileated woodpeckers seem to favor down wood in later stages of decay, which would be lost to burning. American marten need abundant down wood for under snow winter hunting for prey and for thermal insulation.	303	Burning would preferably occur during the late summer and fall. Refer to Design Measures WL11 and WL12 on page 19 of the EIS. They address this comment. Direct, indirect, and cumulative effects of burning on pileated woodpecker and marten habitat are described in the EIS on pages 163-173.

Coulter	Karen	19	173	[Highlighted: "Reductions in these agents would reduce mortality in treated stands, ultimately reducing snag recruitment and downed wood levels in these stands. As downed wood habitat was not modeled into the future, the degree to which this would occur is unknown."] It seems very convenient that down wood models were not modeled into the future, given the very low numbers of trees per acre that would be left in the sale units from planned heavy logging. We ask that basal areas remain after logging be increased and the best wildlife habitat, moister mixed conifer stands, and large trees (greater or equal to 21" dbh) be dropped from logging to provide for more large structure (large snags, down wood, and live trees) for wildlife and fish and soil nutrient cycling and carbon storage. See over survey sheets for guidance or which sale units have the best wildlife habitat and/or moister	304	Higher basal area would be retained in connectivity corridors and stands on the moist end of the dry forest scale. Downed wood standards (see design measures) would be met where material is currently available. Skips within treatment units would provide for locally high downed wood and snag densities. Due to their higher stand density (when compared to the treated matrix habitat in the unit), skips are expected to experience higher disease and insect mortality in the future, and provide high densities of snags and downed wood through time.

Coulter	Karen	19	174	[Highlighted: "Personal use firewood cutting has reduced snag and downed wood densities adjacent to open roads in the analysis area. A reduction in snags adjacent to open roads ultimately reduces future downed wood recruitment."] The majority of the project area on the west side of the project area has had snags and future down wood removed by post fire (salvage) logging. Firewood cutting has also taken a large toll on large snags and large down wood on the project area, based on my observations over the years living right next to the west end and going through the project area frequently. The heavy logging, large tree removal, and other activities proposed in the Kahler project could be expected to result in the area failing to meet Forest Plan standards for down wood when considered in combination with the current deficits in large down wood in the area. The DEIS analysis seems	305	As stated in the downed wood and snag sections of the EIS and Wildlife Report, there are a wide range of dead wood conditions within the analysis area. Portions of the area have little downed wood and snags, while other areas have high densities. A similar condition would have been expected for the landscape historically (pre-fire suppression). Where available, downed wood standards will be met following vegetative treatment. To expect every acre on the landscape to provide densities that meet or exceed the Forest Plan standards is unrealistic given historic fire ecology and other factors.

Coulter	Karen	19	175	Based on the description of direct and indirect effects of the no action alternative for rocky mountain elk, this is the logical choice for meeting Forest Plan cover standards and restoring high quality elk habitat. Taking no action is clearly the most environmentally benign alternative. The always present risk of wildfire is being used in the DEIS as a straw man to excuse creating more ecological impacts and further violating Forest Plan standards - even though the action alternatives pose the same risk. [Highlighted: "In the mid and long term, stands would continue to grow, recover from past disturbance, and develop a multistory structure, increasing the amount of total cover in the E1 and C3 management areas to a small degree. Satisfactory and total cover levels in the C3 management area would approach Forest Plan standards in the long term as stands regenerate from past disturbance and stands develop in	306	Changes have been made in the No Action section due to input from the fuels specialist. Commenter quotes the first paragraph of the section; additional effects are discussed in paragraph 2. Increased fire activity would result from continued fire suppression and in-growth of vegetation into historically open and heterogeneous stands. While mixed severity fire would be expected, the size and continuity of high severity patches is expected to increase above what would have occurred historically. These events would impact the availability of cover for elk in the long term.

Coulter	Karen	19	176	Arguably heavily logging the forest further below the Forest Plan standards for cover definitely has immediate and mid to long-term impacts to elk cover, but these are not compared to the theoretical risk of future wildfire to elk.	307	Please refer to Response #306 (comment 19-175) and the effects analysis for elk on pages 141-154.
Coulter	Karen	19	177	What makes it seem legally or ethically o.k. to the Forest Service to cynically change cover standards to post- logging resulting cover rather then avoid the impacts to the elk and deer. * Obviously elk cover would still be reduced below Forest Plan standards after the duration of the project -especially for satisfactory and total cover.	308	The Forest Plan amendment would last through the end of the project. In the event of another project in the same area in the future, HEI and cover standards would be those contained in the Forest Plan, not the amended levels.

Coulter	Karen	19	178	Re: Table 4-53 and associated effects discussion re: elk- * There isn't significant differences between alternatives 2 and 3 for avoiding significant impacts to elk hiding and thermal cover (marginal and satisfactory cover), so we must choose the no action alternative. * There are significant impacts of cover loss for elk and deer, potentiall threatening their population viability in the project area -especially in winter range and the west side of the project area. This is not acceptable. (See Tables 4-52 and 4-53).	309	The appropriate scale for assessing viability for Management Indicator Species is the Forest level. Impacts to distribution and population within the analysis area are described in the EIS on pages 141-154.
Coulter	Karen	19	179	Referring to the first paragraph on page 211]. This DEIS discussion of direct and indirect impacts to elk adds up to a heavy toll on their viability in the project area (pg 211).	310	The appropriate scale for assessing viability for Management Indicator Species is the Forest level. Impacts to distribution and population within the analysis area are described in the EIS on pages 141-154.

Coulter	Karen	19	180	Highlighted: "At the scale of the Heppner and Fossil Big Game Management Units, population level impacts would not be measurable. Given the already low cover levels in the project area, elk would likely spend less time on public (National Forest System) lands following treatment."] So the Forest Service is essentially abdicating their responsibility for provding suitable habitat for elk by driving them onto private lands. * So that's why such a large scale for population impacts was chosen apparently. To mask the very real project impacts to the elk population within the Kahler project area. This use of a large scale to artificially minimize impacts should not be allowed.	311	The appropriate scale for assessing viability for Management Indicator Species is the Forest level. Impacts to distribution and population within the analysis area are described in the EIS on pages 141-154. The scale of analysis for HEI is based on direction provided in the Forest Plan. In the case of the C3 Winter Range, the scale of analysis is the entire winter range. For the E1 management area, it is the subwatershed scale. As minimum analysis area size (for running the HEI model) could not be satisfied in several subwatersheds, they were combined to provide enough acres for HEI modeling. Refer to the EIS (Affected Environment, page 41) and the Terrestrial Wildlife Report (pages 4 and 34-35) for a discussion of the analysis area for elk.

Coulter	Karen	19	181	[Highlighted: "The proposed activities have the potential to affect elk calving habitat through the disturbance of understory vegetation and downed wood used for cover during calving season."] The cumulative impacts to elk from the Kahler project to elk would be overwhelming. It's hard for me to believe that the Heppner staff cares so little for the elk! What happened? Is this a rash job by new staff with no scene of place here?	312	Direct, indirect, and cumulative impacts are discussed in the EIS on pages 141-154. Burning would require multiple years to accomplish. The burn area would be broken up into smaller manageable units; adjacent units would generally not be burned in the same year to retain low level structure and cover for wildlife.

Coulter	Karen	19	182	* [Highlighted: "It is not expected that treatment activities would negatively impact calving habitat or result in reductions in calf survival due to the availability of untreated areas (unburned habitat adjacent to active burn units) in the project area, and the fact that only a portion of the acres within the burn blocks (average approximately 70%) are expected to be blackened."] Burning -"blackening" -about 70% of the acres -even over a five to ten year period -could well be expected to negatively affect elk calving habitat and cause reductions in calf survival -especially when considered in combination with extensive heavy removal of cover through logging!	313	Burning would require multiple years to accomplish. The burn area would be broken up into smaller manageable units; adjacent units would generally not be burned in the same year to retain low level structure and cover for wildlife. It is expected that up to 50% of the burn acres would not be blackened (see Fuels Report). When these area combined with the fact that there will also be untreated skips accounting for 10 to 15 percent of all treatment units, negative impacts are not expected. Elk will continue to calve in the project area.

Coulter	Karen	19	184	Only 96 acres difference between the two action alternatives for cover remaining in winter range! * [Highlighted: "Overall, Tables 4-55, 4-56, and 4-57 indicate that there would be an increase in total acres (forage and cover combined) that are greater than 0.5 miles from an open road in the C3â€¦"] Again the analysis results are biased by combining totals for forage (higher) and cover (much lower), skewing results to favor project implementation when really, a lot more forage is not going to help elk much if there is even less cover near by. Somehow the writer of this DEIS section conveniently forgot about the needed cover to forage proximity needed for elk viability. * From Table 4-55: "Only about 1/3 existing". Also, "little more than half of existing marginal cover". * From Table 4-56: "Only about 1/10 of forage area". Also, "almost half sacrificed". This is a very low % of satisfaction cover available	314	Commenter quotes the first part of the paragraph on page 213 of the Draft EIS. The remainder of the paragraph (page 146 of the FEIS) says that, "While the acres of forage greater than 0.5 miles from an open road would increase, the amount of cover greater than 0.5 miles from an open road would generally decrease under Alternatives 2 and 3 due to effects related to mechanical vegetative treatment. In the late summer and fall, once hunting seasons begin, it would be less likely that elk would linger in these stands. This reduction may contribute to the tendency for elk to move elsewhere (off NFS lands or to National Forest lands outside the Kahler area) during the late summer and fall during high disturbance periods (hunting seasons)." This portion of the analysis addresses the commenters concerns, and acknowledges that there would be impacts to elk and their distribution. Once again, the appropriate scale for assessing viability is the Forest level.

Coulter	Karen	19	185	Re: Timber sales' cumulative impacts to the Monument (elk and deer) winter range: I guess we were wrong to compromise with the forest service on the timber sales. This also indicates that the Forest Service is still committed to destroying suitable elk habitat as part of an ongoing agenda (see DEIS pg. 214 par 1). The cumulative impacts to elk habitat of past FS management plus recent wildfires are considerable.	315	Cumulative effects are disclosed in the EIS for elk on pages 141-154.
Coulter	Karen	19	186	Actually there's a large number of major riparian areas (esp. in the SE end and the NW end of the sale) on the chopping block for cover reduction, as well as a C1 old growth stand. As I commented before, the satisfactory and marginal cover greater than .5 miles from an open road would greatly be reduced under both action alternatives -42 -73% loss of this needed cover away from open roads is a drastic loss (see DEIS pg. 215 last paragraph) * A 71% cover reduction in both the EI West MA and the EI East MA -this is a staggering loss of cover for elk and deer.	316	Impacts to C1 (12 acres existing and replacement with an adjacent 16 acres) are discussed in the EIS on pages 126-127. There are no cover standards in the Forest Plan for the E1 management area, only HEI standards. The HEI standard would be met in the E1 East and slightly below the standards of 30 in the E1 West following treatment. Please refer to the effects analysis on pages 141-154 of the EIS.

Coulter	Karen	19	188	The Forest Plan amendment proposed to artificially lower total and satisfactory cover standards to post-logging levels is not site specific in that it is a part of a larger, long-term trend on the Umatilla National Forest and other National Forests in the region. To system - actually log elk cover regardless of Forest Plan standard requirements. The impact is significant and cumulative. * Is this really a site specific Forest Plan amendment? (cont. above) * In other words this cynical Forest Plan amendment is designed to allow violation of the existing Forest Plan without any justifiable site specific need to sacrifice needed elk habitat. And what happens after "the duration of the Kahler project?" the elk are still out of luck. * This is an extreme impact to elk populations to result on a negative habitat trend at the Forest scale.	317	The cumulative effects analysis incorporates other activities within the winter range that have affected elk habitat; see pages 141-154 in the EIS. The Forest Plan amendment is valid for the duration of the Kahler Project and only within the Kahler Project area. Projects outside the Kahler project area (but within the winter range) or future projects may require Forest Plan amendments if activities would impact HEI or cover. This project would result in a small negative habitat trend at the Forest scale. However, the cover (satisfactory and marginal) affected under the Kahler project represents a small proportion of the cover habitat available at the Forest scale. This Forest Plan amendment does not affect elk populations anywhere else on the forest, making this amendment specific to the Kahler Project.

Coulter	Karen	19	189	Again, the DEIS writer had to resort to changing the scale of analysis to the broad Forest level to avoid admitting an impact to elk population viability in the project area. This change of analysis scale is not acceptable.	318	The appropriate scale for assessing the viability of Management Indicator Species is the Forest scale. Please refer to the National Forest Management Act for clarification.
Coulter	Karen	19	191	In other words. The Forest Service is admitting that the Kahler area will cease to offer good hunting opportunities for elk. Elk would be severely depleted during summer and hunting season on the Kahler area of the Heppner and Fossil management units, as the DEIS admits. (e.g. DEIS p. 216)	319	The EIS discloses that elk may spend a greater amount of time and longer periods of time on adjacent private lands or elsewhere on the Heppner Ranger District (outside the Kahler area) during high disturbance periods. See elk effects analysis on pages 140-154 of the EIS. See the discussion of effects on hunting on pages 313-315.

Coulter	Karen	19	192	No, Alt. 2 and Alt 3. Would not be consistent with the goals of the C3 management area, as both alt.s would further degrade potential habitat effectiveness considerably, resulting in not providing high levels of potential habitat effectiveness as habitat effectiveness for elk includes the adequate available cover and cover distribution for any given population of elk. * 3,694 (2) 3,138 (3) 556 * 7%, 55%, and 61% reductions in available cover is still a huge impact - only 556 acres less than alt 2.	320	The goals of the C3 management include providing a high level of habitat effectiveness and high quality forage for elk. Alternatives 2, 3, and 4 would provide high quality forage during the winter use period through vegetative treatment and burning activities. Post implementation HEI would be 57 under Alternatives 2 and 3, a reduction from the existing condition of 58. While there would be a slight reduction in HEI, and these levels would be less than the Forest Plan standard of 70, given the vegetative composition of winter range (low elevations with large interspersed grassy openings and relatively open forest stands) under historic conditions, and the expected use period (December through mid-April), an HEI of 57 would be considered relatively high. HEI would remain 58 (the existing condition) under Alternative 4.

Kelley	Brian	13	5	The Forest Service has not adequately analyzed an alternative that reasonably addresses the impacts of the proposed action upon watershed health and wildlife habitat-the significant issues for the Kahler Dry Forest Restoration Project.	321	Both Alternatives 3 and 4 address concerns regarding watershed health and wildlife habitat to varying degrees. Effects for these alternatives are discussed in Chapter 4 of the EIS and in the Fisheries, Hydrology, and Terrestrial Wildlife Specialist Reports (Appendix C, F, and M respectively).
Coulter	Karen	19	193	[Editorial Comment, 2nd to last paragraph] "As a result, the direct and indirect effects on elk resulting from road use and construction and potential non-permitted OHV use would be slightly less than those under Alternative 2." Page 218 * [Editorial Comment, 1st paragraph] "As a result, the expected impacts to elk habitat and elk distribution would likely be only slightly less than those expected under Alternative 2.	322	Refer to response to comments 19-187, 19-188, 19-189, 19-191, and 19-192.

Coulter	Karen	4	3	All of these Forest Plan violations and the heavy logging proposed (down to only 30 square feet of basal area, virtual clearcuts) show that this sale really has nothing to do with forest "restoration" in that impacts from logging would far exceed any benefits and planned logging would violate even the inadequate existing Forest Plan standards.	323	The forest vegetation report glossary containes definitions of "restoration". As noted on page 3 of the supporting forest vegetation report " Between skips and gaps, the matrix area will be thinned to a variable density with minimum amounts of residual basal area varying with a unitâ€™s plant association (at least 25-60 ft2/acre of basal area will be retained after thinning; see tables 16 and 48)." Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the forest vegetation report. Table 16 displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler Planning Area.
Coulter	Karen	19	5	Page 64 * What is the evidence basis for this HRV analysis reflected in table 3-17? What kind of documentation was (held?) from what year and from what specific geographic area?	324	Refer to the Methodology section of the Forest Vegetation Report for explanations regarding data used for HRV development.

Coulter	Karen	19	24	The Kahler project should not be logging the mesic mixed conifer habitat we found in sale units. See our survey sheets. Page 88 * [Highlighted: "Mesic mixed conifer habitat accounts for approximately 1% of the analysis area."] Actually there appears to be more mesic mixed conifer -at least in proposed sale units- probably to log denser area and just identifying them on aerial of satellite photos for logging.	325	Thank you for your comment

Coulter	Karen	19	194	Retention of needed large snags and patches of abundant snags for primary cavity excavators is one of many reasons we favor less logging (or no logging) in the Kahler project area.	326	Design measures will be incorporated that protect snags where they occur; the only snags that would be felled in units would be those that pose a hazard to operators. If felled, they would be left on the ground to provide downed wood where feasible. The disposition of these felled trees would be determined through consultation with the District Wildlife Biologist. Skips within treatment units would also provide abundant snags. Although the primary goal for skips is to provide dense overstory structure for wildlife, a secondary selection criteria would be the presence of high value snag habitat. See Design Measures WL2, WL3, WL4, WL9, and WL15 on pages 19 and 20 of the EIS.

Coulter	Karen	19	195	As I've already commented, many Kahler sale units are actually in naturally denser, moist microclimate areas such as riparian drainages shaded by steep slopes, North to Northeast-facing slopes, riparian areas, and higher elevation drainages, so it's not necessarily unnatural for pileated woodpecker or Williamson's sapsucker to be in these areas. See our survey sheets.	327	Comment noted.

Coulter	Karen	19	196	Hopefully naturally denser areas including riparian areas, the higher elevation (Tamarack Mt.) C1 old growth, OFMS, OFSS, and moist and cold forest stands will be dropped from management in the Kahler project. This would scale down the sale to a more reasonable size, though it would still need higher basal area: retained and no large tree logging for a reasonable intensity of logging.	328	Alternative 3 addressed these concerns to some degree. Refer to Chapter 2 of the EIS for a description of this alternative. Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the forest vegetation report. Table 16 "Minimum tree stocking levels for the Umatilla Natioanl Forest" displays minimum stocking levels for the Umatilla National Forest, and table 48 "suggested stocking levels for predominant plant associations of the Kahler planning area" displays suggested stocking levels based on predominant plant associations.

Coulter	Karen	19	108	[Highlighted: "After the project, the canopy is expected to be more open and have more of a single stratum of mature trees than without the project."] It is not desirable in every Kahler sale unit to create a single stratum of trees and open canopy. The Kahler area is naturally denser in the northern and southern (SW end) drainages, which both have ample evidence of historic mixed conifer - and are moister sites, not dry forest.	329	Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the supporting forest vegetation report. Table 16 of that report displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler Planning Area.
Coulter	Karen	19	110	[Highlighted: "Fire suppression activities may also cause a great deal of disturbance to vegetation, soil, and soil cover."] Actually fire suppression impacts are not all recovered within a few years - my dead old juniper tree and a dying old juniper tree from fire retardant are a case in point.	330	Thank you for your observation.

Coulter	Karen	19	118	We are opposed to such a severe reduction in Douglas fir and Grand fir as proposed (see table -4-21, pg. 144) there is actually very little Grand fir in the Kahler area, and Douglas fir is actually the historic co-dominant tree species with Ponderosa pine in many sale units based on large old growth residual Douglas firs, large fir snags and logs, and many large fir stumps in these stands. Both Grand fir and Douglas fir, especially the large trees -are needed for tree species diversity, related habitat diversity, and wildlife needs. No large trees (greater than or equal to 21" DBH) should be logged, given the heavy past logging removal of large trees that still hurts habitat quality in the area. See over survey sheets and photos for examples of evidence of historic old growth fir in sale units.	331	Instances where 21â€DBH trees might be removed are limited to stands with the following criteria: Douglas-fir vegetation types, moderate or higher stocking classes, dominated by PP, have 10 trees/ acre or more of trees greater than 21â€and not currently classified as Old Forest Single Stratum (OFSS). If all of these criteria are met, than a DF or GF that is young yet large may be removed from within two driplines of a medium sized PP (greater than 15â€dbh). This determination is based on site specific stand analysis. Refer to Table 3-3:Comparison of Existing conditions to HRV for forest cover types of the Kahler forest vegetation affected environment. Note the historical range for grand fir is 1 to 10%, and Douglas-fir is 5 to 20%. Grand fir is currently within HRV while Douglas-fir is just above HRV. Currently the old forest structure is well below HRV in the single stratum, and within HRV in the multi-stratum (Table 3-5, FEIS). Harvest will trend the old forest single structure towards HRV. Old forest multi-strata will decrease with harvest, but remain within HRV (Table 4-4, FEIS). The increase in OFSS is from harvest within OFMS or UR (understory re-initiation) stands. To date, stand analysis and

Coulter	Karen	19	119	Highlighted: "â€¦Kahler project's purpose and need (e.g., "restore and promote open stands of old forest dominated by ponderosa pine, thereby moving the area toward its historical range in structure, density, and species composition")."] Most of the Kahler project area is already Ponderosa pine dominant and there many open stands except for those crowded with small trees (generally only up to 8-10" DBH) due to past logging and fire suppression.	331	Instances where 21â€DBH trees might be removed are limited to stands with the following criteria: Douglas-fir vegetation types, moderate or higher stocking classes, dominated by PP, have 10 trees/ acre or more of trees greater than 21â€and not currently classified as Old Forest Single Stratum (OFSS). If all of these criteria are met, than a DF or GF that is young yet large may be removed from within two driplines of a medium sized PP (greater than 15â€dbh). This determination is based on site specific stand analysis. Refer to Table 3-3:Comparison of Existing conditions to HRV for forest cover types of the Kahler forest vegetation affected environment. Note the historical range for grand fir is 1 to 10%, and Douglas-fir is 5 to 20%. Grand fir is currently within HRV while Douglas-fir is just above HRV. Currently the old forest structure is well below HRV in the single stratum, and within HRV in the multi-stratum (Table 3-5, FEIS). Harvest will trend the old forest single structure towards HRV. Old forest multi-strata will decrease with harvest, but remain within HRV (Table 4-4, FEIS). The increase in OFSS is from harvest within OFMS or UR (understory re-initiation) stands. To date, stand analysis and

Coulter	Karen	19	197	This is another planned violation of the Forest Plan, knowing that logged stands will likely fail to have adequate recruitment of new snags to maintain snag densities above Forest Plan minimum standards in the long term. (DEIS p. 221, par 2) [In reference to the sentence, "In the mid and long term, the recruitment of snags would likely be reduced as a consequence of thinning of live trees in dense forested stands (reduced density-dependent mortality). As existing snags within affected stands age and fall, recruitment of new snags may be inadequate to maintain snag densities in treatment units above Forest Plan minimum standards in the long term." And "In several of the modeled stands, average densities (weighted) were projected to fall below the Forest Plan standard for several decades (approximately 2045 to 2065) before increasing.].	332	The quoted sections of the EIS are correct. Further down the same paragraph, it is also disclosed that modeling in other stands projected substantially shorter periods of time when snag densities may drop below Forest Plan minimums, or no projected drop below the Forest Plan minimum. Page 75 of the Wildlife Report also notes that several historically significant contributors to snag recruitment including insects, disease, and fire (beyond the year 2020) were not accounted for in model runs. For this reason, modeled results would be considered on the low end of potential snag densities. Please refer to the full Affected Environment and Analysis of Effects in the Terrestrial Wildlife Report (pages 52-72 and 73-87) for more information. Snag densities are not static through time. Nor are they going to meet standards on every acre at all times. Please refer to the Terrestrial Wildlife Report for additional information. The best science available indicates that a wide range of snag conditions, from zero to levels well in excess of the Forest Plan minimum standard, would be expected across the landscape historically.

Coulter	Karen	19	198	So, primary cavity excavators are expected to wait 100 years for snag density to "approach" non-logging ("treatment") levels - 2105 for several of the modeled units! Restoration is supposed to be done gradually in stages, not as a shock treatment killing off native species! [In reference to the sentence, "Following the fire-induced increase, snag densities in several of the modelled units were projected to decrease till about year 2055 when they would increaseâ€¦"].	333	The first part of the comment is not interpretting the model results correctly. If the existing stand was left untreated, snag densities would be elevated for a number of years due to density dependent mortality. Under historic conditions, it is unlikely that this stand would reach these snag levels due to periodic low severity and mixed severity fire that would reduce density. Under the treatment modeling run, the same stand, with a single overstory treatment and prescribed fire applied in 2020 would be projected to reach the "no treatment" snag density projections around 2105. Please refer to the Terrestrial Wildlife Specialist Report for the full Affected Environment and Analysis of Effects (pages 52-72 and 73-87).
Coulter	Karen	19	121	How can Ponderosa pine possibly increase in incidence from 7,120 acres to 11,290 acres in these years from logging, including much logging of Ponderosa pine? (See table 4-21, DEIS pg. 144) This is inaccurate.	334	Further explanation is noted in the FEIS. The acres that are decreased in DF, GF, and WJ are added to the PP.

Coulter	Karen	19	123	[Highlighted: "The representation of ponderosa pine increases for the affected environment - it transitions from 55% of the affected environment (pre-treatment) to 69% of the affected environment (post-treatment)."] Actually the Ponderosa pine was there prior to logging, so it doesn't increase in "representation".	334	Further explanation is noted in the FEIS. The acres that are decreased in DF, GF, and WJ are added to the PP.

