

Response to Comments

30-Day Comment Period Summary

The Proposed Action along with a Preliminary Assessment (which, in addition to Proposed Action, included the need for the proposal and the environmental consequences) was made available for public comment. Letters and e-mails were received during the 30-day comment period, which ended on September 25, 2017. The Responsible Official has considered comments received and has developed the Crystal Clear Restoration EA in response to those comments.

This appendix responds to the specific comments received. Specific written comments are comments that are within the scope of the Proposed Action, have a direct relationship to the Proposed Action, and include supporting reasons for the Responsible Official to consider (36 CFR 219.2). The emails and letters are in the analysis file; the following is a summary.

#	Commenter	Comment	Response
1	Bark	Is the Forest Service attempting to exempt itself from the requirements of the Healthy Forest Restoration Act (§102(e)(2))?	While an objective of this project is to address firefighter safety concerns related to stand-replacing fire events, this project contains two additional objectives: 1) to maintain a sustainable supply of timber; and, 2) to restore resiliency to forested areas (EA, Section 1.4). Since the entirety of the project's objectives do not adequately align within the regulatory framework for HFRA, the Responsible Official determined not to use HFRA for this project. Similar to other HFRA projects occurring on the Forest however, this project would implement variable density thinning to allow for an emphasis to be placed on leaving vigorous trees of all sizes without concern for spacing (EA, Section 2.2.1).
2	Bark	Bark requests that the EA be revised and formatted properly per the instructions as described by NEPA to include; a concise and professionally composed document; site specific information to support the analysis; and a detailed and thorough assessment of cumulative impacts with supporting data.	The final EA has been updated and appropriately formatted.

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#	Commenter	Comment	Response
3	Bark, Wild Earth Guardians, Jeremiah Jenkins, Bonnie Greene, Oregon Wild, Cascadia Wildlands, Lola Goldberg, Devyn Riley	<p>Because the project may have a significant impact, the Forest Service should prepare an EIS.</p> <p>This timber sale is 10,000 acres larger than any proposed within the last few decades. Given the size and complexity of this project, prepare an EIS which fully discloses its effect on the environment.</p>	<p>An EIS is required when the projected effects from the project cannot support a finding of no significant impact when considering both context and intensity (36 CFR 220.7(b)(3)(i) and 40 CFR 1508.27). The effects from the project are disclosed in Chapter 3 of the EA and took a hard look at the effects in relationship to their context and intensity. Being that none of the effects disclosed in Chapter 3 of the EA were found to be significant, it has been determined that a finding of no significant impact is appropriate.</p> <p>Although the size of the project is larger than other projects recently proposed, the area has been fully surveyed and effects from this project have been disclosed in the EA and were not found to be significant.</p>
4	Bark	To have the main contact for the Forest Service with highly limited accessibility for the entirety of the public comment period does not promote dialogue and communication between the public and the Forest Service.	Emails that were sent from Bark during the comment period related to this project were responded to within less than 24 hours. The first email was sent Friday 8/25/17 at 3:07pm and was responded to on Saturday 8/26/17 at 4:22am. Additional emails related to other projects from Bark were also responded to within a similar timeframe. Copies of all correspondence are available in the project record.
5	Bark, Lola Goldberg, Devyn Riley	If you choose to include recently burned areas in the project, we will request a supplemental NEPA analysis due to changed conditions.	The Proposed Action has been updated to remove the roughly 50 acres that were burned in the Rim Fire (EA, Section 1.5). These acres include all of stand 121 and portions of stands 89, 92, 93, 94, 315, and 324.
6	Bark	Bark requests that a more robust set of alternatives be provided in order to create a final decision better suited to meet the proposed purpose and need.	The EA includes additional alternatives considered in Section 2.5.
7	Bark, Oregon Wild, Cascadia Wildlands	<p>The EA does not discuss or include an upper-diameter or age limit on the trees to be logged in this project.</p> <p>We request that the Forest Service analyze, in detail, an alternative that includes an 18-inch DBH limit.</p> <p>Please consider an alternative that protects and retains larger trees, preferably trees over 18 inches DBH, and expound and analyze whether this will increase or perhaps reduce future fire risk.</p>	<p>This project does not establish a diameter limit in order to fully meet the purpose and need for action, as stated in the EA in Section 1.4, because a one-size-fits-all diameter does not adequately address spacing and ladder fuel treatments (EA, Section 2.2). Incorporating an upper diameter limit would limit the ability to improve the forest ecosystem health and mitigate fire spread. The Proposed Action utilizes variable density thinning with the overall goal of leaving the best, largest trees within a stand and meeting the purpose and need for action. Diameter limits will be determined on a site-by-site bases utilizing the desired basal area and Stand Density Index (SDI) calculation that will reduce fire spread.</p>

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8	Bark, Lola Goldberg, Devyn Riley	Bark requests an alternative that focuses the fuels reduction logging in areas that are in FRCC 2 and 3, and removes the units that are in FRCC 1.	Of the 69% of lands in FRCC I, 61% are at the upper level of that condition class and are transitioning to FRCC II. Some of these areas have likely transitioned to FRCC II since the FRCC analysis occurred. The purpose and need for the project is discussed in Section 1.4 of the EA and is to provide forest products where there is an opportunity to restore resiliency to forested areas and reduce the risk of uncharacteristic wildfire behavior. The need includes increasing the resiliency of the area to withstand severe, uncharacteristic fires, or widespread occurrence of mortality from insects and disease, not simply restoring FRCC. This also includes providing locations for fire suppression personnel to actively engage a fire safely in areas of high consequence infrastructure areas and the WUI, as well as reducing the impacts of human caused fires spreading to or from public access areas and adjacent landowners. Condition class alone is not a sole factor in providing for public and firefighter safety.
9	Bark	Bark requests an alternative that does not include logging in any suitable or dispersal habitat for the northern spotted owl.	An alternative was considered in the EA in Section 2.5 that reduced acres within spotted owl habitat.
10	Bark	Bark requests that the Forest Service take steps to eliminate this bias of analysis by including the possibility that fire will not occur in the project area in the final assessment. The Forest Service ignores the fact fire is an unpredictable force, the likelihood of a fire occurring in the project area within the timeframe of effective fuels reduction is very small, and that many things besides fuel load effect fire behavior. Bark requests the Forest Service provide an analysis of the likelihood of fire in the final assessment.	Fire history shows 514 fires occurred in and around the project area for a twenty-year period. The primary cause of fire ignition in and around the project area is human in nature, representing 345 of those 514 fires, which is discussed in the EA in Section 3.2.2. Human-caused wildfires tend to be less random than naturally occurring fires. Ignitions in and around the treatment area will continue