Coulter	Karen	19	199	This conclusion is not fully substantiated but is contrary to FS modeling results. [In reference to the sentence, "It is expected that the impacts on future snag recruitment and the snag density distribution at the analysis area scale would be small. It is expected that snag densities at the analysis area scale would continue to meet Forest Plan standards following implementation."]	335	Commenter is under the assumption that all acres will meet or exceed Forest Plan standards at all times. The best available science (the DecAID Advisor) indicates that snag densities will range from zero to densities well in excess of the Forest Plan standard through space and time. While modeling data projects that some units may drop below Forest Plan standards for a time, others are projected to maintain densities above the standard. At the analysis area scale, it is expected that average snag densities would continue to meet the Forest Plan standard through time and that for dry forest stands, structure, composition, and subsequent snag recruitment would be more similar to what historically occurred in these areas. Please refer to the full Affected Environment and Analysis of Effects in the Terrestrial Wildlife Specialist Report (pages 52-72 and 73-87).
Jerome	Irene	15	8	Harvest should occur in Class IV Riparian Habitat Conservation Areas. The devastation that wildfire can inflict on these habitats is well documented and has huge implications far into the future.	336	Harvest is proposed in Class IV RHCAs, with Design Elements to protect the streams.

Coulter	Karen	19	200	We are concerned that prescribed burning could kill up to 5% of the existing large, very scarce, trees and would remove both snag abundance needed by primary cavity excavators like the Blackbacked woodpecker, and snags in late stages of decay needed by PCEs such as the pileated woodpecker.	337	The best available science indicates that prescribed fire would potentially result in mortality of all size classes of trees. The level of impact is expected to range from 1% to 5% for large trees. These levels are not unexpected; fire mortality creates snags for a wide range of primary cavity excators (white-headed, Lewis', black-backed, and other woodpeckers) and other wildlife species. Fire-created snags help to offset losses of existing snags in burn units and provide for dead standing wood through time. Design measures (PF2 and PF3) would be implemented to protect existing large snags and large green trees where needed.

Coulter	Karen	19	122	Based on comparisons of tables 4-21, 4-22, and 4-23 (DEIS pg. 144-146), it looks like Ponderosa pine is already within the historic range of variability of 50- 80% in that it was 58% (Table 4-21) or 55% (Table 4-22) in 2012, pre-implementation of the Kahler project. Likewise HRV for Grand fir is supposed to be 1-10% and is already 5-6% based on Table 4-22 and 4-21, so what's the problem? Douglas fir is not that much higher than HRV (25-32% of compares to 5-20% HRV), and most of that difference would be in small, young trees, not large older trees. There is no good reason to log heavy or log large trees based on this HRV analysis.	338	Table 3-3: Comparison of Existing conditions to HRV for forest cover types of the Kahler forest vegetation affected environment (FEIS). You are correct in that grand fir is currently within HRV while Douglas-fir is just above HRV. Retained basal areas will fluctuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the supporting forest vegetation report. Table 16 of that supporting report displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler Planning Area. Note that "Between skips and gaps, the matrix area will be thinned to a variable density with minimum amounts of residual basal area varying with a unitâ€™s plant association (at least 25-60 ft2/acre of basal area will be retained after thinning; see tables 16 and 48)." Instances where 21â€ DBH trees might be removed are limited to stands with the following criteria: Douglas-fir vegetation types, moderate or higher stocking classes, dominated by PP, have 10 trees/ acre or more of trees greater than 21â€ and not currently classified as Old Forest Single Stratum (OFSS). If all of these criteria

Coulter	Karen	19	201	Yes, we request that you exclude dense moist and old growth habitat from burning to protect habitat niches and landscape level biodiversity. [See asterisked sentences in the 3rd paragraph.]	339	Design Measure PF1 (EIS page 20) would be implemented, when necessary, where heavy fuel accumulations exist (generally dense mixed conifer habitat and old growth). This design measure calls for adjustments to the timing or method of lighting, or the exclusion of these areas from landscape underburns in order to reduce the risk of undesirable impacts to dense pockets of vegetation that are retained in treatment units and across the landscape.
Heiken	Doug	14	27	Non conifer tree and shrub vegetation in RHCAs should be protected from damage by logging equipment.	340	Non-conifer tree and shrub vegetation is protected by a Design Element WQ-15 (EIS 22).
Coulter	Karen	19	124	So in other words, the Forest Service is trying to block natural succession with the Kahler project, rather than restore a condition that has been lost. Allowing wildfires to burn and insect to defoliate would allow natural follow-up thinning to occur. (See DEIS pg. 145 re: 2065 model projection.)	341	Refer to the purpose and need for action statement for the Kahler Dry Forest Restoration project

Coulter	Karen	19	202	We are concerned by the planned logging removal of large trees in the context of a large deficit in the project area of both large trees and snags compared to historic conditions - due to past logging removal of such large structure. [See asterisked sentences in the1st paragraph.]	342	Refer to Figures W-04 and W-06 on pages 64 and 67 in the Terrestrial Wildlife Specialist Report. The large snag distribution data in the analysis area is similar to distributions derived from DecAID reference data. Also refer to the interpretation of the figures on pages 65-66 and 67-68 of the Wildlife Report. Refer to the Forest Vegetation Report for additional information regarding the removal of select young Douglas-fir and grand fir larger than 21 inches dbh.
Coulter	Karen	19	125	It's hard to assess the actual pre-implementation percentages for different forest cover types when they differ between Table 4-21 and Table 4-22.	343	Note that one table refers to direct effects and the other table refers to indirect effects
Coulter	Karen	19	203	The Wheeler Point fire post-fire logging took place shortly after the fire of 1996 - less than 20 years ago, yet the Forest Service is already back to the same area to log again. This is a very short time for recovery and tree growth between timber sales, and does not resemble forest "restoration".	344	The Kahler Project would not salvage dead and dying trees. Treatment activities are designed to meet the Purpose and Need described in the EIS. If treatment of stands in the fire area would contribute to meeting the Purpose and Need, they are included in the Kahler Project.

Coulter	Karen	19	126	Don't log any Engelmann Spruce or Lodgepole pine, or Western larch, as there's apparently very little of any of these tree species in the project area.	345	thank you for your comment
Coulter	Karen	19	127	Currently, scientists are questioning a strict adherence to "returning" to a historic condition that may no longer be appropriate due to various factors such as the young age of stands after extensive heavy logging, the dwindling habitat available for denser forest -and old growth- dependent wildlife species, also due to extensive logging, etc. - yet this is not disclosed or discussed as scientific controversy.	346	Thank you for your comment
Coulter	Karen	19	128	Why are the pre-"treatment" (logging) percentages for the tree species not disclosed in Table 4-23? This is critical information.	347	Refer to the Forest vegetation section of chapter 4 (FEIS) specifically table 4-2: Harvest Effects on Species Composition by Alternative for Dry Upland Forest.

Coulter	Karen	19	204	We are deeply concerned that reductions in snag recruitment and average snag densities would occur over a large area due to the extent of logging etc. in the Kahler project area, and populations of primary cavity excavators adapted to high snag densities in denser snags are expected to decline due to the Kahler project. * The Kahler project action alternatives would continue this trend of cumulatively reducing snag habitat, including scarce large snags, due to logging, burning, hazard tree removal, and creating increased access for firewood cutting. (see DEIS p. 223, par. 1) * If population of primary cavity excavators decline while For Plan standards are met, something's wrongâ€¦.	348	The direct, indirect, and cumulative impacts of the proposed treatment activities on snags and Primary Cavity Excavators are described in the EIS on pages 154-163. It is disclosed that treatment would affect existing snags and snag recruitment to some degree. As stated in the EIS and Wildlife Report, it is expected that some species (including the pileated woodpecker and others) that are using uncharacteristically dense dry forest stands would be affected due to the shift in context of stands from more dense to more open. Access for firewood cutters would be reduced under both of the Action Alternatives through proposed road closures.
Coulter	Karen	19	130	So what actual data (or photographs) did Martin use for this HRV interpretation from what year and from exactly what geographic area? Please let us know!	349	Martin, K. 2010 (October 5). Range of variation for forest vegetation project planning. Memorandum to S.O. Staff and District Rangers. Pendleton, OR: USDA Forest Service, Umatilla National Forest, Supervisorâ€™s Office. 6 p.

Coulter	Karen	19	131	The problem is that most or all of these old forest multi-strata stands proposed for conversion to old forest single stratum stands are actually naturally, historically multi-strata stands because they are moister mixed conifer in drainages, at higher elevations, or on north to northeast aspect slopes. See our survey sheets and photos re: evidence of historic mixed conifer conditions and microclimate moisture indicators, and drop all planned conversion of OFMS to OFSS.	350	Thank you for your comment

Coulter	Karen	19	205	Again the DEIS staff writer has to change the scale of analysis to the broader Forest scales in order to claim that the analysis area could still contribute toward the viability of primary cavity excavators - and then only be comparison with DecAID reference conditions. DecAID is not supposed to be used as an indicator of species viability, according to DecAID authors.	351	The appropriate scale for assessing the viability of Management Indicator Species, including the Primary Cavity Excavtor group, is the Forest scale. DecAID is not a species viability model. It provides information regarding the use and requirements of a wide suite of snag-dependent wildlife by habitat type and structure. Data provided by the Advisor is then used by managers to assess existing conditions and provide management direction. In this case, expected impacts were examined in the context of reference conditions. Due to the similarity between the expected snag density distribution and the reference condition, it was determined that the impacts associated with the Kahler project would move stands toward the reference condition in terms of structure, composition, and density, and ultimately snag recruitment. As such, the Kahler Project would contribute toward the viability of the Primary Cavity Excavator group at the Forest scale. Please refer to the effects analysis on pages 154-163 of the EIS and the full affected environment on pages 52-72 of the Terrestrial Wildlife Report.

Coulter	Karen	19	206	In the absence of existing population studies in the project area, it is impossible to know whether the cumulative impacts to "population levels of some primary cavity excavators" (eg. Pileated and Williamson's Sapsucker woodpeckers) would be enough to eliminates their population viability in the project area and contribute to a trend toward the[ir] uplisting. Under NFMA the Forest Service is required to ensure the viability of all native vertebrate species and MIS.	352	Species-specific surveys were not completed for this project. Incidental observations of pileated woodpecker and other primary cavity excavators, as well as nest tree/cavity locations, were recorded during reconnaissance of the project area. The appropriate scale for assessing the viability of Management Indicator Species (including the primary cavity excator group) is the Forest scale; assessment of viability at the project scale in not appropriate.
Coulter	Karen	19	87	We are opposed to commercial-size logging and use of heavy equipment within RHCAs, including category 4 RHCAs. Any trees felled in RHCAs should be used for large down wood in the stream and this should not be a rational for felling large trees within the natural stream recruitment zone for large wood.	353	See Response 41.

Coulter	Karen	19	132	[Highlighted: "â€¦the Kahler project's purpose and needâ€¦thereby moving the area toward its historical range in structure, density, and species composition")."] See our comments on previous pages of the DEIS re: tables 4-21, 4-22, and 4-23 re: lack of a compelling need to "move" the area toward it's historic range in structure, density, and species composition -especially through drastic logging to very low basal areas and logging of last scarce large trees. * We are more supportive of understory thinning eg. Transition from UR to SE, due to fire suppression effects. Small trees are the size class likely to be evidence of fire suppression (eg. <10" DBH). Page 148 * [Referring to Table 4-24]. Drop the 400 acres of OFMS to OFSS conversion logging. OFSS can be created into the future by thinning understory small young trees in dry Ponderosa pine stands and then allowing	354	Note "The purpose of the Kahler Dry Forest Restoration Project is to restore dry forest conditions and therby create a resilient, fire adapted landscape by moving the project area towards its range of variability in forest structure, tree density, species composition, and associated wildlife and aquatic habitat." Refer to the Table titled "Minimum tree stocking levels for the Umatilla National Forest" of the Supplemental Forest Vegetation Report (Appendix N) for stocking levels in both trees/acre and basal area/acre. Also refer to the table titled "suggested stocking levels of predominant plant associations of the Kahler planning area".

Coulter	Karen	19	133	[Highlighted: "The post-implementation changes in stand density classes (2015) are viewed as beneficial because they directly support the Kahler project's purpose and needâ€¦"] It may be true that some stand density reduction of small, young trees may be beneficial in dry Ponderosa pine plantations, but generally the denser stands in Kahler were historic, naturally denser moister mixed conifer stands in drainages, at higher elevations, and on north to northeast slopes. Most of the sale units were already badly over logged younger mature Ponderosa pine plantations with not much density, or "excess" mature or large trees to spare. You can't get blood out of turnip. This sale needs to be scaled down considerably or abandoned. See our survey sheets and photos.	357	Thanks for your comment

Coulter	Karen	19	207	[asterisk at the end of the 1st paragraph] Again the scale of analysis is switched to the Forest level so as to be able to claim a "small" negative trend in habitat for the primary cavity excavator species.	358	The appropriate scale for assessing the viability of Management Indicator Species (including the Primary Cavity Excator group) is the Forest scale. In terms of habitat trends at the Forest scale, a small proportion of the Forest would be impacted. The proposed activities would move the Kahler area toward the reference condition in terms of structure, composition, and density, and ultimately snag recruitment. As it is expected that the reference condition provided for the viability of species in the past, it is expected that moving toward these conditions in the Kahler area would contribute toward the continued viability of this group at the Forest scale.
Coulter	Karen	19	89	[Highlighted: "All of the RHCAs are in place, but silvicultural treatments are proposed for some of them."] This is downright cynical - the RHCA buffers are to protect streams from logging impacts -"silvicultural treatments"	359	The vegetation in the Class 4 RHCAs is basically upland dry forest, rather than the presumed water dependant riparian species. There will be harvest in the Class 4 RHCAs, and there will be Design Elements to protect protect the streams from harvest impacts.

Coulter	Karen	19	79	[Referring to Table 4-4 under Resource Element, and Water Quality, "This is true provided the buffer distances within RHCA are followed." For alternatives, two and three.] This is actually a good argument for not allowing any heavy equipment use within category 4 RHCA buffers (or any RHCA buffers) -re: Table 4-4 on water quality/ sediment, DEIS pg. 118. Please restrict thinning within cat. 4 RHCAs to non-commercial thinning and felling of junipers up to 15" dbh by hand where trees are not stabilizing the stream bank or are necessary for stream shading.	360	Ground based heavy equipment exclusion zones along Class 4 streams will be either 75' or 100' wide, depending on slope. See Hydrology Prescription Appendix.
Coulter	Karen	19	147	Actually the biggest cause of reduction of old forest single stratum in the Kahler area was the logging of large trees, which is hypocritically proposed for the Kahler project under the guide of restoring OFSS. The old forest multi-stratum stands currently exist where they would naturally occur - in moist drainages and at higher elevations -see over survey sheets and the sale map.	361	Thanks for your opinion

Coulter	Karen	19	84	Why are the impacts of heavy past logging on riparian conditions and hydrology not included in this (inadequate) cumulative effects analysis? (see DEIS pg. 120)	362	Check out FEIS Hydrology section p. 69/254 and the Hydrology Report, Appendix F, p. 503/978.
Coulter	Karen	19	151	Drop all logging of LOS stands, including the OFSS stands under HRV. Logging OFSS stands and degrading their structure is completely contradictory to the express purpose and need for this project, which includes increasing OFSS.	363	Currently the old forest structure is well below HRV in the single stratum, and within HRV in the multi-stratum (Table 3-5, FEIS). Harvest will trend the old forest single structure towards HRV. Old forest multi-strata will decrease with harvest, but remain within HRV (Table 4-4, FEIS). The increase in OFSS is from harvest within OFMS or UR (understory re-initiation) stands. To date, stand analysis and field reviews have confirmed very little OFSS within the Kahler Project.

Coulter	Karen	19	208	How is this expected failure to meet Forest Plan standards [in?] some of the sale units consistent with the Forest Plan?	364	Commenter is under the assumption that all acres will meet or exceed Forest Plan standards at all times. The best available science (the DecAID Advisor) indicates that snag densities will range from zero to densities well in excess of the Forest Plan standard through space and time. While modeling data projects that some units may drop below Forest Plan standards for a time, others are projected to maintain densities above the standard. At the analysis area scale, it is expected that average snag densities would continue to meet the Forest Plan standard through time and that for dry forest stands, structure, composition, and subsequent snag recruitment would be more similar to what historically occurred in these areas. Please refer to the full affected environment in the Terrestrial Wildlife Report (pages 52-72) and the effects analysis in the FEIS (pages 134-136). Existing snags would be retained to the greatest extent possible given safety of operations. Please refer to design measures in Chapter 2 of the FEIS that provide for the retention and protection of snag habitat (pages 18-20).

Coulter	Karen	19	209	The continued viability of species is not an automatic result of consistency with the Forest Plan (where there is consistency with the Forest Plan) when the Forest Plan is so seriously outdated.	365	Comment noted. As noted by the commenter, the Forest Plan is currently being revised. For the purposes of this analysis, the best avaiable science (the DecAID Advisor) has been incorporated into the effects analysis and viability assessment (at the Forest scale) for the Primary Cavity Excavator group.
Coulter	Karen	19	210	Notably this was not claimed for alt. 2, that it would not negatively affect primary cavity excavators and their habitat in the long term. Otherwise, our same comments apply to Alt. 3 as to Alt. 2.	366	As this is also the case with Alternative 2, similar language will be added to this section in the final EIS and Wildlife Report.

Coulter	Karen	19	162	Highlighted: "As the majority of the analysis area is composed of dry upland forest, the upper 1/3 of the site potential would be relatively low (approximately 25 to 30% canopy cover for ponderosa pine stands)."] Not everywhere across the Kahler area was historically much more open as suggested - there is plenty evidence of logging out of historic large fir in drainages - especially in the southeast end of the scale (which is higher elevation). There are also still large old growth Douglas and Grand firs in these areas, an unspecified number of which the Forest Service proposes to remove with logging and plenty of old growth/ large fir snags and logs in these areas, giving evidence of historic denser forest. See our survey sheets and photos for documentation of this	367	Refer to the HRV analysis found in the Supplemental Forest Vegetation report. Tables titled "HRV analysis for forest cover types of the kahler forest vegetation affected environment" and the table titled "HRV analysis for forest structural stages of the Kahler forest vegetation affected environment" will illustrate the different cover types and structural stages found within the Kahler project area.

Coulter	Karen	19	211	Again, this could also happen with the action alternatives' implementation and a large fire happened in the project are less than 20 years ago, so it's unlikely that current forest and fuels structure is really outside of HRV for the area. There have also been other wild fires affecting the project area in the same time period - Monument and Sunflower, as discussed in the DEIS. With the Kahler project the Forest Service is stretching the rationale of their "fear of fire" mantra beyond the limits of credibility.	368	Edits have been made to the EIS and Wildlife Report based on input from the fuels specialist to more acccurately describe expected impacts under the No Action Alternative.

Coulter	Karen	19	212	* This is fallacious reasoning - the re-allocation of E1 acres to C1 acres does not compens[ate?] for the net [word is cut-off] in actual suitable Pileated hab[itat?] acres.	369	The acres that would pass from the E1 to C1 Management Area are similar in composition and structure, and are considered suitable habitat for the pileated woodpecker. The acres that would pass from C1 to E1 would not be treated in the same manner as those elsewhere in the project area. The primary concern is the area immediately adjacent to the tower, cabin, and communication equipment and clearing sight lines from the tower. Trees blocking sight lines from the tower would be identified and topped or felled. In either case, the trees would be left on the ground. The remainder of the area in the vicinity of the tower, cabin, and communication site would be thinned in a similar maner as elsewhere in the project area.

Coulter	Karen	19	214	With the Pileated woodpecker habitat protection, as with other issues of significance to us, there is no significant difference between the two action alternatives - both would cause about the same impacts; only the extent of these impacts differs, and not by much.	370	Comment noted.
Coulter	Karen	19	215	Commercially logging C1 areas is not consistent with the Forest Plan direction and guidance for C1 management areas.	371	C1 would not be commercially logged. These acres would pass into the E1 management area to allow for treatment activities in and around the values at risk at the Tamarack site. Refer to the Dedicated Old Growth section of the EIS (pages 126-127) and the Terrestrial Wildlife Report for more information.
Coulter	Karen	19	232	So since the Kahler projects' purpose the need is dry forest restoration why is logging, etc. planned for moist and cold forest stands at all? This is not consistent with the purpose in need.	372	In the Supplemental Forest Vegetaion Report, refer to the table titled "Potential vegetation composition of the Kahler planning area" where Dry Upland Forest, Moist Upland Forest, and Nonforest vegetation groups are found within the planning area.

Coulter	Karen	19	239	Wow, how did Ponderosa pine ever survive for millennia, given these "no action" assumptions? Nature is not committing ecoside. The forests would and do thin themselves without human intervention.	373	Thank you for your comment. Edits have been made in the EIS and Terrestrial Wildlife Specialist Report to the analysis of effects in the No Action section in response to information provided by the fuels specialist.
Coulter	Karen	19	216	Pileated woodpeckers are very unlikely to use thinned stands due to the open residual nature of the stands and the danger to Pileated woodpeckers of overhead predators without sufficient canopy closure (generally at least 40% needed for foraging and 60 % needed for nesting, based on the science.)	374	Pileated woodpecker generally use dense forest for nesting and foraging. It is stated in the effects analysis (EIS pages 163-170) that the majority of use would likely occur at the margins of thinned stands or in patches of untreated vegetation within these areas (skips). A number of pileated nests on the south zone have been found in large ponderosa pine snags in open stands adjacent to dense foraging stands. Snags would be retained to the greatest extent possible given the need to provide for safe operations.

Coulter	Karen	19	217	What is the evidence basis for determining where the forest used to be shrublands and grasslands historically? What kind of survey data or photographs were used from what baseline year and from exactly where?	375	Aerial photos from 1939 were examined by the District Wildlife Biologist to determine the location of historic grasslands and shrublands. As these photos were not available electronically, large scale paper copies were examined. Areas that appeared to be forested or semiforested were dropped from existing "Juniper" units. Grassland and shrublands were also assessed; where grassland and shrubland were evident on 1939 photos, an asessment was made based on 2012 aerial photos as to the degree of conifer encroachment. Where encroachment was noted, polygons were identified and digitized. Where juniper was evident historically, a visual assessment of the degree to which the juniper had departed from historic conditions was made. Where stands showed little departure from historic conditions, these areas were dropped. Where density had increased substantially or distribution expanded considerably, these stands were also digitized and incorporated into shrub-steppe units.

Coulter	Karen	19	218	It is unlikely that Douglas-fir would be in an area that used to be grassland or shrubland historically in the Kahler area or that Pileated would be using these stands now.	376	This is the opinion of the commenter. Shrub-steppe enhancement units in the southeast portion of the project area contain Douglas-fir that has encroached into grassland and shrubland habitat.
Coulter	Karen	19	219	Avoid burning in suitable Pileated woodpecker and American Marten or Pacific fisher habitat.	377	Direct, indirect, and cumulative impacts of burning are described for the pileated woodpecker and the marten on pages 163-170 and 170-172 of the EIS. The fisher was not analyzed in the Kahler area due to the fact that it is not documented or suspected to occur on the Umatilla National Forest.
Coulter	Karen	19	93	Where is this analysis of overall direct and cumulative effects to hydrologic flows from the Kahler project, livestock use, past logging, existing and re-opened roads, etc.? This is a strongly incomplete hydrology analysis	378	No impact will occur in Class 4 streams because they are intermittent and no fish species are present. Harvest will not occur during water-flow events, as stated in PACFISH RMOs and FEIS (Page 82).

Coulter	Karen	19	95	Where is the consideration of the combined effects of the Kahler project in addition to existing impacts to hydrologic flows, erosion, sedimentation of streams etc.. A listing of cumulative effects is not sufficient without analyzing their combined effect to particular resources and values.	379	See Response 362.
Coulter	Karen	19	101	[Highlighted: "â€¦ at the sub watershed scaleâ€¦"] Calling effects being "localized" and of limited duration avoids the agency's responsibility to disclose actual effects to values such as streams and fish and to analyze cumulative effects. Of course significant direct and cumulative effects generally start at a specific location ("localized") and for a limited duration.	380	From a water quality point of view, "Significance" refers to whether an action will affect a beneficial use of water. When a Hydrology Report says an effect is localized and of short duration, the expectation is that beneficial uses would not be impacted. The other resources have other criteria specific to their resource.

Coulter	Karen	19	94	[Highlighted: "Since 1981, approximately 10,926 acres in the Project Area have had some type of commercial harvest which affected the timber canopyâ€¦ The harvest included overstory removal, regeneration, salvage, and commercial thinning. The harvests before 1995 included trees in riparian areas."] Why is it assumed that livestock are no longer (since 1916!) reducing the numbers and diversity of hardwoods? This is an obvious false assumption if you look at evidence in the forest. What is ECA? Equivalent clear-cut areas?	381	At the end of the paragraph referenced it was clarified that, "The grazing by livestock and wildlife has been an important factor in the maintenance of low levels of riparian hardwoods." ECA = Equivalent Clear-cut Acre
Coulter	Karen	19	96	[Highlighted: "In addition, channels are less stable, because of the lack of woody material functioning as roughness and flow resistance (Photo 3)."] Where is photo 3?	382	Photos are on file at the Heppner Ranger District.

Coulter	Karen	19	105	Highlighted: "The harvest part of the Kahler Projectâ€¦"] Isn't this just the described burning contribution? See Table 4-8.	383	Please read the whole Cumalative Effects section, starting on p. 267 of EIS. The important point is in the last paragraph on p. 269 of the EIS . Notice there are some side boards in regard to timing of harvest and burning: "Compare the 4.3 percent increase in tons per square mile per year of sedimentation for the Kahler Project with the 71 percent increase for the Wheeler Point Fire. The sedimentation modeled for the Kahler Project is limited to approximately 10 years, and is well below the background rate of sedimentation. It is unlikely to be measurable at the watershed scale. The modeled sedimentation from the 1996 Wheeler Point Fire would be likely to be measurable at the watershed scale."
Coulter	Karen	19	4	Page 44 * [Highlighted: "These isolated segments of perennial flow are not included in harvest units"]. Actually at least one area of perennial flow from a spring is included in a sale unit. See one of my survey sheets.	384	There are Design Elements to protect all springs, wetlands, ponds, and streams.

Coulter	Karen	19	88	[Highlighted: "Water temperature may indirectly benefit over the long term from CT and NCT reducing stand density in riparian areas, because more light would reach the forest floor, and possibly stimulate suppressed hardwood vegetation."] Removal of shade-contributing trees especially large trees through CTing streams would obviously increase stream temperatures but this is not discussed.	385	The point is that the streams proposed for harvest in RHCAs are intermittant, and do not contribute to elevated temperatures downstream during the critical low flow, high temperature season.

Coulter	Karen	19	90	[Highlighted: "â€¦during runoff is anticipated, culverts, bridges, and/or rock/earth work would be used to stabilize and armor channel banks and bottoms and prevent erosionâ€¦"] There is no good justification for allowing crossing of swales during runoff. * [Highlighted: "There would be log haul on approximately 26 miles of existing roads within RHCAs. Belt et al. (1992) infers that "sediment produced within the buffer strip would enter the stream more readily than sediment from source areas more distant from the stream channel." Erosion on these roads would be more likely to increase suspended sediment in streams than haul outside of RHCAs."] Avoid stream crossing and heavy equipment use in ephemeral draws altogether. Dragging trees out from stream bank zones will surely introduce a lot of sediment into the stream and should be prohibited.	386	The point for the first comment is that if it becomes necessary to cross a swale during runoff, measures would be taken to maintain the shape and function of the swale. For the second comment, there are design elements stating that trees that support the stream banks would not be cut, and logs would not be dragged across streams.

Coulter	Karen	19	91	[Highlighted: "Because of these Design Criteria, it is not expected that the activities in RHCAs would cause measurable increases in sedimentation above the background levels."] There is no support given for this conclusion of no measurable increase in sediment above back-ground levels due to design criteria.	387	The point of Best Management Practices and Design Criteria is to minimize the impacts of activities on water quality, including sedimentation.
Coulter	Karen	19	92	Avoid log haul on roads within RHCAs to reduce sediment lading to streams. Design criteria are not always implemented correctly, and are not 100% effective, and so cannot be relied upon to avoid significant sedimentation.	388	From a water quality point of view, "Significance" refers to whether an action will affect a beneficial use of water. As you state "Design criteria are not always implemented correctly, and are not 100% effective ..." This is often the case when human beings are involved in activities. For the reasons you mention, and because the actors are humans, perfection in implementation is not the goal. The goal is to protect the beneficial uses of water.

Coulter	Karen	19	97	[Highlighted: "Without actively reducing fuel loads and configurations, there is a risk that wildfire in riparian areas would be uncontrollable. It is further believed that if fuels are reduced in the uplands, but not in riparian areas, then wildfire would spread through the riparian areas to other parts of the forest where fuels were not treated."] Yet there are no considerations of trees (small) would be causing any RHCA problems if and where there are such problems.	389	Comment 19-97 is not understood.
Coulter	Karen	19	103	So the Kahler project would contribute any additional 5.35 tons of sediment per square mile per year, in addition to the modules additional 3.9 tons per square mile of sediment per year from the Wheeler Point fire- worse than the fire! Why is this considered acceptable or an improvement over the fire? It is disingenuous at best to suggest that the Kahler project is designed to prevent a "destructive" fire like Wheeler Point. No it's just a timber sale.	390	See Response 383.

Coulter	Karen	19	104	[Highlighted: Table 4-7, "Alts 2 and 3 percent above background: 4.3%"]. So sedimentation from alternative 2 or 3 would actually be well above background levels. Why is this denied elsewhere in the DEIS?	391	The point is that a 4.3 percent increase in sedimentation over this period of time and in this area would be a very modest increase that would be difficult to distinguish from the background.
Coulter	Karen	19	106	This is indirect contradiction to the previous page's assertion that the Kahler project would add an additional 5.35 tons per square mile per year of sediment. Which is it and why is this DEIS periodically apparently lying to the public?	392	See Response 383.
Coulter	Karen	19	107	[Highlighted: "The sedimentation modeled for the Kahler Project is limited to approximately 10 years, and is well below the background rate of sedimentation."] It's above the background level for sediment, based on DEIS pg. 127.	393	See Response 383.
Coulter	Karen	19	112	There should be analysis as to how the Kahler project would affect the floodplains of streams. Otherwise it is not clear that the Kahler project would violate Executive Order 11988.	394	The references you are referring to are on DEIS, p. 272 and 325. There are 17 more references on pages 11, 71, 76, 256 (2 references), 257, 260, 262, 272, 273 (3), 277 (3), 280, and 296.

Coulter	Karen	19	113	Highlighted: "Executive Order (EO) 11990 requires the Forest Service to "avoid to the extent possible the long and short term adverse impacts associated with the ... destruction or modification of wetlands." The Kahler Project does not propose to destroy or modify any wetland. For this reason, the Kahler Project is consistent with this EO."] Why is there no discussion of effects the Kahler project would have to project area wetlands? We are not convinced that Kahler project activities would not further degrade the areas wetlands, thereby violating Executive Order 11990. (see DEIS pg. 130)	395	Design criteria in the EIS would buffer wetlands, which will protect against impacts.

Coulter	Karen	19	114	[Highlighted: "The mechanisms which created the wetlands appear to have been reversed, because most of the stream channels which run through them are incising and shortening (tending toward Rosgen Class C from possible Class E). As the streams incise and shorten, deposited sediment in floodplains erodes. As the floodplain erodes, there is less sediment to store run off, which results over time in a lowered water table."] We are concerned that there is already ongoing degradation of the wetlands- likely from past logging and ongoing livestock use. We are afraid that the heavy logging proposed in the Kahler project would further dry out and deplete the wetlands and strean floodplains. Why are the impacts of such heavy logging not analyzed in this DEIS? Page 131	396	See DEIS, p. 257 for the scientific reference . It's more about extirpation of beavers and their habitat than logging.

Coulter	Karen	19	220	We are opposed to planned impacts to Pileated woodpecker source habitat - especially under the guise of "dry "forest restoration. Drop all suitable Pileated habitat with signs of active Pileated use (fresh foraging, usable Pileated nestholes) from sale units. See our survey sheets for evidence of active Pileated woodpecker use. Page 231 * We are appalled by the proposed severe reduction in Pileated woodpecker source habitat in the Kahler project area - by 66% in alternative two! The Forest Service is still legally obliged to maintain the viability of Management Indicator species and to not contribute to a trend toward species uplisting. Reduction of 66% of Pileated woodpecker source habitat and greatly reducing overall use of the Kahler project area by Pileated woodpecker, a Management Indicator species, violates the National Forest Management Act, and by extension,	397	Pileated woodpecker were noted at a number of locations during reconaissance of the project area; please refer to the effects anaysis on pages 163-170 of the EIS. Impacts to this species are discussed at the scale of the watershed. Queries of source habitat relied on several variables, including canopy closure, stand structure, and cover type (existing dominant species). Due to changes in species composition desribed in the Vegetation Report, it is likely that a portion of the source habitat acres affected by treatment lie in areas that would have historically been much more open and dominated by ponderosa pine or a mix of ponderosa pine and Douglas-fir. Viability of this MIS species is assessed at the Forest scale, in compliance with the NFMA.

Coulter	Karen	19	223	Again the Forest Service switches to the Forest scale of analysis to artificially minimize[comment end] (or ignore) impacts to Pileated woodpecker pairs (and overall population) at the project scale.	398	The Forest scale is the appropriate scale for assessing the viability of the pileated woodpecker. Impacts are also assessed at the smaller analysis area scale. Refer to effects analysis on pages 163-170 of the EIS and the Terrestrial Wildlife Report.
Coulter	Karen	19	238	Somehow the no action affects description manages to make the in growth of forest and later wildfires look deadly for even thin-bark fire-resistant large old ponderosa pine, but fails to assess the impacts of logging heavily in alts two and three to the future abundance and snake recruitment of Ponderosa pine. The heavy logging into low basal areas planned would (theoretically) mimic open park-like old growth Ponderosa pine stands in dry forest but leave less trees than would typically occur in younger Ponderosa pine stands more common in the project area not allowing for needed mortality to gradually reach old-growth open density.	399	Edits have been made in the EIS and Terrestrial Wildlife Specialist report to the analysis of effects in the No Action section in response to information provided by the fuels specialist. Potential impacts to snag recruitment are discussed in the Primary Cavity Excavator section on pages 154-163 of the EIS.

Coulter	Karen	19	234	We are concerned by the persistent forest service trend of identifying fire suppression as the source of perceived forest health problems, only to then plan timber sales that are thought to reduce the risk of needed wildfire and to Plant continue wildfire suppression in the event of a wildfire. Even when a timber sale is billed as dry forests restoration rather than as "fuel reduction", it is designed to reduce fuels and theoretically reduced fire risk, as stated many times in the Kahler DEIS.	400	Thank you for your comments. At this time, the Forest Plan does not allow for the use of natural fire (wildfire use) within the Kahler planning area. Fire suppression strategies are listed in the Kahler Fire and Fuels report (Compliance with Forest Plan and Other Relevent Laws, Regulations, Policies, and Plans; Management Areas Standards and Guidelines; Fire Management Direction). It is not expected or desired that high severity fire impacts would be eliminated from the landscape in the Kahler project area. A number of wildlife species depend on pulses of burned forest and high snag densities created by these events. Untreated areas (including high density skips within treatment units, other areas dropped from consideration for treatment for various reasons), riparian areas along streams, Dedicated Old Growth, would remain susceptible to high severity impacts within the larger low/mixed fire severity regime.

Coulter	Karen	19	224	In the absence of Kahler area population studies for Pileated woodpecker, the Forest Service has no way of knowing their population status, population trends, level of reproductive success, or viability threshold. Therefore the Forest Service can't be sure the Kahler project implementation would allow for the continued viability of Pileated woodpeckers in the project area. * Based on reductions of Pileated source habitat predicted from both alt.2 (66% reduction) and alt. 3 (56% reduction), implementation of either action alternative could cause a declining trend or loss of viability for the species in the project area.	401	Species-specific surveys for pileated woodpecker were not completed in the Kahler project area. Incidental observations of individuals and nests were recorded and entered in to the database of record (NRM Wildlife). For the purposes of this analysis, habitat is used as a proxy to determine impacts to pileated woodpecker at the small scale (analysis area) and large scale (viability analysis at the Forest scale). While there would likely be impacts to habitat availability and distribution at the stand scale within the Kahler analysis area, at the Forest scale (the appropriate scale for analyzing viability), the viability of the pileated woodpecker is expected to continue. Refer to the effects analysis in the EIS (pages 163-170) and the Terrestrial Wildlife Report (pages 87-97 and 97-105).

Coulter	Karen	19	225	The DEIS admits that under either action alternative: "Some concentrations of pileated woodpecker source habitat would be largely converted to an unsuitable nesting condition. It is likely that overall use of the area would be reduced to some degree due to this reduction in the quantity, patch size, and distribution of pileated woodpecker source habitat." (DEIS p.231 re: alt 2 & p. 233 similar statement re: alt 3). This is not managing for Pileated woodpecker viability even based on habitat alone, in violation of NFMA. Further, without knowledge of the species' population status and trends in the project area, the Forest Service can't know that reduction of 56% - 66% of Pileated so[urce?] habitat in the project area would not cause a loss of viability for the species there and contribute to uplisting of the species.	402	Habitat is used as a proxy to determine impacts to pileated woodpecker at the small scale (analysis area) and large scale (viability analysis at the Forest scale). While there would likely be impacts to habitat availability and distribution at the stand scale within the Kahler analysis area, at the Forest scale (the appropriate scale for analyzing species viability), the viability of the pileated woodpecker is expected to continue. Refer to the effects analysis in the EIS (pages 163-170) and the Terrestrial Wildlife Report (pages 87-97 and 97-105).

Coulter	Karen	19	226	The Forest Plan C1 DOGs are not sufficient to ensure the survival and reproduction of the Pileated.	403	At the time the Forest Plan was written, the size and distribution of the old growth network was based on the best science. New science indicates that this species requires more acres and more snags than previously thought. The C1 areas provide a basis for the viability of the pileated woodpecker at the Forest scale.
Coulter	Karen	19	227	Alt. 3 would only affect 354 acres less of Pileated habitat than Alt. 2 this is less than one viable territory for a Pileated pair (Forest Plan allocations for Pileated woodpeckers of about 300 acres are less than the requirements of a pair in ideal habitat based Evelyn Bull's research. So alt. 3 is not much more likely to protect Pileated viability in the project area than alt. 2.)	404	See Response #398 (Comment 19-223).

Vandehey	Roberta	6	31	Our West End Umatilla National Forest needs to be made attractive and useful to all users year-round. This part of the Umatilla National Forest must be not only restored after the devastating 54,000 acre Wheeler Point Fire on August 10, 1996 as discussed above, but equally important the United States Forestry Service must diversify the user base. I have never seen a more abused National Forest than this one, even without the Wheeler Point Fire! Make it a National Forest Destination everyone's year-round recreational use. Where are the hiking and nature trails, camping facilities and the roadless areas? Where are the animals, birds, butterflies, streams, large trees, etc. to observe, photograph, paint, draw, or just enjoy?	405	There are two camping facilities in the Kahler vicinity--Fairview Campground is within the project boundary (FEIS 101) and Bull Prairie Campground is 2.5 miles north of the project boundary. Tamarack Lookout rental cabin is also within the project boundary (FEIS 101). There are 13.5 miles of OHV trail within the Kahler project boundary (FEIS 102). The Skookum Inventoried Roadless Area is 9.5 miles east of the Kahler project boundary (FEIS 102), while the Texas Butte Inventoried Roadless Area is 11 miles northeast of the project boundary.

Heiken	Doug	14	29	The EIS says that both pines and juniper have invaded the shrub steppe ecosystem, but seems to indicate that only juniper will be removed. That strategy needs further explanation. It's not really steppe enhancement but if only one of the invaders is being removed. Junipers are more tapered than other species, so diameter at breast height is not a very good way to identify legacy junipers. Maybe consider retaining juniper <21" diameter at stump height.	406	The intent of these treatments is to remove invading conifers, including juniper, ponderosa pine, Douglas-fir, etc. where they were historically absent. All juniper larger than 21 inches dbh would be retained; assessment on the ground indicate that the occurrence of young juniper that were greater than 150 years old was minor, so further amendment of the Forest Plan to allow this action was not warranted. In addition, all juniper exhibiting old growth character would be retained, and smaller juniper would be retained in those areas where juniper occurred or is expected to have occurred historically (shallow, rocky soils, rimrock areas, or other areas identified in historic aerial photos where recruitment is expected).

Coulter	Karen	19	228	Marten are now thought to range even further than earlier thought. They are known to have large home ranges of 1,500 acres and more. There have been marten sightings on the Heppner Ranger District (eg. one during sensitive plant surveying in 1992) and I found what could be part of a marten skeleton while surveying the Kahler sale in 2013. With no population surveys for marten, it can't be known that they do not use the project area. Further, the potential for Pacific fisher use of the area should have been analyzed as they have been thought to occupy lower elevation habitat than marten and used to exist across Oregon forests.	407	Direct, indirect, and cumulative impacts on the marten are discussed in the EIS on pages 170-172. Please refer to the Terrestrial Wildlife Specialist Report for a full discussion of the affected environment and potential effects (pages 106-111 and 111-113). Pacific fisher are not known or suspected to occur on the Umatilla National Forest. For this reason, and the fact that the historic distribution of this species does not include the Heppner Ranger District, it was not analyzed in this document.

Heiken	Doug	14	20	The DEIS says "Effects to the intrinsic physical and biological resources of other undeveloped lands within the Kahler planning area (soils, water, wildlife, recreation, fisheries, etc.) are disclosed in the applicable resource sections of the EIS and are not reiterated here." This fails to recognize the disproportionate contribution of unroaded areas to providing various resource values like clean water, intact watersheds, high quality habitat, snag and dead wood habitat, etc. And it fails to recognize the disproportionate adverse effects of logging on unroaded areas >1,000 acres compared to logging in previously roaded and managed areas.	408	Cumulative effects to wildlife, water, fish, soil, and other resources were not reiterated in the undeveloped lands section to avoid unnecessarily lengthening an already extensive document.

Heiken	Doug	14	37	The DEIS says "Analysis of projected climate change impacts suggest that a project of Kahler's scope will contribute such minimal amounts of greenhouse gas that its impact on global or national climate change will be infinitesimal." This is a completely improper way to look at the issue of greenhouse gases and climate change because GHG emissions only become a problem as a result of cumulative effects of all emissions. On a global scale, all emissions seem infinitesimal, but cumulatively they cause a global crisis. All emissions contribute to cumulative effect and exacerbate the global problem. All emissions must therefore consider ways of avoiding, minimizing or mitigating effects. In this case, global climate change can be mitigated by reducing acres treated, or increasing retention levels. The FS argues that logging a few small patches of forest won't make a difference in the global scheme of	409	See response #267

Coulter	Karen	19	229	Yet marten evolved with the periodic stand replacement fire, which actually creates suitable habitat for them by creating large blocks of habitat subject to only infrequent fire. Marten did not evolve with, and are not adapted to logging. Yet this is not discussed in the DEIS. * Drop the logging planned (and burning) in marten source habitat. Logging already scarce habitat is not managing for viability of this Management Indicator species. * Actually landscape underburning would have major impacts on marten source habitat as they need abundant downed wood.	410	Changes have been incorporated into the effects discussion for the No Action alternative. Commenter indicates that infrequent high severity fire immediately creates habitat for this species. As stated in the discussion of effects under the No Action Alternative, it takes a number of years to provide stand structure (generally later/older structures) desired by this species. The viability of the marten is assessed at the Forest scale. The Forest scale is the appropriate scale for this analysis. Please refer to the NFMA for clarification. Moist and cold upland forest stands would be less likely to burn during appropriate burn windows for dry upland forest habitat; generally fuel moisture inhibits fire spread in these areas. In addition, project design elements would be implemented in moist and cold upland forest stands to reduce the risk of undesired fire impacts.

Coulter	Karen	19	25	The following bullet points from page 96 indicate some of the values we found in "other undeveloped lands" where logging is planned. Other road less characteristic criteria may also apply to these areas, such as traditional culture artifacts and sacred sites. o Diversity of plant and animal communities o Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land o Primitive, semi-primitive, non-motorized and semi-primitive motorized classes of dispersed recreation o Reference landscapes o Natural appearing landscapes with high scenic quality o Other locally identified unique characteristics	411	Thank you for your comment.

Heiken	Doug	14	9	The DEIS is confusing. It refers to two different criteria for choosing large-young trees that may be removed, e.g., "interacting canopies" and "2 times the dripline." These seem like two different things (unless it is interpreted as the dripline of the large old tree, plus the dripline of the large young tree, therefore means the canopies are interacting). We prefer the interacting canopies criteria.	412	Refer to the Rationale for Removing Trees Greater than 21 inches in Diameter section of the Supplemental Forest Vegetaion Report. There are two different criteria.
Coulter	Karen	19	109	There needs to be far less wildfire suppression which has the effects of altering natural ecological functioning and giving rise to Forest Service rationales for more destructive logging. My land burned at stand replacement severity in the Wheeler Point Fire and I still see logging as far more (and unnaturally) destructive than wild fire.	413	Thank you for your comments. At this time, the Forest Plan does not allow for the use of natural fire (wildfire use) within the Kahler planning area. Fire suppression strategies are listed in the Kahler Fire and Fuels report (Compliance with Forest Plan and Other Relevent Laws, Regulations, Policies, and Plans; Management Areas Standards and Guidelines; Fire Management Direction).

Coulter	Karen	19	230	So based on the DEIS discussion of past affects to marten from marketing especially from significantly reducing canopy closure as proposed in the Kahler sale propose logging of source habitat would eliminate its suitability for marten under burning would also do greater eliminate habitats suitability. Where pileated woodpecker habitat has abundant down wood and large snags and large down wood, it may also serve as marten or Pacific Fisher habitat if it also has sufficient canopy closure. So protecting active pileated habitat also helps protect habitat for marten and Fisher in the project area. True dry forest restoration should not be going into pillaged, marten, or Fisher habitat both because moist source habitat for the species tend to be moist mixed conifer except for pileated nesting and because it tends to be old-growth forest.	414	Source habitat identification is laregly dependent on canopy closure, stand structure, and cover type. Treatment of the proposed stands would meet the purpose and need described in the EIS.

Coulter	Karen	19	231	Once again we are given no adequate range of alternatives to avoid impacts this time to marten.	415	The effects analysis for marten describes potential impacts of the No Action Alternative and all action alternatives. Due to the fact that there is little (235 acres) marten source habitat in the analysis area (>30,000 acres), and the fact that the majority of source habitat is outside of proposed units (moist and cold stands, RHCAs, etc), there are only slight differences between the action alternatives.
Coulter	Karen	19	233	Yet marten could be using the project area because they have large territories.	416	It is unlikely that marten are present in the Kahler area due to the preponderance of dry upland forest habitat in the area. Please refer to the Terrestrial Wildlife Report for a full discussion of the affected environment for marten, located on pages 106-111 in Appendix M.

Coulter	Karen	19	235	Is this the same source habitat identified for marten? (See DEIS p. 234) Is it Lodgepole pine?	417	Source habitat acres identified in the three-toed woodpecker section are the same acres as those described in the marten section. Source habitat characteristics differ slightly in terms of structure and cover type for these species. Refer to the Terrestrial Wildlife Specialist Report (Appendix M, affected environment, pages 106-111 and 114-118) for more information regarding these Management Indicator Species.

Coulter	Karen	19	67	[Highlighted: "with the assumption that the proposed action would reduce the fire risk, so a Low Severity Fire was modeled (85% cover). In the modeling we see sediment prone acres that may offer input to streams; similar to those created by the proposed activities (Table 4-2). This modeling indicates; after the project is implemented, the assumed effects of wildfire would not be as intense and thus produce unmeasurable effects from the proposal and its required mitigations."] It is not scientifically accurate to assume tht planned logging and other activities would reduce fire risk. The Forest Service fails to disclose scientific controversy as to the effectiveness of planned fuels reduction logging for reducing fire risk. In fact, there is some evidence that heavy logging proposed may further dry out microclimate conditions, increase wind speeds, slash, and the severity of fir in the area. (Sierra Nevada	418	For fire-adapted ecosystems to function in the future, multiple treatments over time will be imperative. In a 2012 study on the ecological effects of fuel reduction treatments, results showed that single entry mechanical treatments did not serve as surrogates for fire. Rather, restoration to pre-settlement conditions required repeated treatment over time (McIver, J., Stephens, S. et al). The combination of thinning and burning shift diameter distributions toward larger trees; however, no single entry will mitigate the history of fire exclusion and fuel accumulation in dry coniferous forests (Youngblood 2010). Therefore, multiple prescribed fire entries every 10 to 15 years post-treatment is recommended to maintain the Kahler analysis area. In doing so, stand densities may be better managed and fire tolerant species would be favored. This would allow for a more fire resistant forest over the long term (Kahler Fire and Fuels Report, Desired Conditions). Disclosed in the Fire Behavior section of the Kahler Fire and Fuels Report are the modeled impacts of fire occurring in each alternative. The short-term effects of the proposed action alternatives are captured through increased

Coulter	Karen	19	236	The forest service also identifies logging, including commercial thinning, removal of large trees, and reduction of significant canopy closure and snag recruitment is a major cause of loss and reduction of source habitat for management indicator species, yet plans to repeat the above mentioned logging practices in the Kahler project, which would cumulatively contribute to continued loss of source habitat for the species - eg. Pileated woodpecker, American marten , American three toed woodpecker, and other native denser forest-reliant species such as the as accipiter Hawks and flammulated owl and neotropical migratory songbird species.	419	Refer to the analysis of MIS in the EIS (pages 141-174) and the Terrestrial Wildlife Report. Impacts on goshawk (an accipiter) and Neotropical Migratory Birds (of which the flammulated owl is a focal species) are described in the EIS on pages 194-198 and 199-205.

Coulter	Karen	19	85	[Highlighted: "because of 100+ years of fire suppression, the biological components (wood, vegetation, fish, and wildlife) are increasingly threatened by the risk of uncharacteristically severe wildfireâ€¦.In the Project Area, approximately 1135 acres (20 percent) have burned out of approximately 5687 acres of riparian areas since 1944."] * Is there anything outside HRV about this level of fire in riparian areas since 1944? Fire suppression has not been widespread or effective for as long as 100 years -more like since the 1950's.	420	An HRV analysis was completed for species composition of the Kahler forest vegetation affected environment. Because species composition varies by biophysical environment, the HRV analysis is stratified by potential vegetation group: dry upland forest (app. 26,980 acres). Note that Moist Upland Forest PVG is excluded because it has too few acres for a credible HRV analysis (app. 300 acres). (Kahler Vegetation Report, Affected Environment, Exisiting Conditions, HRV Analysis for Forest Vegetation Affected Environment: Species Composition). The Kahler analysis area is classified as having a landscape FRCC departure of 2. This is derived from a weighted average based on the BioPhysical Settings determined by the Most Similar Neighbor (MSN) data and the effects of prescribed fire, wildfire, and herbivory from domestic ungulates (Justice 2014, Kahler Fire and Fuels Report, Existing Condition, Fire Regime Condition Class). For more information on HRV and FRCC refer to the Existing Conditions section of the Kahler Vegetation Report and the Kahler Fire and Fuels Report. It is not expected or desired that high severity fire impacts would be eliminated from the

Coulter	Karen	19	48	Why is there no explanation for these assumptions of no impacts re: erosion or sediment from current existing detrimental soil conditions (legacy skid trails, ect.)? not above this assumption for sediment (par. 1 pg. 103) it is admitted that a 400 foot buffer would be needed to limit sediment loss to streams (maximum buffers used for RHCAs are 300 feet for class 1 streams and that 18 miles on 26 acres of trails would produce erosion which could hinder soil productivity. How are there contradicting conclusions reconciled? * [Highlighted: "In the modeling we see that a 400ft buffer is needed to limit sediment loss to streams. Within the 400ft distance from streams there were 27 miles or 39 acres of trails would produce sediment that could influence the hydrology of the project areas."]	421	The 400 buffer is a theorized buffer needed under a wildfire scenario in the WEPP modeling. The Soils Report page 103 mentions a total loss of cover wildfire scenario with existing skid trail (10% cover) and burn area (45% cover). This modeling shows that if a wildfire were to occur, skid trails could not get closer than 400 from streams with 45% EGC in a harvest unit. A clarification will be added to the Soils report (103) and the EIS based on this comment.

Coulter	Karen	19	237	Once again there is no choice offered between the action alternatives to allow for avoiding impacts to a particular species - this time the White-headed woodpecker, even though impacts could be avoided (eg. no logging all for a single stratum, lighter and more bearable density thinning of mature people mine no logging of large trees.)	422	Beneficial impacts to stand structure would be similar in the short term; in the long term, projections indicate that differences would emerge to some degree. Differences are also described betweeen the action alternatives regarding the availability of moderate and high density patches of dry upland forest habitat. Please refer to the analysis of effects on pages 178-183 of the EIS.

Coulter	Karen	4	25	These four significant issues do not encompass all the significant issues - the 21" dbh/large tree deficit issue may have not been fully raised earlier because it was not clear that the Forest Service intended to log trees > 21" dbh during scoping, but it is a significant issue. So is any proposed logging LOS. The misuse of fire science re: moister mixed conifer stands is also a significant issue due to its effects on converting the forest to an "early seral" dominant forest type where it may not naturally be so.	423	Instances where 21â€DBH trees might be removed are limited to stands with the following criteria: Douglas-fir vegetation types, moderate or higher stocking classes, dominated by PP, have 10 trees/ acre or more of trees greater than 21â€and not currently classified as Old Forest Single Stratum (OFSS). If all of these criteria are met, than a DF or GF that is young yet large may be removed from within two driplines of a medium sized PP (greater than 15â€dbh). This determination is based on site specific stand analysis. Currently the old forest structure is well below HRV in the single stratum, and within HRV in the multi-stratum (Table 3-5, FEIS). Harvest will trend the old forest single structure towards HRV. Old forest multi-strata will decrease with harvest, but remain within HRV (Table 4-4, FEIS). The increase in OFSS is from harvest within OFMS or UR (understory re-initiation) stands. To date, stand analysis and field reviews have confirmed very little OFSS within the Kahler Project.

Heiken	Doug	14	17	We urge the Forest Service to protect the disproportionate resource values associated with large unroaded areas by reconsidering commercial logging in unroaded areas >1,000 acres. Some non-commercial restoration treatments may still be appropriate, such as pre-commercial thinning and prescribed fire. The map below does not clearly distinguish the 4 large unroaded areas from the smaller ones, but it looks like the following groups of units need to be reconsidered, and the FEIS needs to more fully disclose the adverse effects of commercial logging in them: * 29, 32, 100, 212, 31, 31b, 31a, 33, 34, 35, 37 * 49b, 88 * 42 * 71a, 71, 73, 92, 69a, 69b * 95, 70a, 70, 205, 205a	424	The FEIS pages 317-322 discuss the 4 areas of undeveloped lands that were greater than 1,000 acres in size. The Forest Plan details the decisions already made regarding which managment activities, if any, are appropriate on which lands through its management area allocations. Kahler proposes only those treatments allowed by the respective management areas.

Coulter	Karen	19	86	[Highlighted: "The likely sedimentation increase was modeled at 3.9 tons per square mile (Table 4-5), a 71.5 percent increase over background sedimentation."] Why is the reduction of shading, bank stability, and increased water temperatures and affected biological criteria from cattle grazing and logging in the project area not addressed? Why is only wildfire considered a threat? * High severity fire could also still take place after alt. 2 or 3 activities, but this is not considered or analyzed, making for a very biased analysis of the effects of no action vs. the action alternatives.	425	It is not expected or desired that high severity fire impacts would be eliminated from the landscape in the Kahler project area. A number of wildlife species depend on pulses of burned forest and high snag densities created by these events. Untreated areas (including high density skips within treatment units, other areas dropped from consideration for treatment for various reasons, Class I, II, and III riparian areas along streams, and Dedicated Old Growth) would remain susceptible to high severity impacts within the larger low/mixed fire severity regime. For cumulative effects to streams and water quality, see the Hydrology sections of the FEIS, starting on page 70 and on page 255.
Artley	Dick	1	1	Wouldn't it make sense to tell the public what "Resource Indicator and Measure 1" is first? This write-up is meaningless!	426	In the soil analysis four resource elments were examined in chapter 4 FEIS where it was disclosed that no active acres of soil mass movement were identified.

Artley	Dick	1	2	Wouldn't it make sense to tell the public what "Resource Indicator and Measure 3" is first?	427	Resource Indicator (sediment) is listed in table 3-14.
Coulter	Karen	19	240	We are concerned by potential impacts of both alternatives 2 and 3 to white headed woodpeckers through the misguided logging removal of large trees; too many mature, seed-producing Ponderosa pines, and the homogenization of the stands into essentially tree farm status lacking heterogeneity such as denser clumps of insect defoliated young and mature pine for whiteheaded woodpecker foraging (insect gleaning.) * Planning to retain old Ponderosa pine and Douglas fir does not address the impacts to white headed woodpecker of removing other large trees - and large nesting snags.	428	Direct, indirect, and cumulative impacts on the white-headed woodpecker are discussed on pages 178-183 of the EIS. In addition to stand heterogenity that will be favored by stand prescriptions and marking guides, skips (untreated area) will be retained in units. These skips would include dense fir stands (where available) and dense ponderosa pine stands ranging in sizes up to several acres, or larger, where appropriate given site specific conditions. The skips would provide potential feeding areas for white-headed woodpecker during years with poor seed production, as well as areas that will contribute to moderate and high snag densities in dry forest. Existing snags would be retained to the greatest extent possible; please refer to the snag effects discussion on pages 154-163.

Artley	Dick	1	3	The public wants to know the soil condition if there is no logging and road construction.	429	Existing detrimental soil condition totals are estimated in Table 3-14, by Project area, then harvest units and finally by RHCA in chapter 3 page 70.
Artley	Dick	1	4	A competent soils scientist would divulge that the following will not occur if Martin selects No Action: soil puddling, compaction, mycorrhizal fungi elimination, elimination of future sources to boost the organic in the soil, subsurface water flow process destruction, increased erosion and soil displacement.	430	Thank you for the comment. The soils report (page 11) & EIS (page 236) will include mention that under the No Action Alternative; proposed harvest related Detrimental Soil Conditions will not add to the existing DSC listed in table 4-21 FEIS.

Coulter	Karen	19	241	In the absence of population studies for white headed woodpecker in the project area, it is impossible to know how much past logging, including post-fire logging has already heard their viability and the effects of their viability of further logging-related snag and mature Ponderosa pine loss.	431	Systematic surveys for white-headed woodpecker were not carried out for this project. A recorded white-headed woodpecker call was broadcasted in some units to try and elicit a response. An incidental observation of two individuals was recorded in proposed unit 10. Activities proposed under Alternatives 2, 3, and 4 are designed to move stands toward an old forest single-stratum structure while providing for heterogeneity and untreated patches within units. The proposed activities would provide structural conditions and species compositions more similar to what occurred historically. While some existing snags would be lost as hazards and to burning, it is generally believed that snag recruitment in these stands would also be more similar to what would have been expected historically. Mature ponderosa pine (those >21 inches dbh or any size exhibiting old growth characteristics) would be retained in proposed treatment units.

Coulter	Karen	19	242	Where is the quantified cost/benefit analysis comparing habitat degradation consequences to any improvements in habitat for white headed woodpecker; without this wing of risks/costs against benefits, it can't be assumed that there will be a net benefit to the species from the Kahler project. (See DEIS p. 243 par. 3 and earlier discussion of impacts, pp. 241-243.)	432	The effects analysis for this species describes potential improvements as well as potential impacts to features desired by this species. Refer to the analysis on pages 178-183 of the EIS.

Coulter	Karen	19	243	Forest plan snag density requirements seem artificially low when compared to never managed forest and more recent science.	433	Current Forest Plan standards for snag retention are based on the biological (population) potential model described in Thomas and others (1979). There is general consensus that the biological potential model does not provide adequate nesting, roosting, or foraging structure for some cavity excavating birds (Bull et al. 1997, Johnson and Oâ€™Neil 2001). New sources of information have been incorporated into the Primary Cavity Excavator analysis (see pages 154-170 of the EIS and 52-72, 87-97 in the Terrestrial Wildlife Specialist Report) that indicate a more un-even distribution of snag densities across the landscape is more appropriate.

Coulter	Karen	19	245	The least the forest service could do is to drop one - third of the dry forest sale units from "thinning" (heavy logging) as recommended by Mellen - McLean et al., 2013, drop the logging of large trees (> 21" DBH), retain higher basal areas of mature ponderosa pines in sale units, drop the OFSS logging, and reduce the related road use that would result in associated hazard snag removal.	434	The White-headed Woodpecker Conservation Strategy suggests that 1/3 of the landscape should be in a moderate to high density condition to provide foraging habitat for this species during poor ponderosa pine seed production years. Untreated areas and skips within units would largely meet this recommendation.
Coulter	Karen	19	246	This conclusion ignores the greater impacts to white-headed woodpecker from more homogenization of the forest (more acres logged), more large trees and snags removed, and more roads meaning more hazard snake removal in alt. 2.	435	Text has been added to the analysis to clarify that this alternative would also have the most potential impacts to existing habitat features.
Coulter	Karen	19	247	So alt. 3 would also fail to follow the recommendations of Mellen - McLean for white-headed woodpecker forest density retention.	436	Refer to Response #434 (Comment 19-245).

Coulter	Karen	19	248	So these predicted impacts to white headed woodpecker are not quantified or evaluated against perceived benefits to the species, it is impossible to judge whether white headed woodpecker viability would be lost in the project area, especially in the absence of population data for the species there. (See DEIS p. 245)	437	Refer to the analysis of effects for white-headed woodpecker in the EIS (pages 178-183). Direct, indirect, and cumulative impacts (including those that have positive and negative implications for this species) are discussed in this section.
Coulter	Karen	19	251	In other words population levels of gray wolf prey would be expected to change within the project area. This impact of potential dispersing gray wolves needs to be analyzed. Listed species viability needs to be protected even if they are not known to be reproducing (denning) in the area. A radio-collared wolf has already been photographed in Wheeler County so gray wolf presence is not that unlikely.	438	Refer to Response #94 (Comment 4-54).

Coulter	Karen	19	252	This is an illogical cumulative effects to conclusion for gray wolves. It is not known for sure that they are not using the area (not present) and of course there is cumulative reduction in wolf prey. * Therefore wolves could start using the winter range, as it has only 0.5 miles of road per square mile.	439	Refer to Response #94 (Comment 4-54).
Heiken	Doug	14	18	Table 4-62 is misleading. It says that logging in will reduce undeveloped areas by 7%, but really its more than 23%. The data show that 2,332 acres of undeveloped lands are being modified out of 7599 total acres of undeveloped lands. The FS uses the wrong baseline to make its calculation by considering all lands instead of just the undeveloped areas.	440	This comment refers to DEIS Table 4-62, but it appears to use data found in DEIS Table 4-63. The scale of analysis was chosen to be the project area (FEIS 97). The comment that "The data show that 2,332 acres of undeveloped lands are being modified out of 7,599 total acres of undeveloped lands " is incorrect. In fact, there are 9,931 acres of undeveloped land currently within the Kahler analysis area and after Alternative 2 would be implemented 7,599 acres of undeveloped lands would remain, with 2,332 acres having been affected by management activities.

Heiken	Doug	14	23	The DEIS says there are maps in the appendices showing the impact of logging in undeveloped areas but such maps cannot be found. The DEIS refers to maps being in "Appendix A" but Appendix A is a botanical report.	441	Thank you for pointing out these errors. The maps will be included in the FEIS and the appendices will be properly referenced.
McClure	Steve	8	4	Industry infrastructure should be a key issue for this project. Boise Cascade, LLC currently employs over 600 people in Union County and approximately 100 people in Umatilla County. We have lost 24 forest contract companies and 357 family-wage jobs since 2005 in the seven county Northeast Oregon Blue Mountain Region. The mills in the area are also running below capacity.	442	The Purpose and Need states that the Kahler project will provide a supply of commercial forest products to support and maintain local infrastructure.

Coulter	Karen	19	249	Lewis' woodpeckers' status is considered rare and it is sensitive - listed, yet there have been no population studies initiated for the species for the project area or the Umatilla Ntl Forest. The Lewis' woodpecker is definitely in the project area. The greatest impact to this species from the Kahler project would be the attempted prevention of high severity fire, ongoing wildfire suppression, and the unquantified loss of large snags. The Lewis' woodpecker uses post-fire ecosystems longer than 10 years after the fire, since the Wheeler Point fire was in 1996 and they only started using the area on my land (stand replacement burned) a few years ago but are still nesting there - 18 years after the fire.	443	Species specific surveys for this species have not been done in the Kahler area. Based on past sighting records, this species is known to occur in the area. Heavy salvage after the fire reduced potential habitat considerably for this species. Please refer to the effects analysis on pages 183-187 of the EIS. It is not expected or desired that high severity fire impacts would be eliminated from the landscape in the Kahler project area. A number of wildlife species, including the Lewis' woodpecker, utilize pulses of burned forest and moderate and high snag densities created by these events. Untreated areas (including high density skips within treatment units, other areas dropped from consideration for treatment for various reasons), riparian areas along streams, and Dedicated Old Growth would remain susceptible to high severity impacts within the larger low/mixed fire severity regime.

Coulter	Karen	19	250	There is no quantified analysis given to support the contention that post-logging, snag recruitment would be equivalent to that which occurred historically in dry forest stands. We remain concerned about loss of large snag recruitment for Lewis' woodpeckers due to logging of large trees, hazard tree removal, burning, and planned fire severity reduction.	444	It is expected that moving stands and the landscape as a whole toward the HRV for structure, composition, and density would provide for snag recruitment at levels similar to what would have been expected historically. Please refer to the effects analysis on pages 183-187 of the EIS and Response # 443 (Comment 19-249).
Coulter	Karen	19	253	At what point do elk populations start crashing on the district and in the project area due to lack of adequate cover? Why is this not analyzed re: both elk and gray wolf viability in the project area?	445	Please refer to Response #93, 94, and 101 (Comments 4-53, 4-54, and 4-55).

Coulter	Karen	19	254	We are not convinced that there are no goshawk in the project area. * We want all commercial logging in suitable goshawk nesting habitat dropped in reducing foraging habitat. Canopy closure and basil area retained in sale units should be higher than propose - at least 40% canopy closer should be retained and all commercial size logging in LOS and DO G should be dry, along with the planned flogging of large trees greater than 21 inches TBH and our HCA. This will also benefit pileated woodpecker American Martin and other species dependent on large live trees. Large and dense snags, and abundant down large wood.	446	Please refer to Response #102 and 103 (Comments 4-56 and 4-57).

Coulter	Karen	19	255	Goshawk are very sensitive to human disturbance - especially when nesting, so no road should be built or re-opened in suitable goshawk nesting habitat or adjacent PFAs.	447	No known goshawk nests are present in the analysis area. In the event that a nest is located, potential disturbance associated with harvest activities would be assessed and seasonal restrictions considered where needed. Actions would also be taken to satisfy Forest Plan requirements for active northern goshawk nests (Eastside Screens). Please refer to the effects analysis for goshawk on pages 194-198 of the EIS.
Coulter	Karen	19	256	There should be no logging in suitable goshawk nesting or mixed conifer (including DF/PP) suitable forging habitat. There should be no large tree logging, to benefit cost talk and many other species.	448	Please refer to Response #102 and 103 (Comments 4-56 and 4-57).
Coulter	Karen	19	257	Drop all logging in suitable goshawk nesting habitat. A 62% reduction in suitable nesting habitat is crippling to the species' viability in the project area.	449	Please refer to Response #102 and 103 (Comments 4-56 and 4-57). The approporiate scale for viability assessment is the Forest scale.

Coulter	Karen	19	258	Sale units we are advising to be dropped from logging (mostly mixed conifer) should benefit interior and old growth - or greater density-dependent neotropical songbirds if they are dropped from logging. * Avoid burning in the spring reproductive season to benefit the neotropical migratory songbirds.	450	Preferred timing for landscape underburning is late summer or fall. If a burn window in the spring develops, burning would occur prior to the peak of migratory bird nesting. Please refer to Design Element WL11 (page 20 of the EIS). The effects analysis for Neotropical Migratory Birds is provided on pages 199-205 of the EIS.
Coulter	Karen	19	259	We are opposed to all logging of live trees and snags greater than 21 inch DBH including in Aspen stands, unless they are OSHA hazard trees. Aspen stands have three times more biodiversity when large conifers are retained. Largest conifers are likely to have been there long enough not to be "encroaching".	451	Aspen stands would be assessed on a case by case basis to determine appropriate treatment activities. Where it is apparent that aspen was historically codominant with conifers, larger conifers and those having the least impact on the aspen stand would be retained. Girdling, topping, or other actions are options for conifers in these stands to maintain structure for wildlife; wildlife biologist input would be sought to determine the disposition of these trees.

Coulter	Karen	19	267	Don't re-burn the area within the Wheeler Point Fire perimeter so as not to reduce nesting and roosting snags for Lewis' woodpecker, retain regenerating hiding cover for deer and elk, and as it has already been affected by wildfire and should be allowed to regenerate and change as naturally as possible, since natural regeneration on fire-burned areas creates important habitat on the landscape and is rare due to post fire logging.	452	Planned prescribed fire in the Wheeler Point burn perimeter is intended to begin breaking up the homogenous landscape and rejuvenating fire adapted grasses, forbes, shrubs, and trees. Prescribed fire entries will focus on achieving a mosaic of burn severity that ranges from unburned (approximately 50%) to patches of high severity. As part of the plan for retention of logs and snags, protection measures will be used during prescribed underburning to reduce consumption of these large woody fuels needed for wildlife habitat and hydrologic stability. Within proposed treatment units, we intend to protect large diameter snags and green trees (>20 inches dbh), where needed, from adverse impacts (consumption, mortality, felling as hazards to operations) associated with burning. This may include scratch lining, raking litter and duff, or pulling harvest-created slash away from these habitat features (Kahler DEIS, Design Features/Monitoring/Mitigation/ Common to Action Alternatives). For more information on the Wheeler Point fire see the Kahler Fire and Fuels Report, Existing Conditions.

Coulter	Karen	19	266	We support Alt 3's dropping of the four proposed sale units in the Wheeler Point Fire area that currently provide suitable habitat for Lewis' woodpecker, as well as cover patches for elk and deer. We are opposed to potentially disrupting Lewis' woodpecker breeding in known occupied habitat (the four sale units) through logging and other planned activities in alt. 2.	453	Thank you for your comment in support of Alternative 3.

Jerome	Irene	15	5	AFRC fully supports management in riparian areas to maintain and enhance the hardwood and shrub components as well as increasing the diameter of the conifers (excluding western juniper), for more effective shade potential, and for future long term woody debris. The "need" is not clearly articulated.	454	The Kahler Project is a Dry Forest restoration project. Restoring the dry forest in the Kahler Area involves reducing the stand density, creating a â€œpatchyâ€ forest, favoring dry forest species, managing for Old Forest Single Stratum, and reducing the ground fuels and ladder fuels. The rationale for treating in Class 4 RHCAs is that the vegetation in them most closely resembles the adjacent upland vegetation, i.e. â€œDry Forest,â€ rather than the presumed potential â€œriparianâ€ (i.e., stream dependent) vegetation. This type of restoration is consistent with PACFISH Goals 1, 2, 5, 6, 7, and 8, and with Standard and Guideline TM-1B, â€œApply silvicultural practices â€¦ to acquire desired vegetation characteristics where needed to attain Riparian Management Objectives (RMOs). Apply silvicultural practices in a manner that does not retard attainment of RMOs and that avoids adverse effects on listed anadromous fish.â€

Artley	Dick	1	82	Request for changes to be made to the final NEPA document: Assure that all natural resource conclusions are substantiated and supported by scientific evidence consistent with the science statements contained in Attachments #1 and #4. * insure that timber will be harvested from National Forest System lands only where protection is provided for other resources, * avoid actions that do not protect, restore, and enhance the environment as discussed in the Opposing Views Attachments, and * avoid any possible adverse effects of their actions upon the environment discussed in the Opposing Views Attachments. * analyze action alternatives which would avoid adverse impacts to the quality of the human environment.	455	Resource specialists consider and incorporate the best available science available when analyzing impacts on their respective resources. As is the case in many land management activities, there are trade-offs that invariably occur; some species or habitats benefit, while others do not. Although these impacts would occur, it is expected that moving the project area toward the HRV for structure, composition, and density would provide for a landscape more in line with what would have been present historically. Avoiding all impacts to all species and habitats is not realistic; refer to the Design Measures in Chapter 2 for a list of measures that would be implemented to reduce potential impacts to various resources, habitats, and species.

Henning	Blake	7	1	The Rocky Mountain Elk Foundation (RMEF) strongly supports the Kahler Dry Forest Restoration Project and recommends selection of Action Alternative 3 with modifications to provide retention of additional dense hiding cover for elk.	456	Thank you for your comment.
Henning	Blake	7	2	There remains doubt as to the effectiveness of Alterative 3 in retaining elk on the National Forest, even though Alternative 3 provides for fewer treated acres that would require fewer new temporary roads and fewer temporary openings of closed roads, thus reducing potential disturbance to elk.	457	Alternative 3 would retain larger patches of dense dry upland forest distributed across the project area for elk and other wildlife species. The effects analysis for elk (pages 141-154 in the EIS) indicates that despite these additional cover patches, it is likely that elk will move to adjacent private lands or adjacent National Forest lands outside the Kahler area during high disturbance times.
Henning	Blake	7	3	We suggest that Alternative 3 can be modified to increase hiding cover necessary for elk security.	458	Thank you for your comment. The Responsible Official and the Interdisciplinary Team will consider this input.

Henning	Blake	7	4	We suggest that in the Final EIS an action alternative be analyzed which increases the percentage of treated areas retained in "skips" over and above the range of 10 to 15 percent of treated area provided in the DEIS.	459	Thank you for your comment. The Responsible Official and the Interdisciplinary Team will consider this input.
Coulter	Karen	19	38	[Highlighted: "Soil mass movementâ€¦This assessment is made despite the presence of DSC in the form of legacy trials assumed to be detrimentally impacted from previous harvest. While the presence of some DSC is known to increase sediment, it is currently covered with adequate EGC to limit erosion above background levels."] * Why is soil mass movement not identified as a risk for proposed logging on steep slopes in the area?	460	Table 3-14 in the Soils section of the FEIS states no active areas of soil mass movement were identified.
Coulter	Karen	19	39	Referring to the last "Highlighted" comments: What is "EGC" and why is it assumed to "limit erosion above background levels"?	461	EGC is short for Effective Ground Cover and is listed with other acronyms in Chapter 7 of the FEIS.

Vandehey	Mike	10	1	I am a landowner and reside on the North end of the Notch Rd. I am definitely in Favor of Alternative #1. No action at this time I lost everything on the Wheeler Point Fore, so I don't want to see anymore irresponsible logging in the area. The Forest Service should plant more trees in The Fire area, not remove any more in the adjacent Area.	462	In the Supporting Forest Vegetaion Report , refer to Table " Silvicultural activities inlcuded in the Kahler Dry Forest Restoration Project ". Note that reforestation efforts in the Wheeler Point Fire area have been inconsistent.

Jerome	Irene	15	4	The "purpose" of the Kahler project is described as "to restore dry forest conditions and thereby create a resilient, fire adapted landscape by moving the project area towards its range of variability in forest structure, tree density, species composition, and associated wildlife and aquatic habitat. There is a shortage of old forest single stratum (OFSS) structure forest in the project area. This type of forest is characterized by a single overstory layer, with medium to large trees of early successional tree species such as ponderosa pine or western larch. Currently, only 6% of the forested land within the project area is classified as OFSS, whereas historically 40-60% of the forest would have been in this condition." Please include providing forest products as a part of the actual "Purpose" of the project as well as showing it as a need. It is one of the purposes of the project is it not?	463	Refer to the specific needs for the Kahler Project area.

Coulter	Karen	19	41	[Highlighted: "â€¦WEPP runsâ€¦ loam and slit loam soil texturesâ€¦ cover elements of Mature Forest (100% cover)â€¦"] * What are "WEPP runs"? Why is the Forest Service speaking in undefined acronyms in a public DEIS?	464	WEPP is short for Water Erosion Prediction Model and is listed with other acronyms Chapter 7 of the FEIS. WEPP runs are a reference to a specific model run or erosion scenario.

Artley	Dick	1	47	The DEIS does not list IDT members with the education, experience or knowledge to adequately and professionally assess and divulge the environmental effects of sale implementation to Recreation, Visual Quality, Camping and Trails and Dispersed Recreation. The public expects the USFS to staff their IDTs with professionals who specialize in the resources they represent. Chapter 4 contains a section describing the direct, indirect and cumulative effects of No Action and the 2 action alternatives to Recreation (pg. 265), Visual Quality (pgs. 265 to 267), Camping (pgs. 267 to 270) and Trails and Dispersed Recreation (pgs. 270 and 271). Incredibly, Supervisor Martin is so focused on getting out the cut, he forgets to staff his IDT with specialists capable of analyzing recreation in a professional manner. How could Supervisor forget this? Doesn't he know recreational use of the	465	The Recreation Specialist was mistakenly left off the list of IDT members in the DEIS. This has been fixed in the FEIS. The Recreation Specialist has been trained in visual quality assessment so is qualified to conduct that analysis as well.

Artley	Dick	1	40	There are costs associated with timber sales that occur long adter the sale closes. Also, where is the cost analysis of USFS cots vs. expected revenues. The public wants to know if this is a "below cost" sale.	466	The associated costs that occur after the timber sale closes is through receipts collected and distributed into the KV collection account. The cost analysis is located in Table 1 on page 3 in the Kahler Economics Report. The Economics Report states the finacial status with the current log markets at the time the analysis was completed.
McClure	Steve	8	3	Also, the economic analysis is based on the 1990 Forest Plan and there have been significant changes in demographics, infrastructure, and social needs over the past 25 years. These changes are very important in understanding the needs of the local communities and the desire for more family-wage jobs.	467	The data within the Economic Report is based on current log values and logging costs and an estimated volume for the project at time the report was completed.

Coulter	Karen	19	20	Page 86 * The Forest Service proposing to remove large trees (and thus also future large snags) in the Kahler project area is a direct threat to white headed woodpeckers and other MIS species. Planned heavy removal of over story canopy closure, multilayered canopy, and other dense forest threatens the viability of Townsend's Warbler, Varied Thrush, Flammulated owl, and other focal species and Neotropical species heeding denser habitat, including Northern goshawk, Coopers hawk, and Sharpshinned hawk.	468	The white-headed woodpecker is not an MIS for the Umatilla National Forest. Impacts to the white-headed woodpecker, MIS, and goshawk are described on pages 178-183, 141-174, and 194-198. Impacts are also described for Neotropical Migratory Birds on pages 199-205.

Artley	Dick	1	80	The DEIS does not discuss the items shown below. (c) Possible conflicts between the proposed action and the objectives of federal, regional, state, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned. (See Â§1506.2(d).) (g) Urban quality, historic and cultural resources, and the design of the buil environment, including the reuse and conservation potential of various alternatives and mitigation measures. Request for final NEPA document modifications: Please comply with the law by including discussions of c and g above.	469	This issue has been addressed in the FEIS. All tribal consultation will be implemented on a government-to-government level. All eligible cultural resource sites will be flagged and avoided.

Heiken	Doug	14	19	The DEIS does not give adequate consideration to the ecological significance of unroaded areas >1,000 acres, at least four of which exist in the planning area. The EA looks at undeveloped areas through the lens of wilderness (focusing on solitude) when in reality there are a wide range of values other than wilderness that are disproportionately found in unroaded areas >1,000 acres. Logging is adverse to many of these values and the DEIS does not fully disclose those effect.	470	At the time of the analysis in the DEIS, National Forest Service direction is that undeveloped lands less than 5,000 acres do not need to be analyzed for wilderness values. This direction has changed since the DEIS was published, and those changes have been addressed in the FEIS.
Kelley	Brian	13	36	Amendments to the Eastside Screens are considered a significant change to the forest plan and therefore the Forest Service must follow the same procedures as are required for developing and approving a forest plan. The DEIS characterizes such amendments as non-significant and thus is in violation of the National Forest Management Act NFMA. See League of Wilderness Defenders et al., v. Connaughton, No. 3:12-cv-02271-HZ (D. Or. November 9, 2014).	471	The determination of significant or non-significant plan amendments will be addressed by the Responsible Official in the decision document.

Kelley	Brian	13	40	The United States District Court for the State of Oregon recently affirmed the requirement that for a forest plan amendment to be a site-specific amendment and therefore non-significant "the amendment to the Forest Plan must be based on unusual or unique aspects of the site itself when compared to the forest generally". League of Wilderness Defenders et al., v. Connaughton, No. 3:12-cv-02271-HZ (D. Or. November 9, 2014). Amendments to the Eastside Screens are a forest and region wide issue and thus are not site specific. Id.	472	See Response #471.
Heiken	Doug	14	1	"Increasing the pace and scale" of activity on the Blue Mountain National Forests should not come at the expense of meaningful public involvement.	473	This project had two public comment periods and the 45-day comment for the Draft EIS was extended an additional 30 days. This project was also written in cooperation with the Umatilla Forest Collaborative Group to incorporate the issues and concerns of the group into the Kahler Project. It is the Forest Service's opinion that there were sufficient public comment periods.

McClure	Steve	8	14	We are concerned that economics was not a key issue identified for this project. While we understand that there will be an economic benefit coming from both of the action alternatives, the amount and type of economic benefit, both to the Forest Service and the local communities could vary significantly. Having economics identified as a key issue would provide better clarity regarding economic return, jobs, return on the investment as well as a better understanding of how this project fits with the multiple use mandate.	474	While economics was not addressed as a key issue, the economics section in the FEIS will be updated.

Storm	Rex	16	7	Restate 'skyline" harvest method as "cable" logging; avoid prescriptive logging method language. The proposal refers to, "â€¦skylineâ€¦methods," where the more appropriate language would be "cable logging" method. I'd urge you to identify logging plans that facilitate logging by cable systems. "Skyline" refers to a single specific rigging method; and its use in the DEIS would harmfully deny use of many effective cable logging techniques. The NEPA decision document language should accommodate a full range of modern harvest technologies; rather than needlessly prescribing one specifically-limiting system or method. We suggest stating harvest objectives as outcomes, rather than prescriptive equipment/rigging requirements. Project application of modern logging technology and methods should be subject to the professional discretion of the silviculturist, timber sale officer,	475	Skyline will be replaced with "cable system" in the final EIS

Storm	Rex	16	12	Please remember that economic factors are critical to accomplish a viable forest management project. Optional removal of unmerchantable material from the sale area; sawlog timber volume per acre harvested; a practical forest road network; and optimizing the sawlog harvest of trees over 21" dbh are the economic means to help pay for the thousands of acres of non-merchantable thinning in this project. Without cost-effective sawlog revenue included, the non-commercial treatments become infeasible.	476	Although economics is a critical component of the Kahler project, the purpose and need for the project is dry forest restoration.

Vandehey	Roberta	6	17	Do no logging, thinning, or chemical applicaitons in wetlands, riparian areas, or streams, including the removal of any trees, regardless of species. Because the tree is a Juniper is no justification to log a wetland.	477	Refer to Table 1 in the Supplemental Forest Vegetation Report for a summary of objectives based on treatment. Additional information regarding harvest within the Dry Forest RHCA thinning section begins on page 9 of the Supplemental Forest Vegetation Report. The silviculture prescription would be applied in Category 4 RHCAs, but there would be additional Best Management Practices (BMPs) to protect streams, springs, wetlands, and ponds (see Hydrology prescriptions). All chemical application will be consistent with the 2010 Invasive Plant Treatment EIS.

Vandehey	Roberta	6	2	I do not see any good forest management actions suggested in Alternatives 2 and 3 of the Project proposal excepting road closures and there aren't nearly enough of those. To even suggest building any new permanent roads as the Project proposes to do is unconscionable. To suggest that logging, thinning, spraying, removing trees in riparian areas, and burning is going to restore a fire area is outrageous and unacceptable.	478	Refer to Table 1 in the Supplemental Forest Vegetation Report for a summary of objectives based on treatment. Additional information regarding harvest within the Dry Forest RHCA thinning section, beginning on page 9 of the Supplemental Forest Vegetation Report. Open road densities will be reduced in both action alternatives. Refer to Table 2-6 Current Road Density Project Area in the EIS.

Artley	Dick	1	46	Congress didn't anticipate that federal employees who are paid to serve the public would lie to the people who supply the tax dollars that pays their salaries to further their agency's agenda. Request for changes to be made to the final NEPA document: Rewrite the Environmental Consequences Chapter with a new IDT and instruct them to 1) include accurate, professional, complete, honest effects disclosures, or 2) provide unbiased science (not authored by a USDA employee) that supports the natural resource effects disclosures shown above written by members of the current IDT. This will eliminate the unsubstantiated effects disclosure issue. Also, disclose accurate effects of No Action to heritage resources.	479	This is an opinion of the commenter, no changes to the EIS will occur based on this comment.

Artley	Dick	1	48	The American people do not want their national forests logged for ANY (emphasis added) reason. Supervisor Martin the money for your salary comes from tax dollars supplied by these same Americans. How do you justify backhanding them? Comment: Even the USFS acknowledges that the public does not want their public lands logged. The following quote comes from a forest service publication that describes what the public wants from their national forests: "The public sees the restriction of mineral development and of timber harvest and grazing as being more important than the provision of natural resources to dependent communities (although this is still seen as somewhat important)." (Pg. 28) Source of quote: "Survey results of the American public's values, objectives, beliefs, and attitudes regarding forests and grasslands: A technical document supporting the 2000 USDA Forest	480	Thank you for your comment.

Warness	Lindsay	2	1	I am concerned that the Forest Service did not discuss the effect that this project may have on the counties through increased employment or returns to the county budgets. These are the social benefits that will have a lasting impact on county roads and schools.	481	This is nearly impossible to respond due to the to fact that we don't know who will purchase the products, or type of contract, value of the product, or how much money will be generated.
Kelley	Brian	13	37	The Forest Service has been marking logging units on this project before the DEIS was released and therefore before important public comments were received and before the final Decision was issued. HCPC is very concerned about pre-decisional marking and the expenditure of limited resources to mark units for logging before the completion of the NEPA process.	482	The marking of units common to all alternatives was started before a decision was reached in order to make efficient use of existing labor. There is no FS policy, direction, or law that prohibits the FS from completing marking activities on the ground. If needed alterations will be made following the final decision.

Reichgott	Christine	18	4	Chapter 2 describes implementation and/or BMP compliance monitoring activities related to mechanical treatment within riparian areas and silvicultural marking (WQ21, VG I). Chapter 2 does not, however, lay out a framework for a broader monitoring program. This project represents one of a handful of projects that are experimenting with active management within class IV RHCAs, as well as with different methodologies for establishing skips and gaps (the variable density approach2 and the individual, clumps, and openings (ICO) approach3. We believe the Kahler project provides an opportunity for interdisciplinary and interagency learning. We encourage the Forest to frame these activities in the context of adaptive management. We support the use of multi-party monitoring and encourage the Forest, in concert with the Umatilla Forest	483	Best Management Practice (BMP) monitoring would take place during layout, during harvest, during burning, post harvest, and post burning. This would be the Umatilla National Forest's responsibility. The broader monitoring and evaluation of active restoration in Class IV RHCAs, variable density thining, and ICOs thinning would be more in the realm of research, which is generally conducted by institutions other than individual National Forests.

Coulter	Karen	19	81	[Highlighted: The WEPP Modelâ€¦ is a physically-based soil erosion model that can provide estimates of soil erosion and sediment yield by considering the specific soil, climate, ground cover, topographic condition, and management activity."] * [Highlighted: Actual conditions and activities are more complex than those used to make model estimates. For example, the WEPP model assumes that project activities would take place in one year, when actually they would take approximately 5 to 10 years. However, the assumptions and simplificationsâ€¦] So, for using the WEPP model, were actual site specific conditions necessary for the model's accuracy assessed and used for each sale unit? (i.e. soil type, ground cover, topography and management) because these are quite variable.	484	See the Soil Specialist Report in the Kahler DEIS, p. 643.

Coulter	Karen	19	82	[Highlighted: "Models necessarily reduce the complexity of activities to make them more tractable and synthesize diverse sources of information. It may be helpful at times for readers to understand the high dimension of complexity in a particular mannerâ€¦ With any model, assumptions for model runs and applicably of results need to be documented and explicitâ€¦ Model results should be considered relative values only (not absolute predictions) for purpose of comparing background and activity effects."] * Given these stated and known limitations of models (eg. Over-simplification of highly complex ecosystems, sacrifice of a high degree of complexity), a precautionary approach needs to be taken, with greater protection of soils, water, etc. than the model suggests is necessary -especially as model results are only relative values, not absolute predictions for impacts -and their severity- caused	485	Heavy equipment exclusion zones 75' to 100' wide would be located in RHCAs along Class 4 streams. Ground based equipment would not operate on slopes greater than 35 percent. Wildlife habitat needs were considered in project design. Model limitations were discussed in the Soil and Hydrology sections of the FEIS.
Coulter	Karen	19	116	[Highlighted: "Livestock grazing practices before 1916 resulted in the reduction of the numbers of individual riparian hardwoodsâ€¦"] Not just before 1916!	486	See Response 362. Grazing is discussed in the Hydrology Report.

Warness	Lindsay	2	3	It is my understanding that this area has limited moisture that affects how the trees grow on the site. I'm concerned that if we leave too many trees on the landscape, we run the risk of creating a forest that is not healthy due to the continued stress from lack of moisture on the landscape. Leaving overstocked timber stands may provide additional cover and habitat but if it is not sustainable on the landscape, we should remove these excess trees in order to ensure viability	487	Part of the Purpose and Need of the Kahler Project, is to open up dense stands. See page 3 of the FEIS
Artley	Dick	1	108	Request for changes to be made to the final NEPA document: Abide by your current forest plan and delete Amendments #1, #2, #3, #4, #5 and #6.	488	This comment was addressed in the No Action Alternative and in Alternative 4 of the FEIS.

Kelley	Brian	13	1	The Forest Service must "[r]igorously explore and objectively evaluate all reasonable alternatives" in order "to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of [the agency's] actions upon the quality of the human environment." 40 C.F.R. Â§Â§ 1502.14(a), 1500.2(f). Comparing the Alternatives "Alternative 3 was developed to meet the Purpose and Need for the Kahler Dry Forest Restoration Project, while addressing the issues identified in Chapter 1" (DEIS page 13). These significant issues are: * Issue 1: impacts to big game habitat, * Issue 2: reduction of habitat for wildlife species associated with dense, multi-strata forests, * Issue 3: impacts from temporary roads and re-opening closed roads, * Issue 4: impacts from logging in Riparian Habitat Conservation Areas. Alternative 3 proposes to	489	Alternative 4 was developed, in part, in response to this comment. A number of other alternatives were also considered, but not fully developed for various reasons (FEIS 26).

Artley	Dick	1	7	I suggest you check-out an EIS at random from any other national forest in America. You will find heritage discussed like the other resources that might be affected. Hiding it in the "Other Required Disclosures" section which fails to disclose the effects of No Action violates the law. You make the unsubstantiated claim that "there would be no effect to any historic property listed in or eligible to the National Register of Historic Places."	490	By law, we are required to protect eligible or listed cultural resources. These resources that have been determined not eligible have no protection under the law. However, if a resource is un-evaluated, we treat it as eligible to protect it's historic integrity. That does not mean that the not-eligible sites are not important, but rather that the law does not protect them.

Artley	Dick	1	81	Supervisor Martin, you accepted and acted on the recommendations to log 18.1 square miles and construct 12 miles of road to reach these trees owned by 318 million Americans. Mr. Powell's, Mr. Spivey's and Mr. Garber's tragic advice to log the area was supported by the members of the IDT. Yes, the IDT invented a bogus P&N to complete the public assault. Will you still choose to accept the advice of Mr. Powell, Mr. Spivey and Mr. Garber with financial incentive to sell this timber sale after you read the research conclusions of hundreds of Ph.D. scientists? Here is a tiny sample of the quotations contained in Attachments #1 and #4 that describe how logging devastates the proper functioning of countless resources in the forest for generations to come. "I recently read a letter from a line officer who chided local managers for being behind schedule relative to meeting	491	Thank you for your comment.

Artley	Dick	1	83	Supervisor Martin, you have consciously selected literature for the References section that excludes science describing how logging will adversely affect non-timber natural resources in the sale area. Professionals do not selectively choose literature citations that support their case and systematically exclude those that don't. The majority of your references are biased, since they were authored by forest service employees. Even random selection of science literature related to logging would have included several of the hundreds of science documents contained in the Opposing Views Attachments. None of this literature is listed in the References. Supervisor Martin, you were encouraged to sell the Kahler timber sale by Mr. Powell, Mr. Spivey and Mr. Garber. These individuals have financial interest in the sale. The quotes by hundreds of Ph.D. scientists in the	492	Thank you for your comment.

Artley	Dick	1	84	This uncertainty has affected the ability of the Forest Service to utilize fully the provisions of Â§ 219.35 paragraph (a) to consider the best science available in plan amendments and project decision making. For example, while population data have been held to be required for management indicator species under the 1982 rules, other tools often can be useful and more appropriate in predicting the effects of projects that implement a land management plan, such as examining the effect of proposed activities on the habitat of specific species; using information identified, obtained, or developed through a variety of methods, such as assessments, analysis, and monitoring results; or using information obtained from other sources such as State fish and wildlife agencies and organizations such as The Nature Conservancy. The purpose of this interpretative rule is to clarify that, both for	493	Thank you for your comment.

Artley	Dick	1	85	"The transition provisions as originally enacted, and now twice amended, explicitly refer to the 1982 planning rule as the rule "in effect prior to November 9, 2000." At the same time, given the extension of the effective date of paragraph (d), within which site specific decisions must comply with the 2000 planning rule (68 FR 53294), it is clear that site-specific decisions entered into during the transition period are not to comply with the substantive provisions of the 2000 planning rule. This interpretative rule clarifies that until a new final rule is promulgated, the transition provisions of the 2000 planning rule, as amended by the May 2002 interim final rule remain in effect, including the requirement of Â§ 219.35 paragraph (a) of the transition provisions that responsible officials consider the best available science in implementing national forest land	494	Same as response #481

Artley	Dick	1	86	Request for changes to be made to the final NEPA document: Include some source documents from the Opposing Views Attachments in the References section. Also, cite the specific quotes presented for the source literature chosen by this member of the public in the text. Finally, include clickable links to each Opposing Views Attachments you choose to include in your reference section.	495	Any additional references used in the preparation of the FEIS will be cited.

Artley	Dick	1	87	Comment: Supervisor Martin, you know inflicting resource damage with commercial logging (a.k.a. euphemistically called mechanical treatment by the USFS) does not "restore" the countless natural resources that exist in a fully functioning forest. You do not tell the public how you determined the past forest condition you are trying to recreate with logging is best. Comment: Supervisor Martin, the percentage of the general public becoming aware that money drives USFS actions is growing. Do you enjoy tricking and deceiving the public? We both know you are really trying to create private industrial tree farm conditions in the sale area. We both know this is the antithesis of the USFS mandate to the American public even on "suitable" land. Comment: The USFS has been aware that most American citizens do not want their national forests logged for many decades, yet the	496	Thank you for your comment.

Artley	Dick	1	92	Happily and enthusiastically trashing big game habitat to acquire volume is such fun. Silly me, I thought R-6 had finally stopped promoting "timber beasts" to positions that allow them to make decisions. Just think how the R-6 volume would decline if they promoted only responsible, competent USFS employees to line-officers	497	Thank you for your comment.
Artley	Dick	1	93	It must be exciting to violate the original intent of the forest plan so you can provide the purchaser with maximum profit by cutting large trees greater than 21 inches DBH. This single action will honor you with the much coveted award: R-6 timber beast of the year.	498	Thank you for your comment.

Artley	Dick	1	104	You repeatedly tell the public you want to emulate historical conditions, or return the forest to a certain historical forest condition. You do not indicate how your favorite past conditions were determined. Your IDT members know healthy forests are continually changing. Now explain to them why you chose one specific forest condition that required trees to be removed. Of course they know the answer. I'll bet a few IDT members know logging is not a cure-all for forest problems that are mostly perceived problems to justify logging. They know logging creates conditions that will require real restoration efforts that don't require chain saws. Supervisor Martin Congress promulgated the NFMA which required the USFS to prepare forest plans. The law directed USFS line-officers to manage the public land according to the plans. This meant the USFS line-officers would not propose	499	Thank you for your comment.

Artley	Dick	1	105	Supervisor Martin, the Forest Plan is a contract with the public. NFMA contains a process to amend the forest plan for individual projects to maintain ecological integrity of the area if conditions had changed since the forest plan went into effect.. Amending the Forest Plan to allow resource damage to occur in order to make it possible for you to implement a commodity output project with no ecological benefits is unacceptable to the vast majority of Americans. I suggest you read NFMA from beginning to end.	500	Thank you for your comment.
Artley	Dick	1	106	We both know USFS decision-makers (and their supervisors) abhor bad press. We both know the Umatilla National Forest is owned by 314 million Americans. We both know only a handful of these Americans take the time to read USFS NEPA documents, thus you believe you can cause harm to the countless natural resources in the forest with impunity.	501	Thank you for your comment.

Artley	Dick	1	107	Therefore, if your site-specific forest plan amendment proposal appears in the final EA it will be necessary to tell the public in your area the truth behind your actions. My letter to the editor will suggest that the public contact you Supervisor Martin and ask why you believe volume accumulation is a higher priority to you than protecting and conserving the natural resources in the forest. Indeed, it sells newspapers when they publish articles about corrupt Federal agency employees who use taxpayer dollars to prepare projects that provide opportunities for corporations to reap profit at the expense of the public After the final EA and draft Decision document is completed the I suggest you start reading the Eastern Oregonian. By this time it will be too late for the general public who didn't submit comments to object, but you will object to the many phone calls you will receive	502	Thank you for your comment.

Artley	Dick	1	109	The children born 50 years from today will not appreciate the ecological plunder you will cause with this timber sale. Most Americans want future generations of kids to have the opportunity to experience the quietness and solitude in a real, undeveloped forest. This will become more important in 2050 when the predicted population of the United States will be 438 million people. The wild UNDEVELOPED national forests will provide one of the only escapes from the insanity of a world driven even more by money than it is now. Where else will the go for nature sounds, quietness and solitude? The Kahler timber sale is taking away more undeveloped national forest acres from the legacy the unborn kids of the future deserve. Which is most important: the future kids of America or another summer home for a CEO? Of course by proposing this sale you have answered this	503	Thank you for your comment.

Artley	Dick	1	110	Supervisor Martin, the press will become acquainted with the damage you propose to inflict to the Umatilla National Forest that are described in these comments. Articles describing how the USFS proposes to maim and ravage this public land will sell newspapers. Supervisor Martin, when I send hardcopies (and emails) of these comments to the Baker City Herald, La Grande Observer and the Eastern Oregonian you can be sure they will publish a feature article detailing how you plan to trash the natural resources (and recreation opportunities) in the Kahler timber sale area to provide opportunities for short-term profit for natural resource extraction corporations. Of course the primary reason you are proposing this sale is personal. You know you must not have a penny of unspent NFTM money at the end of the fiscal year to assure next year's budget won't be reduced, and you know you must	504	Thank you for your comment.

Artley	Dick	1	111	By now you may have read the information contained in the Opposing View Attachments. Reasonable people would have doubts about the wisdom of their proposal that is likely to create major adverse impacts as described by hundreds of Ph.D. scientists to whatever they are charged with protecting. Responsible people that contemplate any action intuitively engage the Precautionary Principle. Perhaps you have never heard of it. Here it is in a nutshell: The precautionary principle or precautionary approach states that if an action or policy has a suspected risk of causing harm to the public or to the environment, in the absence of scientific consensus that the action or policy is not harmful, the burden of proof that it is not harmful falls on those taking an action. See: http://en.wikipedia.org/wiki/Precautionary_principle Comment: Supervisor Martin, Mr. Powell, Mr.	505	Thank you for your comment.

Artley	Dick	1	112	1) "Human beings and the natural world are on a collision course. Human activities inflict harsh and often irreversible damage on the environment and on critical resources. If not checked, many of our current practices put at serious risk the future that we wish for human society and the plant and animal kingdoms, and may so alter the living world that it will be unable to sustain life in the manner that we know. Fundamental changes are urgent if we are to avoid the collision our present course will bring about." Union of Concerned Scientists 2) "The primary goal of resource management (sustained yield) evolved from the utilitarian values of the Progressive Era. Intuitively, sustained yield is a logical and laudable goal: no more is taken than can be replenished. As it has come to be implemented, however, the concept of sustained yield has been modified to mean taking the	506	Thank you for your comment.

Artley	Dick	1	113	Please don't' underestimate me. I want the grandchildren of my grandchildren to have the opportunity to escape an American society of 500 million people to an area where they might experience solitude with only Nature sounds to be heard. I believe I have unique qualifications to act on my goal stated above. * MS in forestry from Oregon State University, * hold a private pilots license, and * perhaps most importantly - 30 years as a USFS employee. After I retired from the USFS I had the chance to continue my activism in earnest. I became so frustrated loosing appeals (and now objections) with clear multiple legal violations. I realized it was necessary to spend the money to do something. I have passed the Idaho Bar exam.	507	Thank you for your comment.

Coulter	Karen	19	70	[Highlighted: "â€¦it is not advisable to locate trails on these features. These soils also store a great deal of moisture from the clays that form these soils and locating equipment traffic through this soil may prove to have inputs to sediment sources; if these clays are suspended in puddles that sediment may have the opportunity to be routed to streams under high precipitation. Therefore units with soils described with vertic properties (units 7, 11b, 22, 23, 23a, and 28) should be evaluated during placement of any equipment traffic waysâ€¦"] Drop these units -7, 11b, 22, 23, 23a, and 28 due to the potential being higher for detrimental soil conditions. (See DEIS pg. 110, par. 1)	508	Placement of trails will take into account vertic soils and avoidance will be a tactic in trail placement.

McClure	Steve	8	6	We support Alternative 2 over Alternative 3 because it will have more impact with regards to resilience and overall forest health because it removes more trees through vegetative treatments. Not only will removing these trees help to decrease competition, but it will increase water flows by releasing more moisture into the soil and ultimately the streams for fish habitat.	509	Thank you for your comment
Coulter	Karen	19	63	Why does this discussion of detrimental soil conditions not make reference to hear the existing level of dsc compares with Forest Plan standards for dsc? This is critical information for then evaluating whether the Kahler project would exceed Forest Plan standards regarding detrimental soil conditions, yet quantified analysis for how much detrimental soil effect the Kahler project would contribute is also missing. This is inadequate analysis. Further the legacy trails quantification may not be capturing all the detrimental soil impacts in the project area or proposed sale units.	510	The Soils Report referenced both the current FSM 2551.5 and Umatilla NF LRMP (1990) S&Gs for soil productivity. This information was considered and incorperated within the soils analsyis as it may relate to legacy trails. This information was displayed in Table 4-1 in the DEIS, under existing the Existing DSC column.

Coulter	Karen	19	68	[Highlighted: "Provided all mitigating factors are present when proposed activity occurs, the anticipated DSC for a given unit or the proposal (as a whole) does not exceed 20% DSC criteria (LRMP)."] This is not quantified or detailed sufficient analysis. * This is an inadequate cumulative effects analysis for soil impacts with no quantified estimate of Kahler' s contribution to erosion and sedimentation.	511	Within the Soils Report (table 11) DSC are calculated with observed DSC and the estimated DSC from proposed activities. These values were then calculated on the percent area impacted (cumulative DSC) by each of the action alternatives. No units were seen to exceed the Umatilla NF LRMP S&Gs for Detrimental Soil Conditions (

Coulter	Karen	19	73	So why is there no analysis as to whether the Kahler project would actually meet Forest Plan standards for soils based on the criteria described on DEIS pg. 116. * [Highlighted: "For the proposed actions within this proposed project there are no activities expected to exceed DSC defined by the forest plan. The highest expected DSC will be in unit the ground based unit 21 (17% or 8.7 acres DSC). The lowest DSC will be 11% in a variety of units."] Where's the analysis that supports this conclusion? What would be the combined percentage of existing DSC (detrimental soil conditions) plus Kahler project-caused DSC prior to any mitigation? Mitigation cannot be assumed to be fully implemented as it often is not, nor can it be 100% effective. Therefore CRPM standards may be exceeded.	512	Analysis as to Detrimental Soil Conditions (DSC) was included in the soils report. Specific calculations are included in table 11 of that document, by proposed units. The DEIS summarizes the conclusions to be drawn from this table with the referenced information in the comment. The DSC and sediment analysis showed that with the proposed activities (mitigations included) there was no measureable sediment into streams and rivers so if CRMP standards are at risk they are not exceeded.

Coulter	Karen	19	47	Highlighted: "In the modeling we see that a 400ft buffer is needed to limit sediment loss to streams. It is assumed that all of the other DSC (>400ft from streams); 18 miles or 26 acres of trails would produce erosion which could hinder soil productivity."] * Direct contradiction between the "Highlighted" bulleted above and the "Highlighted" bulleted below. * [Highlighted: "This assessment is made despite the presence of DSC in the form of legacy trials assumed to be detrimentally impacted from previous harvest. While the presence of some DSC is known to increase sediment, it is currently covered with adequate EGC to limit sediment above background levels."]	513	This discussion in the DEIS was intended to show if a wildfire were to consume the no-equipment area in the RHCA, equipment trails could not be placed closer than 400 feet from the RHCA. This description of the analysis will be reworded in the FEIS.

Coulter	Karen	19	76	[Highlighted: "As it may apply to temporary roads placed on shallow soils, these effects may be irreversibleâ€¦ These impacts over time may be colonized by noxious weeds and other pioneer species suited to such undeveloped conditions; which may lead to other resource damage. Therefore these types of impacts are expected to minimize to reduce the occurrence of irreversible damage to the soil resource."] ? Someone doesn't have very good command of the English language and/ or editing skills for correcting typos.	514	To mitigate irreversible loss of soil productivity; where opperationally possible new temporary roads will be placed on deep soils, refer to pages 236-252 FEIS

Coulter	Karen	4	13	We can only support the "No Action" alternative due to the lack of significant difference between the two action alternatives' potential ecological impacts, an inadequate range of alternatives (including no "restoration only/no commercial logging" alternative), and an overly narrow Purpose and Need artificially used to preclude detailed analysis and consideration of other viable alternatives that would better accomplish restoration.	515	An additional alternative (Alternative 4) was developed and analyzed in the FEIS to address concerns regarding the range of alternatives.
Coulter	Karen	4	31	This is an inadequate range of alternatives based on a very narrowly construed purpose and need.	516	Alternative 4 was developed to respond to concerns that the range of alternatives was too narrow.
Coulter	Karen	4	49	Table 2-5 illustrates that there is very little difference between alternatives 2 and 3, an inadequate range of alternatives, with most activity impacts the same or only slightly different in scale.	517	Alternative 4 was developed to address concerns regarding the range of alternatives.

Coulter	Karen	19	42	Why were loam and silt loam soils assumed when most of the project area is composed of clay and ash soils? -or are clay and ash soils considered to have loam and silt loam textures?	518	WEPP analysis is based on the textural description of soils as they relate to sand silt and clay, ash is not a factor. The analysis of clay content soils has been added to the soils report based on this comment. The FEIS will have additional analysis added to the document.
Coulter	Karen	19	44	[Highlighted: "While the presence of some DSC is known to increase sediment, it is currently covered with adequate EGC to limit sediment above background levels."] * 13 miles or 20 acres for the whole project area? So much for any post project design criteria to avoid legacy soil impacts.	519	Low soil ground cover can be a contributing factor in erosion and sediment from the effects of rain splash and entrainment of loose soil particles in runoff. However, if enough Effective Ground Cover (EGC) exists on the soil surface the cover buffers the energy from rainfall splash, minimizing entrainment of soil in the water column (i.e. erosion & sediment). The EGC levels found in Kahler project area generally are >45%. According to the WEPP analysis this level of cover would prevent erosion and sediment above background levels.

Artley	Dick	1	28	The IDT members on the Umatilla NF have been taught that their job is to minimize and/or deny the clear and obvious harm the timber sale activities will inflict on their resource. Here is the scheme: Here is the most popular untrue USFS explanation given to show why selecting "No Action" and not logging the area will harm the natural resources in the timber sale area. 1) The IDT member explains how the resource that is their responsibility to protect will be destroyed by wildfire if logging does not occur. The IDT member conveniently "forgets" that best science shows fire intensity does not subside when fires reach logged areas and instead intensifies. Sadly, the IDT members will read Opposing Viewpoints Attachment #3 and somehow deny the validity of the science quotes authored by hundreds of independent, unbiased Ph.D. scientists.	520	For fire-adapted ecosystems to function in the future, multiple treatments over time will be imperative. In a 2012 study on the ecological effects of fuel reduction treatments, results showed that single entry mechanical treatments did not serve as surrogates for fire. Rather, restoration to pre-settlement conditions required repeated treatment over time (McIver, J., Stephens, S. et al). The combination of thinning and burning shift diameter distributions toward larger trees; however, no single entry will mitigate the history of fire exclusion and fuel accumulation in dry coniferous forests (Youngblood 2010). Therefore, multiple prescribed fire entries every 10 to 15 years post-treatment is recommended to maintain the Kahler analysis area. In doing so, stand densities may be better managed and fire tolerant species would be favored. This would allow for a more fire resistant forest over the long term (Kahler Fire and Fuels Report, Desired Conditions). Disclosed in the Fire Behavior section of the Kahler Fire and Fuels Report are the modeled impacts of fire occurring in each alternative. The short-term effects of the proposed action alternatives are captured through increased

Coulter	Karen	19	51	[Highlighted: "â€¦total DSC is a loss to the soil resource (13 miles or 20 acres)."] * Yet were all the skid trails in proposed logging units examined? Probably not. Therefore it is inaccurate to assume that 31% DSC represents only 13 miles or 20 acres of DSC in the proposed sale units.	521	DSC is a diminishment of soil productivity. An expression of that diminished capacity can be expressed as an alteration or loss of vegetative growth. Locations where the vegetation growth was noticeably diminished through remote sensing, offered a way to examine the past soil disturbance in a timely, reasonable way. Sites mapped for diminished vegetation (i.e. trail) were located then determined to be human impacts or natural features. Then a determination of detrimental soil conditions (DSC) was made along the entire length of that trail; based on criteria from the 2009 Forest Soil Disturbance Monitoring Protocol (Page-Dumroese, 2009). Per the DSC definitions in the 2009 Protocol, it was determined that of the trails measured 31% of trail area was the highest DSC recorded. When the entirety of units with actual recorded disturbance were measured, 3% of the area was the highest unit estimate. That became the estimate for all other ground based activity units, 3% of activity area to be added to the estimated DSC to be created by a proposed harvest extraction method. In monitored units actual observations were used to calculate DSC; existing DSC+ proposed DSC estimates =

Coulter	Karen	19	59	Since when are effects to an ecological resource like soils supposed to be compared to effects of a high severity wild fire instead of being assessed regarding impacts to the soil itself and to streams, water quality, etc.? There is no guarantee that Kahler proposed logging would reduce or prevent high severity wildfire or that wild fire needs to be reduced or prevented in the first place! This is spurious analysis and lacking in professional integrity. Why is there no qualification of Kahler project impacts to soil re: erosion, sedimentation, etc.? This is inadequate analysis.	522	The summary of erosion and sediment of Kahler project impacts to erosion and sedimentation are throughout the FEIS pages 233 to 255. Specifics as to quantification for erosion and sediment are in the Soils Report pages 5 to 17.
Coulter	Karen	19	60	How much of an effect to detrimental soil conditions from alts 203? "Some" effect tells us nothing.	523	Estimates of DSC (Table 4-21) are based on the 2013 Kahler field observations (Soils Report, Table 5); in those site visits; 98,200ft of trails were examined. Of the sites measured, 31% was considered to be in DSC, when using the criteria from Page-Dumroese, et al (2009)

Coulter	Karen	19	61	[Highlighted: "If harvest in a unit occurs before or as it transitions from moist to dry soil conditions; equipment may need to ride on slash to minimize DSC."] So will this be a required mitigation? Earlier it seemed that moist soil conditions were to be avoided with logging, which is it?	524	Soil bearing strength can be low with high soil moisture and transitions to high bearing strength with low soil moisture. To buffer the soil when needed it was recommended that slash be used to aid in the soil bearing strength in some situations. This was included in the Design Criteria WQ11 on page 22 of the DEIS.
Coulter	Karen	19	62	Highlighted: "â€¦it is assumed that the opportunity to mitigate equipment disturbance with slash may not be an option in many Kahler project units."] This is not encouraging re: avoiding skid trail detrimental soil impacts in the Kahler project, where the soil scientist says (DEIS pg. 107) "it is assumed that the opportunity to mitigate equipment disturbance with slash may not be an option in many Kahler project units." (emphasis ours) then drop sale units where there are likely to be detrimental soil effects.	525	The design Criteria WQ8 specifically directs activities to â€œAvoid ground equipment operations on unstable, wet or easily compacted soils and steep slopes as described per Forest Planâ€

Coulter	Karen	19	64	Figure 4-1 shows a great deal of skid trails from a recent logging sale on the Heppner District, with most of the otherwise legacy detrimental soil disturbance being mitigated with slash in a way not anticipated for many Kahler units. There is no guarantee that there would be the same degree of success just from operating on dry soils.	526	Figure 4-1 mentioned in the comment is not from a Heppner district sale, but from the Umpqua NF. This image was used to help illustrate the potential level of disturbance, by showing the density of trails with either a harvester/forwarder or skidder operation. The proposal does not designate either logging method for Ground Based units. Under appropriately dry soil conditions it is assumed that skid trails will not alter the soil structure or density. Design Criteria WQ8 directs operations to be done under the best soil moisture conditions to minimize DSC.

Coulter	Karen	19	65	There is no support given for the conclusion that "provided all mitigating factors are present when [the] proposed activity occurs, the anticipated DSC for a given unit or the proposal (as a whole) does [will] not exceed 20% DSC criteria (LRMP)." (DEIS pg. 109) (emphasis ours) Nor is there any quarentee that all mitigation planned will actually take place or be 100% effective to ensure <20% DSC. * [Highlighted: "Therefore within the harvest units there is a total of 45 miles (65acres) of trail for a total of DSC (including system roads). Since only 31% of the evaluated impacts were deemed to be DSC; like alternative 1, we can assume 31% of the total DSC is a loss to the soil resource (13 miles or 20 acres)."] Yet 31% of legacy skid trails cannot be assumed to be the total of determined soil conditions in the project area, as this is not including landings, any fuel breaks, quarries, etc. Further this effects analysis	527	The mentioned concerns are all addressed in the design criteria in the DEIS and those criteria will be transferred to the FEIS.

Artley	Dick	1	15	issue a news release that says "unless people who own homes within 10 miles of the forest boundary sell them immediately, it a near certainty their homes will burn up â€¦ unless their home is located near cutting units of past sales.	528	Thank you for your comment
Artley	Dick	1	6	why are there fish in streams where the stream is not contained on a logged area?	529	Thank you for your comment
Artley	Dick	1	8	Do you really expect the public to believe heritage resources that are not listed in or eligible to the National Register of Historic Places are unimportant?	530	We understand that these sites are important, sites that are not listed but are eligible will be protected by avoidance. Sites that are not eligible require no protection by law.

Artley	Dick	1	24	Your proposed sale is unique. It's not only a tragic assault on the recreating public, but the DEIS is an incomplete, twisted justification document rather than an honest analysis. Do you really want to sign a ROD for this thing? The Kahler timber sale will log and road-up 18.1 square miles of public land used often for outdoor recreation. Why do you believe the public enjoys camping, hiking, fishing, among the stumps and dusty, hot skid trails and landings. If you would take the time to visit with your constituents, you would discover they come to this area NE of Spray seeking solitude, quietness and outdoor fun. Are you unaware that this timber sale will destroy this opportunity?	531	Thank you for your comment

Artley	Dick	1	25	Your EA is an illegal timber sale justification document. Supervisor Martin, you wanted this and your IDT knew you wanted this. The recreating public trusts you. You know 97% of the people who visit their national forests do so pursuing recreational activities. There are 5 things that cause this situation. All 5 must exist to produce an EA like this: 1) IDT other resource specialists that are so obsessed by the need to please the Responsible Official that they lie to the public to grease the skids for precious volume accumulation, 2) IDT other resource specialists too willing to cast aside their values and ethics to further the USFS's all-important timber agenda, 3) an IDT without a member having expert knowledge of NEPA and a working knowledge of ESA/NFMA to guide the Team through the process, 4) the IDT NEPA expert that looks the other way when he/she discovers untruths written	532	Thank you for your comment

Artley	Dick	1	30	The IDT members on the Umatilla NF have been taught that their job is to minimize and/or deny the clear and obvious harm the timber sale activities will inflict on their resource. Here is the scheme: Here is the most popular untrue USFS explanation given to show why selecting "No Action" and not logging the area will harm the natural resources in the timber sale area. 1) The IDT member explains how the resource that is their responsibility to protect will be destroyed by wildfire if logging does not occur. The IDT member conveniently "forgets" that best science shows fire intensity does not subside when fires reach logged areas and instead intensifies. Sadly, the IDT members will read Opposing Viewpoints Attachment #3 and somehow deny the validity of the science quotes authored by hundreds of independent, unbiased Ph.D. scientists.	533	Thank you for your comment

Artley	Dick	1	31	I invite each IDT member who has written effects disclosures to read best science in the Opposing Views Attachments. Then review your effects disclosures you have written below for accuracy. Please ask yourself who you really believe 1) a handful of timber employees with financial interest in selling as much volume as possible, or 2) several hundred Ph.D. biological scientists who are experts in their fields with no financial interest in logging.	534	Thank you for your comment
Artley	Dick	1	32	reflect on what you have done. Please examine whether your effects disclosure quoted below will push the Responsible Official towards selecting an alternative that will benefit the recreating public, or enhance the financial bottom line for the natural resource extraction corporation that purchases this timber sale.	535	Thank you for your comment
Artley	Dick	1	33	The IDT reflects their frantic desperation to please Supervisor Martin.	536	Thank you for your comment

Artley	Dick	1	34	Each terribly frightened IDT specialist clearly embarked on an insane collective attempt to fabricate absurdly untrue text to clearly show selecting the No Action alternative would be tragic. This is worse than deception. How does Supervisor Martin frighten these people. A casual reader would conclude from the Environmental Effects section that unless the entire Umatilla National Forest is logged, it will all burn and all natural resources will be destroyed. Even secondary school science classes teach students that human intervention and manipulation of the natural resources that have survived for millions of years without "help" will likely adversely impact the natural resources so loved by Americans. Truthful resource specialists who are more concerned with the health of their resource than volume would tell the public in write their No Action effects write-ups that 1)	537	Thank you for your comment

Artley	Dick	1	37	if any member of the public were to actually believe the lies spewed above, they would conclude that Supervisor Martin must log every non-Wilderness acre on the Umatilla National Forest to keep all the wildlife species from burning up	538	Thank you for your comment
Artley	Dick	1	38	Whomever did the visual quality write-up got it right. Perhaps its good the IDT has no landscape architect.	539	Thank you for your comment
Artley	Dick	1	41	did you really think the public would read your effects disclosures rubbish and not conclude you were all strongly motivated to write erroneous, apocryphal, untrue statements trying to justify this timber sale?	541	Thank you for your comment.
Artley	Dick	1	42	are you concerned that your ridiculous effects disclosures ignore and deny the research conclusions by hundreds of independent scientists holding Ph.D.s? You should be.	542	Thank you for your comment

Artley	Dick	1	49	Supervisor Martin, please post your responses to public comments online as well as maintaining a hardcopy in the Project File. Comment: Members of the public who submit comments on a draft NEPA document make the effort to read the NEPA document closely and take the time to compose comments that reflect their issues. Supervisor Martin, unless you respond to these comments and allow the public to read your responses they don't know if their comments were read and "considered." Request for changes to be made to the final NEPA document: Post your meaningful, specific responses to the comments contained in this document online. Supervisor Martin, if you choose not to allow the public to read your responses to their comments online then consider this a FOIA for your responses. Assure that they are posted within a day or 2 of the date	543	Responses to comments will be published in the FEIS, as well as posted to the Kahler website the day the final EIS is available to the public.

Artley	Dick	1	50	Increases in logging on the national forest do not stabilize or enhance the economy of small communities located near national forests. One of your purposes listed in the P&N for this timber sale is: "Provide a supply of commercial forest products to support and maintain local infrastructure." The IDT members include this in their P&N knowing it's a commonly used excuse intending to convince the public the timber sale is needed. This need is only legitimate if an analysis is completed validating the need for logs at local mills. You conveniently forget that the community stability is at least as dependent on the recreation/tourism related businesses in the local communities. Comment: Most tourists and recreationists don't want their public lands logged. When they find out it is occurring on the Umatilla National Forest they will go elsewhere to spend	544	This report doesn't effectively assess the impacts of timber harvest on national forest lands due to the short-term analysis and limited spatial area of analysis. This report focused on roadless areas in Eastern Washington State national forests, and the analysis was relatively short-term; 1986 to 1998. Also in those years, there was increased harvest on eastside of Washington and Oregon forests due to insect and disease epidemic, which would skew the numbers for harvest volume.

Artley	Dick	1	51	ECONorthwest reached conclusions similar to those of Dr. Power: "(1) Despite years of rhetoric and misinformation, national and regional economies are not dependent on logging National Forests. The most often cited misconception is that the regional economy of the Pacific Northwest declined after a court injunction and related events reduced National Forest logging. In fact, instead of collapsing, the region's economy expanded and the Pacific Northwest weathered virtually unscathed the national economic recession that occurred at the same time as the court injunction. (2) National Forests now produce goods and services that are much more significant than the value of logging. (3) The Forest Service logging program has caused devastating impacts in the ability of the National Forests to provide economically valuable goods and services. Reversing the	545	See Response #544

Artley	Dick	1	52	1) remove the following statement from the P&N: "Provide a supply of commercial forest products to support and maintain local infrastructure."	546	The Purpose and Need statement for the Kahler project was written with input from a collaboration group that included environmental interest groups, adjacent private landowners, and industry.
Artley	Dick	1	53	offer the sale as an SBA sale,	547	The decision to offer a timber sale as a Small Business Adminstration sale is not made at the NEPA level. This comment is beyond the scope of this analysis.
Artley	Dick	1	54	include the following papers (referenced above) in their entirety in an Appendix to the NEPA document. Line-officers must not withhold such important information from the public. Congress promulgated laws to prevent zealous federal officials from behaving in such a manner to feather their nest. "The Economic Impact of Trails-Forest Recreation's Growing Inpact" "Seeing Forests for their Green: Economic Benefits of Forest Protection, Recreation, and Restoration", "The Economic Impact of Preserving Washington's Roadless National Forests"	548	All comments and associated materials will be included in an appendix to the FEIS.

Artley	Dick	1	60	Supervisor Martin, please don't tell the public everything will be fine since you plan to apply the herbicide according to label directions. Monsanto would not dare to say anything that might indicate to the public there are health issues associated with their products. The label directions must not be trusted. Monsanto pays other chemical labs to do the safety research on their glyphosate-containing herbicides. These labs know what Monsanto wants. The label directions printed and composed by Monsanto are based on this type of so-called safety evaluation. It should not be necessary to explain further. Monsanto composes and prints the label directions	549	Thank you for your comment.

Artley	Dick	1	70	Request for changes to be made to the final NEPA document: Please indicate the Responsible Official will apply only Rodeo or Accord glyphosate herbicide formulations and no substitutions will be made. Include the following documents in the Literature Cited section with clickable links to both so the public may read them online: * the 2010 Umatilla National Forest Invasive Plant Treatment Record of Decision * The SERA report titled "Glyphosate Human Health and Ecological Risk Assessment" completed on March 25, 2011	550	The references to the SERA report have been updated and included in the Weeds Report. The 2010 Umatilla National Forest Invasive Plant Treatment Record of Decision will be included in the FEIS.

Artley	Dick	1	73	You are not exempt from the provisions of the Administrative Procedures Act. Under the APA, a court may set aside an agency action if the court determines that the action is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. Â§ 706(2)(A); see also Marsh, 490 U.S. at 375-77 (arbitrary and capricious standard applies to agency findings which involve agency expertise). Here's an excerpt from this opinion: "Consequently, we may reverse the decision as arbitrary or capricious only if the agency relied on factors Congress did not intend it to consider, entirely failed to consider an important aspect of the problem, offered an explanation that ran counter to the evidence before the agency, or offered one that is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Source: SIERRA CLUB	551	So noted. Thank you for your comment.

Artley	Dick	1	78	Supervisor Martin, please respond to the opposing views contained in the Opposing Views Attachments to these comments. Each responsible opposing viewpoint contained in the attachments to these comments is different and closely related to the issues at hand described in the Kahler DEIS. When Congress promulgated the law requiring Responsible Officials to respond to Opposing Views submitted y members of the public their intent was to steer federal agencies towards projects that would be approved by most people who are aware of the project and its objectives. They expected Federal Officials who will sign NEPA decisions to explain why a project should proceed in spite of disagreements about the project's outcome. The law requires these Federal Officials to respond to the Opposing Viewpoints with reasons why the Opposing Views are not relevant to the project and can	552	The referenced comments will be addressed.

Artley	Dick	1	97	Supervisor Martin, once again you parrot the USFS playbook. You will claim the smaller trees near the older trees take water from the old trees. Of course this is not true. You will remove trees 149 year old to protect the 150 year old trees. The USFS's much touted "parklike stand" is devoid of biodiversity. A responsible manager with this goal in mind would do nothing. Do you really think crushing the roots with skidders and cats and knocking off limbs by falling adjacent trees into the old trees, and burning rush piles near the old trees "maintains an' promotes them"? Of course you don't, but you will say anything for volume.	553	Position statement. The impacts mentioned in the comment have been analyzed in the FEIS.
Artley	Dick	1	98	The American public knows this is the USFS's code phrase meaning: we want to log now, and without this sale we proably won't 1) meet the RO timber expectation for the Umatilla NF, or 2) spend all our NFTM dollars this FY. Supervisor Martin, either tell the truth or delete this overused lie from the P&N.	554	Thank you for your comment.

Artley	Dick	1	100	Supervisor Martin, will you tell the public you will never again take initial attack on all non-Wilderness fires to "Reestablish the character of a frequent fire regime"? Here we go again. "Open stand conditions" is the code phrase for a "parklike stand" with no biodiversity. Surprise, how do you create open stand conditions without logging. Fire tolerant species do not include climax species with a low mill value that grow in wet areas. The value at the mill is why the USFS favors fire-tolerant species. Surprise, how do you "reduce conifer encroachment" without logging.	555	Thank you for your comment.

Artley	Dick	1	99	Supervisor Martin, once again you parrot the USFS playbook. You have several IDT members who know natural disturbance events benefit countless natural resources. It's sad they are too frightened to speak up. You have timber IDT members who know disease and insect activity will kill merchantable trees and reduce corporate profit. Some IDT members know all healthy forests contain dead and dying trees. Indeed, all healthy populations of living things contain dead and dying individuals. Nice try supervisor Martin. How do you maintain IDT loyalty and respect by spouting these lies?	556	Thank you for your comment.

Warness	Lindsay	2	14	The economic analysis is inadequate as it refers to the 1990 forest plan for the Umatilla National Forest. This information is outdated by almost 25 years. This does not provide an adequate economic baseline from which to analyze this project because of changes in demographics, timber industry as well as recreational changes. Please update the economic section to discuss the current conditions regarding the areas that this project will affect as well as current condition of potential contractors and markets for the commodities coming off of the project.	557	The economics section will be updated.

St.Martin	Amanda	3	3	I am opposed to any Forest Plan amendments designed to violate existing Forest Plan standards.	558	The National Forest Management Act of 1976 (NFMA) allows the forests to make changes to their plans. â€œPlans developed in accordance with this section shall- â€˜(4) be amended in any manner whatsoever after final adoption after public notice, and, if such amendment would result in a significant change in such plan, in accordance with the provisions of subsections (e) and (f) of this section and public involvement comparable to that required by subsection (d) of this sectionâ€™. These requirements are satisfied under this EIS since the public has been notified of the amendment in this EIS, and the amendment follows subsections (e) and (f).

St.Martin	Amanda	3	10	I only support the "No Action" alternative due to lack of significant differences between the two proposed action alternatives. Both proposed alternatives involve significant detrimental ecological impacts that can and should be avoided through responsible research and planning. An inadequate range of alternatives has been presented-for example, there is currently no proposal for "restoration only/no commercial logging." The narrow Purpose and Need statement excludes consideration of other viable alternatives that would better accomplish restoration.	559	A fourth alternative has been added to analyze many of the concerns in this comment.

St.Martin	Amanda	3	13	As an Oregonian, I value the area within and around the proposed Kahler Timber Sale for the unique wildlife habitat, recreation and study opportunities it provides. As wild, undisturbed spaces continue to disappear rapidly across the globe, I urge you to consider all the values of forestland, and to act in the best interest of all Oregonians by acting as stewards, rather than exploiters, of our public lands.	560	Thank you for your comment.
Coulter	Karen	4	16	The "Purpose and Need" is purposely misleading. The greatest damage evident in Kahler sale units is from past logging, roading, and ongoing livestock use, not from insect damage or the wildfire.	561	The impacts from past logging, roads, and livestock use are analyzed in the EIS and are not addressed in the Purpose and Need section since they are not the underlying purpose and need of the proposed action.
Coulter	Karen	4	27	Region 6 has also been pushing all the Districts to use Forest Plan amendments to enable more logging. These Forest Plan amendments are now epidemic across eastern and central Oregon and have nothing to do with any site-specific ecological need for them.	562	Personal opinion. We have received no direction from the regional office to "use Forest Plan amendments to enable more logging".

Coulter	Karen	4	38	It's unclear what species and size of trees would be logged and removed in the category 4 RHCAs.	563	Size and species of trees to be harvested within the RHCAs will be the same as outside the RHCAs. This is addressed in the Forest Vegetation Report.
Coulter	Karen	4	41	We are opposed to all logging of trees > 21" dbh except certified OSHA hazard trees.	564	So noted, thank you for your comment.
Coulter	Karen	4	43	We are strongly opposed to converting mixed conifer stands to Ponderosa pine and Western Larch through creation of gaps and planting.	565	So noted, thank you for your comment.
Coulter	Karen	4	44	We are opposed to trees > 21" dbh being removed from aspen areas as retention of large conifers increases biodiversity.	566	So noted, thank you for your comment.
Coulter	Karen	4	45	What mileage of "temporary" roads would be constructed and what mileage of closed roads would re-opened?	567	Table 2-5 of the FEIS has this information.
Coulter	Karen	4	46	Avoid both the stream crossing and new road building by dropping the unit(s) "necessitating" the new road.	568	This issue will be analyzed in Alternative 4.
Coulter	Karen	4	51	Page 199 * This is a direct contradiction in the same paragraph of the DEIS. Which is it?	569	The first statement in this paragraph is referring to OFSS and the second statement is referring to dry upland forest late and old structure habitat. This will be clarified in the FEIS.

Solomon	Laurie	5	9	I am writing to express my opposition to both preferred action alternatives your agency proposes to inflict on the old growth habitat needed for sensitive and other old-growth dependent species currently residing in the area being called the Kahler Dry Forest Restoration Project by your agency. I support only the No-Action alternative for the following reasons	570	Thank you for your comment.

Vandehey	Roberta	6	3	Above all else, the trees need to be put back 101 percent. That needed to happen in the first three years after the fire, when the competition from grass was at its minimum and in fact we had some good planting years. Funding should have been obtained from those who started the fire, not the tax payer, or as it turns out it should not have been short-cut because of a 'funding shortage." Trees need to be planted all the way to the west end of the fire area, not just in patches and it looks like the USFS simply ran out of trees as they moved toward the west. (See Photos) Truly, some areas were badly planted and had "J" roots, but again, that is no excuse for not replanting. Planting quality improves if the planters are overseen by a planting foreman whose only job is to watch the planters to prevent bad planting. The trees have to be planted all the way to the rim rocks north of the	572	Thank you for your comment.

McClure	Steve	8	1	As Union County Commissioners, we are concerned with the management of the National Forests in and near Union County as it pertains to the economic, ecological, and social aspects of Union County.	573	Thank you for your comment.
McClure	Steve	8	2	Please discuss the economic analysis further_ There was no discussion regarding how this project will supply the local infrastructure, what types of jobs will be created/maintained, or what it will to do for local schools/county governments.	574	The economics section will be edited to include more information.
McClure	Steve	8	7	We support the Umatilla Forest Collaborative Group in their proposal to remove trees larger than 21" that are younger than 150 years old. Many times these large trees are encroaching on the early seral species and creating an unsustainable landscape where trees are continually stressed due to lack of moisture. Removing these large, young trees will help to create a resilient landscape that is better equipped to deal with fire.	575	Thank you for your comment.

McClure	Steve	8	15	We support the Umatilla Forest Collaborative Group's statements that have been submitted to the Forest Service regarding the Kahler Basin Project and we believe that Alternative 2 will best meet the objectives of the collaborative with regards to this project.	576	Thank you for your comment.

Public	Jean	12	1	THIS IS A GUN WACKO WILDLIFE MURDERING HUNTERS PLAN. THEIR PLAN IS TO TAX NATIONAL TAXPAYERS FOR ALL OF THIS WORK SO THEY CAN CONTINUE TO GROW DEER AND OTHER GAME ANIMALS THAT THEY CAN THEN SHOOT TO DEATH FOR THEIR FUN AT KILLING SPECIES. I DONT GO ALONG WITH THIS. THEY PLAY THAT GAME ALL OVER THE UNITED STATES. THIS IS NOTHING NEW. SHRUBLAND IS LAND THAT GROWS DEER. THIS PLAN AS SUCH IS EVIL, VENAL AND MALICIOUS TO ANIMAL AND BIRD SPECIES BECAUSE THEY ARE GROWN TO BE SHOT TO DEATH. EMPLOYEES LOVE THIS PLAN BECAUSE THE NATIONAL TAXDOLLARS COME RUSHING IN FOR THIS ALLEGED "RESTORATION" AND ALL IT IS IS A KILLING PLAN FOR DEER, ETC. THE EMPLOYEES MAYBE EVEN GET OVERTIME OUT OF IT AND A JOB THAT LASTS LONGER. I AM FOR MORE NATURAL LAND LEFT NATURAL WITHOUT	577	Thank you for your comment.

Kelley	Brian	13	2	During scoping comments for this project, HCPC requested the Forest Service develop an alternative that would not propose any temporary road construction, road re-opening, or use of roadbeds other than officially open roads. This alternative would have reduced treatment acreage by 53% (DEIS page 24). This alternative was considered but eliminated from detailed study. However, it provides a valuable comparison to Alternative 2 in terms of what an alternative might look like that would actually significantly reduce the negative impacts from roads, the negative impacts to wildlife habit from commercial thinning /logging, and the negative impacts to wildlife from the roads themselves.	578	Alternative 4 has been developed to address these concerns.

Kelley	Brian	13	11	Similarly, the DEIS emphasizes concerns about "uncharacteristic wildfire effects associated with the 1996 Wheeler Point fire" (DEIS page 1). Yet it is worth noting that the Stand Initiation structural stage is currently within its Historical Range in the Kahler project area largely because of the Wheeler Point Fire. The DEIS also refers to uncharacteristic (stand replacing) effects from this fire. Yet without the fire, the Stand Initiation structural stage would currently be below its Historical Range. Stand replacing fires occurred less often than lower intensity fires in dry forests, but they were not uncharacteristic. Wildfires of varying intensities will return to the fire- adapted forests of the Kahler project area in the future.	579	The Forest Service concurs with this comment.

Kelley	Brian	13	15	As noted above, the Decision Framework for the project asks "Will harvest occur in Class IV Riparian Habitat Conservation Areas (RHCA)" (DEIS page 3). Yet there is no action alternative developed that does not propose harvest (logging) in the RHCAs. Also, the difference between the amount of commercial logging proposed in RHCAs for Alternative 2 and Alternative 3 is only 25 acres-less than 4%.	580	Please refer to response #188.

Kelley	Brian	13	12	Successful forest restoration strategies must take into account the specific ecology of forests as well as the history of land management activities in a particular place (Crist et al. 2009). Inappropriate application of restoration treatments on a landscape may lead to failed restoration efforts (DellaSalla et al. 2003). Although the commercial thinning treatments proposed for the Kahler project have many positive elements, both Alternative 2 and Alternative 3 propose to cut too heavily across too many acres. The positive elements of the proposal are in balance with the natural disturbance forces of the native forest-the scale and the intensity of the cutting should be reduced in order to bring the project as a whole into balance.	581	The harvest prescription will be written using the best available science. Alternative 4 has been added to the FEIS to analyze less acres of harvest. As noted on page 3 of the supporting forest vegetation report " Between skips and gaps, the matrix area will be thinned to a variable density with minimum amounts of residual basal area varying with a unitâ€™s plant association (at least 25-60 ft2/acre of basal area will be retained after thinning; see tables 16 and 48)." Retained basal areas will flucuate based on plant associations as discussed in the Upland Forest Commercial Thinning section of the forest vegetation report. Table 16 displays minimum stocking levels for the Umatilla National Forest, and table 48 displays suggested stocking levels based on predominant plant associations of Kahler Planning Area.

Kelley	Brian	13	17	The National Environmental Policy Act (NEPA) mandates that government agencies inform the public of the potential environmental impacts of proposed actions and explain how their decisions address those impacts. The DEIS document for the Kahler project falls short of this mandate in several ways including: Confusion about acreage and treatment descriptions Alternative 2: Page 7 of the DEIS refers to "Upland Forest Thinning" across "approximately 10,600 acres" in alternative 2. This seems to refer to commercial thinning as opposed to the 6,135 acres of "Noncommercial Thinning" described on page 8 that would occur both within harvest units and outside harvest units. The table on page 25 lists 9,435 acres of commercial thinning, 638 acres of non-commercial thinning, 38 acres of shrub/ steppe non-commercial thinning, 1426 acres of "shrub/ steppe" (unspecified) and 682 acres	582	Thank you for pointing out these inconsistencies. Corrections will be made in the FEIS.

Kelley	Brian	13	18	More than six hundred pages of important specialist reports are contained in Chapter 8 "Appendices". There appears to be thirteen different specialist reports. Yet, there does not appear to be any index to these reports. The page numbering system within the appendices is not consistent. Hence there is no way to look up a given specialist report other than scrolling through the digital version or flipping through hundreds of pages of paper. Adding to the confusion, some of the reports are incorrectly identified as the Botanical Resource Report.	583	Thank you for pointing out these errors, they will be fixed in the FEIS.

Kelley	Brian	13	19	The specialist reports contain a very large number of tables and figures. Each table and figure is numbered. However, the numbering system for tables and figures is routinely different than the numbering system referred to in the text of the specialist reports. For example, the Forest Vegetation Report, Appendix L (on page iii) refers to table 48 on page 82. This table does not exist on page 82 of the DEIS or on page lxxxii of Appendix L. Perhaps the table 172 on page lxxxvii is the table in question. Perhaps it is not. However, this requires a significant amount of uncertainty and an unreasonable and significant amount of searching. The public has the right to be informed about this project without this type of unnecessary and time-consuming tasks.	584	Thank you for pointing out these inconsistencies, they will be fixed in the FEIS.

Kelley	Brian	13	20	The only maps that we were able to locate showing treatment units are too small to be informative. The maps showing units contain the entire planning area (about 32,000 acres) on about a half page of text (pages 13 & 15). No legend is visible showing what types of treatments are proposed for the different units. It is impossible to locate a particular proposed treatment type on the maps provided with the DEIS. The maps found on the website for the project show treatments from scoping for the proposed action. It is not clear if these units are the same as Alternative 2. No maps were found on the website for the vegetation treatments of Alternative 3.	585	The maps in the FEIS will be larger and additional maps will be provided.
Kelley	Brian	13	30	HCPC encourages the Forest Service to refrain from using forest plan amendments and instead design vegetation and fuels reduction projects that achieve the project goals and leave large and old trees.	586	Please refer to the Supplemental Forest Vegetation Report in Appendix N in the section titled "Context for the Proposed Forest Plan (Eastside Screens) Amendment".

Heiken	Doug	14	2	The draft EIS has a lot of errors making it more difficult to review. There are few maps showing the plans for logging and road building under the different alternatives, and how logging intersects with different resource values.	587	These errors will be corrected in the FEIS and additional maps will be provided.
Heiken	Doug	14	3	Table numbers are misidentified in the text. Appendix A is supposed to be maps but it's a botany report.	588	These errors will be corrected in the FEIS.

Heiken	Doug	14	5	The FS and the state have engaged in pre-decisional marking on this project which raises several concerns. The NEPA process, including analysis of effects and consideration of public comment, is supposed to be completed "before decisions are made and before actions are taken." Some pre-decisional marking may be OK, such as marking a demonstration area to help the public visualize the treatments, but pre-decisional marking on a large-scale is prejudicial because it will be more difficult for the decision-maker to adjust units after they have been marked because it will require "writing-off" resources devoted to the marking effort and investing additional resources in remarking.	589	Tree and boundary marking are not a part of NEPA. If the marking does not conform to the NEPA decision, then those trees not in conformance will need to be re-marked.

Heiken	Doug	14	6	Our comments, for instance, urge reconsideration of some units that are partially within large (>1,000 acre) unroaded areas. We would like to see those boundaries redrawn but if they are already being marked our comments will be read with a thumb on the scale of leaving the boundaries where they are already marked on the ground. Furthermore, the state crews are marking skips and gaps. In choosing skips and gaps, they are making some key decisions about what gets cut vs what gets saved. These are decisions that should be informed by full NEPA analysis and public comment. Our comments request enlarging the unthinned skips in order to mitigate for loss of cover, loss of snags and down wood habitat, and reduced carbon storage. As a result of pre-decisional marking, these comments are not going to be given unbiased consideration.	590	Due to changes in national policy, the Potential Wilderness Areas section is being re-analyzed. Please see Response #589 for the marking issue.

Heiken	Doug	14	8	We support design criteria WL15: "Large diameter, complex structures are a key habitat feature in dry forest habitat. A portion of Douglas-fir and white fire that are larger than 21 inches DBH and that are interfering with a desirable leave tree would be retained to provide large diameter dead wood habitat. A combination of actions, including girdling, topping, inoculation with disease agents, or felling and retaining them on the ground would be used. The number of these structures retained would vary by unit based on the existing availability of large dead wood and wildlife biologist recommendations."	591	Thank you for your comment.

Heiken	Doug	14	21	In a recent case the 9th Circuit held the NEPA analysis of wilderness values insufficient when the agency argued that wilderness issues was adequately addressed in the totality of other resource analyses. "BLM provides a laundry list of other resource values that it did consider, ranging from animal habitat quality to visual resources. Although it does not argue that its analysis of these other resources was identical to an analysis of wilderness characteristics, it contends that the analysis had the "incidental benefit of capturing the [Southeast Oregon Plan's] effects on many 'wilderness characteristics.' " The BLM supposes, apparently, that members of the public and government decision makers might be able to piece together a wilderness characteristics analysis from what the Bureau did say. The BLM is wrong in several regards. First, the BLM never advanced such	592	This comment refers to the Bureau of Land Managment. It's not clear if this comment is applicable to the Kahler project, and if so, how? This comment may be addressed in the new section of Lands with Wilderness Charteristics.

Heiken	Doug	14	22	Finally, this appeal does not, as the BLM contends, concern an issue of agency methodology.... no question of methodology with regard to the treatment of wilderness values on non-WSA lands in the planning area is before us. Here, the BLM used no method to analyze or plan for the management of such values. We cannot defer to a void. ONDA v. BLM (9th Circ July 2008) http://www.ca9.uscourts.gov/datastore/opinions/2008/07/14/0535931.pdf.	593	This comment does not apply to the Kahler project since the Forest Service does not have "WSA" (Wilderness Study Area) lands.
Jerome	Irene	15	6	The "Purpose" statement is rambling and I suggest you tighten it up.	594	The purpose for the Kahler project was developed to respond to the stated need.

Jerome	Irene	15	7	Forest Plan amendments should occur in order to adequately meet the purpose and need	595	Amendments 1, 2, and 3 will meet the needs of providing "for a high level of potential habitat effectiveness at the landscape scale to meet the needs of big game in the winter range management area" and to "(p)rovide, develop, and enhance effective and well-distributed habitats throughout the Forest for all existing native and desired nonnative vertebrate wildlife species, particularly those associated with late and old structural stages in dry upland forest stands (e.g. white-headed and Lewisâ€™ woodpecker). Amendment 4 will address the need of reducing "the risk of loss from wildfire by improving fire sighting capabilities and creating defensible space around Tamarack Rental Cabin, Fire Lookout, and communication sites".

Jerome	Irene	15	10	Page 5 in Chapter 1 of the DEIS outlines the "significant" issues that were identified from the earlier public comment period and how the differences between alternatives would be measured. It is imperative that the FEIS clearly articulate the cost/benefit (in ecological terms) of not treating acres because temporary roads weren't built; and not treating RHCAs.	596	These concerns will be reflected in Alternative 4.

Jerome	Irene	15	14	Old road beds and skid trails should be used whenever possible - for both temporary roads and for system roads. Roads allow the access necessary (sad but true!) to adequately treat the Kahler Project area. Another Wheeler Point Fire event in this area would be devastating. Many of the sites are very marginal ground for timber production, which in conjunction with a drier warmer climate, means that stocking levels must be closely managed and often managed more aggressively than some individuals may be comfortable with. However, only about 37 percent of the landscape is being treated so numerous opportunities for monitoring and comparison will be available.	597	Alternative 2 analyses use of existing roads and trails, both currently open and closed. Alternatives 3 and 4 will show impacts of not using these roads and trails.

Jerome	Irene	15	15	The economics section is completely inadequate. . The social and economic (S/E) analysis is an element of most Forest Service NEPA documents that has been generally overlooked or deficient in content to truly be analyzed along with the environmental elements that are discussed in detail in all NEPA decisions. The Human Element analysis required by Council on Environmental Quality (CEQ) can be found in Sec. 1508.14 Human environment of the Forest Service Manual, section 1920 Land Management Planning.	598	The Economis section of the EIS will be re-written.

Jerome	Irene	15	16	There is no analysis or comment that provides information on where the historic forest management outputs compare to current and what the S/E affects have been. This would require collaborating and coordinating with the Counties to provide information on impacts to schools, i.e., decline in enrollment, increase in school lunch program; impacts to the County roads, change in demographics that may indicate loss of young families due to loss of jobs vs increase in the age of current vs past demographics. The County should have and should be a major contributer to the S/E Purpose and Need so that your analysis provides a meaningful comparison between the ecological and human environment.	599	See Response #598

Jerome	Irene	15	17	What have been the social and economic impacts on the loss of infrastructure in this region over the past 50 years? Has the loss of infrastructure affected the agency's ability to implement projects in an economic and timely manner? How is this associated with the agency's ability to restore watersheds and forests back to historic balance? ? What are the S/E benefits or losses to recreation within the project area if objectives for reducing fuels and restoring the area to historic conditions are met or not met? If the project is not implemented, what are the recreational losses and S/E impacts?	600	The Economics section of the EIS will be re-written to incorporate this comment.
Jerome	Irene	15	19	Chapter 5 provides a "financial summary" of Alternatives 2 and 3, which uses ccf for the volumes. Please make your best estimate at the amount of non-saw versus saw material as the numbers in the analysis on pages 275 and 276 are useless in their current form. It is critical to be able to evaluate the volume per acre for removal in mbf form as this is what makes a project viable.	601	Volumes are shown in cubic feet per Forest Service direction.

Jerome	Irene	15	20	Please develop an alternative that maximizes the acres treated and the forest products produced.	602	The purpose of the Kahler Dry Forest Restoration Project is to restore dry forest conditions in part by changing variability in forest structure, tree density, and species composition, which will result on a supply of commercial forest products. Alternative 2 was developed to maximize restoration.
Jerome	Irene	15	21	Recognizing that this is the first project out of the Umatilla Collaborative, the DEIS is somewhat of a disappointment. It would greatly benefit from some tightening of the prose.	603	The final EIS will be edited to correct the errors from the draft document.

Storm	Rex	16	1	Larger size & scope of project area is correct. This larger-than-ordinary landscape scale approach provides for better scale economies, as well as the ability to efficiently meet stated objectives. Your proposed timber harvest treatment of about 39% of the planning area acres should provide reasonable scale economies. This large-scale project would conduct the needed forest health improvement, utilize valuable timber, restore forest road conditions to enhance the watershed, address the Tamarack Lookout visibility problem, and improve game range long-term condition. The proposed project is the best way to reduce dangerous fire hazards, stand over-stocking, and disease problems.	604	Thank you for your comment.

Storm	Rex	16	2	Support Alternative 2, rather than Alternative 3. We prefer the proposed Action Alt. 2, rather than the more limited Alt. 3. While we encourage the greater harvest acreage in Alt. 2, AOL supports further modification of the Proposed Alt. 2-as described below, to incorporate adjustment of increased cable and temporary road construction. Our aim is to further improve the scale economics and the net economic value of the Proposed Action.	605	The cable-logged acres and the temporary road miles are a result of coordination with the Umatilla Collaborative Group and the Kahler inter-disciplinary team and will not be modified in the FEIS.
Storm	Rex	16	4	Proposed action relationship to the Forest Plan is unclear. The DEIS would be strengthened by adding a clear discussion of how the proposed DEIS project would advance the goals, objectives, and desired conditions identified in the 1989 Umatilla Forest Plan (as amended). The Forest Plan is the seminal land management document for the planning area, and the Plan's ideals and objectives necessarily must guide the Kahler DEIS project purpose, need and designs.	606	The FEIS will have a discussion on how the Proposed Action conforms with the Forest Plan.

Storm	Rex	16	8	Strengthen Proposed Action with additional economical logging method. Please consider improving the economic viability of the proposed Alternative 2, by shifting additional proposed helicopter logging method (a portion of the DEIS proposed He logging units) to cable logging with added temporary road construction. This modified alternative would harvest the same acreage, while employing a combination of added road building that would facilitate added cable logging. This treatment option would significantly reduce both current unit costs and long-term forest management costs for the same acreage treated. We urge you to design logging/transportation plans that would facilitate additional cable systems. For many of the proposed helicopter logging units (low cut volume/acre), a combination of construction of temporary roads and cable logging would be far more economical and	607	See Response #605

Storm	Rex	16	10	Economic assessment must identify contributions. The DEIS 'Economics Report' mischaracterizes the economic cumulative effects-by understating the importance of the meaningful economic contribution of timber harvest volume to the Blue Mountains forest sector. Also, the DEIS 'Economics Report' errantly stated the Alt. 2 & 3 financial viable values as "net", when the figures stated were actually the gross values. Past timber harvest from the Umatilla National Forest has had significant beneficial contribution to an established forest sector infrastructure (forest management and manufacturing) and forest product markets. Furthermore, "present and reasonably foreseeable activities" proposed by the DEIS would also significantly contribute to existing forest sector infrastructure (forest management and manufacturing) and forest product markets in a	608	The Economics section will be modified and will correct the errors of net values.

Storm	Rex	16	11	A recent economic contribution report by Oregon Forest Resources Institute (The 2012 Forest Report: An Economic Assessment of Oregon's Forest and Wood Products Manufacturing Sector'), determined that each million board feet of sawlog timber harvest from an Oregon forest results in 11 direct forest sector jobs annualized. This report also identifies additional economic contributions to the state. Furthermore, data readily available from the Oregon Employment Department and the Oregon Dept. of Education indicates a clear decline over the past two decades, in both the labor force size and K-12 school enrollment census in the seven-county Blue Mountains working circle. The employment supported by past and proposed Umatilla National Forest timber harvest has and would make a positive contribution to the region's employment and school enrollment (working-aged employees have	609	We will look at the referenced material and incorporate in the Economics section, if applicable.

Reichgott	Christine	18	1	The EPA is supportive of the overarching goals and objectives of the proposed project, and we appreciate the collaborative approach taken by the Forest in designing the Kahler project. We find the science compelling and believe there is an immediate need to move dry forest systems toward a more ecologically resilient future, particularly in light of the risk of uncharacteristic wildfire, insect outbreak and climate change. Overall, we find that the treatments proposed under Alternative 2 align well with the broad body of science emerging about dry and moist mixed conifer forests1.	610	Thank you for your comment.

Reichgott	Christine	18	5	Based on our review, we are rating the DEIS as EC-1 (Environmental Concerns - Adequate). An explanation of this rating is attached. We appreciate the opportunity to review and comment on the DEIS, and we look forward to furthering our understanding of this and other projects that develop through the collaborative efforts of the Umatilla Forest Collaborative Group.	611	Thank you for your comment.
Coulter	Karen	19	32	* [Highlighted: "Opportunities for a feeling of solitude, the spirit of adventure and awareness, serenity, and self-relianceâ€¦"] A sense of solitude, adventure, awareness, serenity and self reliance are all important values to us of lands.	612	Thank you for your comment.
Coulter	Karen	19	33	[Highlighted: "The existing condition of all remaining 22,917 acres of land within and affected by the Kahler project presents a landscape that has been managed and is generally developed in nature; these lands contain evidence of past harvest and forest roads."] Yet these are the best areas left to us in the Kahler area!	613	Thank you for your comment.

Coulter	Karen	19	35	Page 100 * This is a grossly inadequate discussion of the existing condition economic activity for the Umatilla National Forest and the project area. All of the information mentioned on DEIS p. 100 as existing in economic profiles should have been disclosed and discussed in the Kahler DEIS. The public should not have to wonder what the demographic, employment, ad income trends are for these countries when reading the DEIS. By the time members of the public, such as myself, get to page 100 of the DEIS, there may not be time or opportunity for them to get a copy of the Umatilla Forest Plan or copies of the economic profiles from the Heppner District Office to review for their comments -especially as the Forest Service now insists on a Freedom of Information Act request for virtually all material not in an EIS or it appendices (when there are any) and is often slow to deliver such	614	More detail has been added to the Economics section of the FEIS.

Coulter	Karen	19	36	What about livestock grazing, roading, and any mining, herbicide use, etc? Why are these not discussed? This is a inadequate analysis of past, present, and reasonably foreseeable herbicide use and ongoing and future livestock use? Further these actions should not just be listed (in much more detail and more comprehensively) but should also be discussed and analysized as to the combined effect past, present, and foreseeable actions with the Kahler projects' known and foreseeable potential effects.	615	A grazing section has been added in the FEIS; roads are addressed in tables 2-5 and 2-6; mining was not identified as an issue in the Kahler project area; herbicide use is addressed in the Noxious Weeds section.
Coulter	Karen	19	53	[Highlighted: "The harvest example was using no disturbance other than removal of EGC. This is not to say under the extreme conditions (high precipitation, poor EGC left in place, or unplanned equipment traffic), erosion could not occur above background levels."] * What is "EGC"? With terms like these not defined, parts of the analysis are incomprehensible to the public.	616	Please refer to the response to comment 19-39.

Coulter	Karen	19	74	[Highlighted: "â€¦provided they are placed on a soil depth were restoration is possibleâ€¦"] This assumes that 1) "temporary" roads will be located at a "soil depth" where restoration is possible 2) that the "temporary" roads will actually be obliterated, 3) the obliterated "temporary" roads will not be re-opened and re-used (which is now often the case), and 4) that there are no other ecological impacts of these roads being constructed that sub-soiling or obliteration wont correct. (see short term uses and long term productivity DEIS pg. 117)	617	Tahnk you for your comment.
Coulter	Karen	19	75	This discussion of unavoidable adverse effects and of short-term uses and long term productivity neatly avoids analyzing soil effects from skid trails, sedimentation of streams, etc. -anything other than effects from "temporary" roads.	618	WEPP Sediment Analysis was used to determine if and what design criteria could be used to minimize measureable erosion and sediment.

Coulter	Karen	19	72	Based on the DEIS discussion of soil effects from alternative 3, there appears to be no significant difference in effects between the two alternatives, so see our discussion of DEIS analysis flows for alt. 2, as discussion is virtually identical for alt. 3.	619	From the perspective of the soil resource this is true.
Coulter	Karen	19	80	This is a biased analysis re: change in vegetation growth, as not only "temporary" roads and landings (proposed for obliteration) are at issue -what about skid trails or other soil impacts from logging more extensively with alternative??	620	It is true that change in vegetation growth can be influenced by activities that create soil compaction and displacement, the DEIS made this assertion in the previous statement with a refernce to unregulated recreation. This issue will be clarified in the EIS to reflect that continued use or forest activities can promote this condition.

Coulter	Karen	19	78	[Highlighted: "This assumption is based on the expectation of obliteration of temporary roads and landings. These impacts if uncovered by a wildfire like the Wheeler Point Fire, may serve as a conduit for erosion and sediment over a short period (<3years) to longer durations (14 years), depending upon the intensity of the wildfire (Robichaud, 2000)."] Actually past heavy logging may have converted some areas to grass -associated soils- See Elinor Ostrum's study. Also the process of mollisols does not mean that proposed heavy logging would not harm these soils alter their development. (eg. logging compacts soils, heavy removal of trees could diminish their ability to retain moisture from snow etc.)	621	It is the assumption of the soils report that soil development of Mollisols are due to environmental conditions that can resulted in grassland dominated soils. Past logging can create an area open enough for grass dominated conditions. However, less than 100 years is not likely to allow for accumulations to result in an alteration in soil taxonomy. Mollisols are recognized for high base cation exchange capacity and organic content that are typically developed under grassed conditions. An attempt was made to identify the Ostrum reference, but the Ostrum Study mentioned was not submitted, nor was there record of this citation in any of the references submitted. Therefore it is not known in what way the Osturm reference would be relevant to the Kahler Project proposal.
Coulter	Karen	4	24	We request a hard copy of this list of "non-significant" issues raised and reasons reg[arding] their categorization as non-significant, which should have been included in this DEIS.	622	All letters received regarding the issues will be made available

Artley	Dick	1	16	It would have been interesting to read how wildfire would adversely impact woodpecker habitat.	623	Thank you for your comment regarding the effects analysis. Effects on woodpecker species that do not rely on fire to create burned forest habitat are described in the terrestrial wildlife report.
Coulter	Karen	19	40	Why are the unregenerated skid trails from past skyline yarding just north of the project area (still on the Heppner District same west end) not disclosed and compared to potential severe erosion from proposed skyline yarding on steep slopes for the Kahler project?	624	The analysis was limited to activity areas proposed within the project. Current Best Management Practices (BMPs) in this project are expected to not produce these results.
Coulter	Karen	19	154	We are disgusted that the Forest Service is already flagging and tree-marking proposed Kahler sale units even before the comment deadline for the DEIS. Apparently the FS really doesn't care what the public thinks. This should be a NEPA violation -no considerations for public comments.	625	The marking of units common to all alternatives was started before a decision was reached in order to make efficient use of existing labor. There is no FS policy, direction, or law that prohibits the FS from completing marking activities on the ground. If needed alterations will be made following the final decision.

Coulter	Karen	19	190	The Forest Plan standards should not be further violated to meet purely silviculture (timber sale) goals. This is in violation of the multiple use legal framework and the requirement to provide for multiple uses of the Forest and for the Forest Service to choose the environmentally preferable alternative.	626	Alternative 4 was developed in the Final EIS to analyze effects of no forest plan amendments, except for the conversion of C1 to E1 around the Tamarack Lookout.
Vandehey	Roberta	6	6	Stop hunters and others from cutting little trees that the tax payer paid to plant in the fire area because they want to put their tent where the tree is or they want to make 4-wheeler trails through the young plantations, particularly found on the 050 road around my fences. (See Photos)	627	This comment is beyond the scope of the Kahler project.
Vandehey	Roberta	6	7	Stop hunters and others from leaving the roads such as the 025 Road to camp. They should not be cutting trees big trees as they are doing to get into the few trees that survived the Wheeler Point Fire because they want to "camp in the trees"! That needs to be stopped, damages repaired, and infractions enforced to prevent further damage. (See Photos)	628	This comment is beyond the scope of the Kahler project.

Vandehey	Roberta	6	11	Stop grazing the Wheeler Point Fire area because the money that is received from grazing would be more than offset by the money saved planting the trees that the devastated area so badly needs. Grazing a forest stops the natural regeneration of trees at nature's expense. Had the fire area not been grazed for the past 18 years since the fire, the reforestation "job" would have been well on its way, with no tax dollars used.	629	This comment is beyond the scope of the Kahler project.
Vandehey	Roberta	6	30	Eastside forests are far too fragile, even before climate change and fire damage, to support impactful multiple use. First and foremost, a national forest is just that, a FOREST, OWNED AND ENJOYED BY ALL PEOPLE, NOT JUST CERTAIN SPECIAL INTEREST GROUPS; groups such as loggers, hunters, 4-wheelers, cattlemen, etc. There is no place in our national forests for exclusive uses by anyone at the expense of the pleasurable use by all others.	630	This is a personal view comment, no response required.

Vandehey	Roberta	6	34	Do not say there is no market for these other users. The market is created by good land use policies on the part of the USFS. Wheeler County needs the year round income from visitors, not just from hunters that bring their own gas, food, beer, law infractions and garbage. Who wants to come here with their children to see blood and gut piles, trees effaced with hanging bars for skinning deer, "open pits full of human feces" behind every tree (see photo), and worse yet getting their heads shot off if they accidentally see this forest on the map and decide to try to take a family vacation here. Why should they, or the rest of us pay a penny for the support of this National Forest if they sew what they (or we) are paying for? We shouldn't! Trust me, the general public, once they come here never come back! That is WRONG! It is unfair to Wheeler County to have such a National Forest on their lands.	631	Thank you for your comment.

Vandehey	Roberta	6	35	The West End of the Umatilla National Forest has great potential and it is the Forest Service's OBLIGATION to Wheeler County and to the Tax Paying Forest users to repair and nourish that potential. Broaden your horizons!!! Take better care of our land and give the rest of us something for which to come here.	632	Personal view, thank you for your comment.
Vandehey	Roberta	6	36	Fix the Broken Wheeler Point Fire area and stay out of it with your chain saws, drip torches, chemical sprays and cattle. Bring on the planting shovels, road closures and cattle exclusions, and family vacationers.	633	Beyond the scope of this project, thank you for your comment.
Coulter	Karen	19	129	HRV analysis is supposed to guide management, but not at the expence of many ecological values - especially when there are legal mandates to maintain those values - such as MIS viability.	634	This is a position statement, thank you for your comment.

Coulter	Karen	19	155	Actually there would be cumulative impairment and degradation of existing old forest multi-strata habitat through logging to turn it into OFSS, but those impacts are not are not discussed under alternative 2, instead choosing to downplay such impacts by referring only to "reduction" of LOS overall. This is deceptive and inadequate cumulative effects analysis.	635	This comment is an opinion.
Coulter	Karen	19	120	[Highlighted: "By 2065, the near-term implementation effects of alternative 2 are not maintained - Douglas-fir and grand fir both increase when compared with their 2015 levels, while ponderosa pine is decreased from its 2015 (post-implementation) level."] So if this modeling (for 2065) has any basis in reality it indicates Douglas and Grand fir naturally regenerate in the Kahler project area -i.e. they are recovering from past logging, not just "encroaching".	636	Thank you for your comment.
Heiken	Doug	14	35	We urge the Forest Service to protect large tree structure where possible by topping large trees, instead of felling them.	637	Thank you for your comment.

Coulter	Karen	19	157	Highlighted: "Alternative 3 would move approximately 400 acres of multi-strata late and old structure (OFMS) habitat in the dry upland forest PVG into a single-stratum old forest (OFSS) structural conditionâ€¦"] this sounds exactly like alt. 2-13 this a typo? What is the difference in OFMS logging between alt. 2 and alt. 3?	638	Refer to the Forest Vegetation section in Chapter 4 of the FEIS.
Coulter	Karen	19	54	Highlighted: "â€¦so the Kahler harvest and burning in RHCA would be justified and no Design Criteria is recommended based on canopy removal."] No design criteria? Yet canopy removal negatively affects soils.	639	Canopy removal is another term for timber harvest and prescribed burning. There are Design Elements that apply to timber harvest and prescribed burning, and they are organized in the EIS as applying to timber harvest and prescribed burning. They are not organized under canopy removal, but they are relevant to it. Permanent loss of canopy can alter soils, this in not expected to be the result of this proposal.

Coulter	Karen	19	163	Limit management of wildlife connectivity corridors to under-burning, but exclude corridors that are moisture mixed conifer or are incorporating moist drainages from burning.	640	It is neither feasible nor desirable to keep fire out of wildlife connectivity corridors and drainages. This project proposes 31,020 acres of low intensity prescribed fire to be accomplished in increments of a few hundred to a few thousand acres 5 to 10 years post thinning treatments. Prescribed fire is anticipated to directly effect 50 to 70% of the proposed landscape burn acres in Kahler (approximately 21,713 acres burned) and will result in a mosaic of burn severity ranging from unburned to patches of high mortality (less than 10% of the burned acres). Prescribed fire will be used as a management tool to reduce fire hazards created by management activities and naturally occurring fuels, to prepare sites for reforestation and to maintain and improve other resources such as range and wildlife. Prescribed burning will be the principal program and technique used for winter range habitat maintenance, for forage enhancement, and to assist in keeping big game animals on the Forest during the winter (Umatilla NF LRMP, 1990). Design Criteria and Best Practices will be utilized, refer to Kahler Dry Forest Restoration EIS Project Design Features.

Coulter	Karen	19	183	Really there's only 80 acres of forage greater that .5 miles from open roads in the EI MA west? And no marginal or satisfactory cover greater than .5 miles from an open road? This is dismal.	641	Thank you for your comment. The existing condition indicates that there are few acres of cover and little security habitat in the E1 West HEI analysis area. This condition is largely due to the impacts associated with the Wheeler Point Fire and the current road system in the area.
Coulter	Karen	19	213	* This is fallacious reasoning - the re-allocation of E1 acres to C1 acres does not compens[ate?] for the net [word is cut-off] in actual suitable Pileated hab[itat?] acres.	642	There would be a net increase in Dedicated Old Growth acres under all of the action alternatives. The acres that would pass from the E1 to C1 Management Area are similar in structure and composition to those acres that would pass from C1 to E1, based on old growth survey plots completed in both areas. These acres are considered suitable pileated woodpecker habitat. The emphasis of treatment would be clearing site lines from the Tower (through tree topping and felling of trees less than 21 inches dbh) and thinning adjacent to infrastructure at the Tower, cabin, and communication sites.

Coulter	Karen	19	222	Pileated woodpecker area management Indicator species for other species' habitat needs, including secondary cavity users Pileated nest and roost holes. They cannot be dismissed as unnecessary, inconvenient, or out of place. We found Pileated woodpeckers in suitable habitat in the Kahler area, which means it had large and old growth live Grand fir and Douglas fir for foraging and nearby old growth Ponderosa pine for nesting as well as sufficient canopy closure. Pileated woodpeckers tended to be in riparian drainages and higher elevation moist mixed conifer, where they naturally occur. See our survey sheets and photos.	643	This species is not dismissed in the EIS as unnecessary or not belonging in the Kahler project area. This species is present, and was historically present in pockets of dense dry forest and other wetter areas. Impacts are assessed in the EIS on pages 163-170. Large, old Douglas-fir and grand fir, and trees less that 21 inches dbh that exhibit old growth characteristics would be retained in proposed treatment units. Proposed activities will aid in moving existing stands toward or to maintain existing old forest single stratum ponderosa pine stands, and will provide for heterogeneity. Where available in proposed units, dense Douglas-fir and grand fir pockets would be a priority for retention as untreated skips.
Coulter	Karen	19	43	Why was 100% cover assumed for mature forest? This is mostly not the case. Who wrote this and where are they from? Evidently they're not from this area. This is inaccurate use of the science - unless I'm missing something.	644	This model is created by researchers from the Rocky Mountain Research Station (RMRS). Use of 100% cover for mature forest is the default cover in the model.

Vandehey	Roberta	6	12	Replace the lookout on Wheeler Point Ridge because had it still been there, it would have prevented the Wheeler Point Fire that was started by Boise Cascade loggers logging at its base.	645	Constructing a new fire lookout is beyond the scope of forest restoration. Thank you for your comment.
Coulter	Karen	19	45	What is the site-specific data basis for the miles or acres of legacy skid trails assumed? Actually for non-RHCA- areas (and perhaps for RHCAs also) it looks like there may actually be more skid trails on the ground (legacy) in sale units than assumed.	647	Many trails were identified in the project area. To determine if they were detrimentally impacted, the 2009 Forest Soil Disturbance Monitoring Protocol was used. Of the trails examined only 31% of that distance was determined to fall within the detrimental criteria of those protocols.
Coulter	Karen	19	46	6 miles or 9 miles of legacy trails inRHCAs? This is severe for soil impacts.	648	The presence of trails was evaluated with the 2009 Forest Soil Disturbance Protocols. Not all areas with the features of trails had detrimental disturbance.
Coulter	Karen	19	49	These are logging-caused skid trails, not "human created" trails. Why is this glossed over, effectively downplaying the impacts of past and proposed logging?	649	Not all trails are caused by logging. Within the soils report the use of "human created" trails is an indication the trails was likely created by many activities in the forest, of which logging is included.

Coulter	Karen	19	50	[Highlighted: "While not many of these effects seem to have been reduced over time, there is one instance where the soil restored itself."] * This doesn't make me optimistic about Forest Service ability to avoid legacy soil impacts with the Kahler project!	650	The use of the recent TEUI (Terrestrial Ecosystem Unit Inventory) identified the presence of the vertic soil properties that were mentioned. This finding was then extrapolated to the other locations with vertic properties and trail restrictions were placed on activity traffic in those areas. It is hoped that this is the use of the best available science on a site specific basis.
Coulter	Karen	19	52	It is not acceptable under NEPA or legal precedents not to quantify potential impacts and to use vague terms such as "same effect" on pg. 106 of the DEIS.	651	The section of the document on page 106 is a description of Resource Indicator and Measure 3. The reference to "some effect" is an indication that DSC (Detrimental Soil Conditions) will be analyzed with respect to water quality later in the document.
Coulter	Karen	19	55	[Highlighted: "When the WEPP model used the criteria to examine skid trails there was elevated erosion, so design criteria was developed. This information was used to limit the length of trails (225ft and 600ft)â€¦"] So where is the analysis of direct and cumulative impacts of proposed skid trails??	652	The results of the WEPP Analysis are in the Soils Report (Table 10). The Soils Report summarizes this information.

Coulter	Karen	19	56	[Highlighted: "As long as the proposed activity is allowed to use legacy trails, they can be eliminated by contract provision of a timber sales."] Yet will skid trails that are not turned into "temporary" roads be obliterated? If not, what are their impacts?	653	It is estimated that they may remain on the landscape, but cumulatively they will be less than the 20% detrimental soil conditions in LRMP standards and guidelines.
Coulter	Karen	19	57	[Highlighted: "Mentioned in the existing condition discussion there is existing DSC from past activities. Each of these methods has an expected impact to the DSC (Reeves, 2011, Archuleta, 1997 & 1999, Siskiyou NF, 1997 and Bennett, 1982), which can influence sediment." â€¦"During the implementation of activates, there will be some elevation of risk to erosion. However BMPs (sediment) will mitigate or diminish; most if not all, short term effects from erosion."] Missing language, many typos. What is the evidence that proposed BMPs will "mitigate or diminish" "most if not all" short term effects from erosion? What about long term effects?	654	WEPP analysis shows that with the appropriate cover erosion activities can be mitigated to within background levels.

Coulter	Karen	19	58	[Highlighted: "This is not to say all proposed activities (in or out of the RHCA) would not have an effect to sedimentâ€¦" "Skid trails (a yarding method) are the one example when sediment could rise above background levels." "When skidding of trees was examined in relationship to the RHCA thinning, unlike the felling of trees; it was determined that a buffer was indeed needed to minimize the risk of sediment to streams."] So why is logging proposed within Cat. 4 RHCA buffers?	655	The statement within the document references the WEPP modeling that showed the removal of canopy did not show elevated sediment. However when logging trails were modeled, there were distances that showed elevated levels of erosion and sediment. This was the basis for the exclusion of harvest trails and equipment skid trail distances from class 4 streams in the Soils Report (Table 9).
Coulter	Karen	19	66	[Highlighted: "Of the legacy trails mapped in the project area, some measure of the road obliterated (units 2, 3b, 4b, 18, 19, 22, 27, 31 and 60a), dependent upon activity use."] Some sentences don't even make sense.	656	Will be edited as follows. "Of the legacy trails mapped in the project area and used for harvest activities, some will be rehabilitated (units 2, 3b, 4b, 18, 19, 22, 27, 31 and 60a), dependent upon activity use."]

Coulter	Karen	19	69	What are the potential combined levels and effects of erosion and sedimentation from both the Kahler project and a possible wildfire? Why is this not analyzed under cumulative effects? Why were no models run or studies cited in order to estimate potential amounts of erosion and sediment to streams from Kahler project activities? Other Forest Service DEISes have used science and models to make such estimates. We are concerned by the unqualified expected "elevated" amounts of sediment from the Kahler project plus even a low severity wildfire. Why are the effects of increased erosion and sedimentation not described? * [Highlighted:"â€¦ unless like above influenced by wildfire. If wildfire takes place elevated. The potential duration of expected sediment risk would be for at least 3 years immediately following wildfire (Elliott et al 2001 and Robichaud 2000), assuming for a low severity	657	The effects of erosion and sediment were analyzed for the Kahler project using WEPP (Water Erosion Prediction Program). It was use dto examine both the effects of the project and wildfire. These results are in the soils report and sumerized within the Kahler DEIS.
Coulter	Karen	19	77	[Highlighted from Graph 4-4: "Given the proposed EGC in this"] What is the proposed effective ground cover for the action alternatives and how would it be ensured to be that high?	658	The EGC used int eh modeling showed that at least 40% EGC is required to meet EDC estimates. Current logging practices easily allow that amount of EGC to remain following activities.

Coulter	Karen	19	102	Highlighted: "Table 12 shows the assumed hill slope and stream bank sedimentation of 5.35 tons per square mile per year for the Kahler Project."] This is insulting. My land was burned in the Wheeler Point Fire. We don't want a timber sale here.	659	The value of 5.25t/square mile in the comment represents the estiment of background sediment in the area. This is the extimate of natural sediment without activities.
Jerome	Irene	15	1	For Community Wildfire Protection Plan purposes, please include the county lines that separate Wheeler County from Grant County within the Kahler project area.	660	This will added to the maps in the FEIS.
Coulter	Karen	19	264	Please drop all dispersed camping sites, Fairview campground, and Tamarack Mountain from all commercial logging. Leave Fairview and Tamarack completely alone drop commercial logging along Highway 207.	661	Thank you for your comment.

for the greatest good

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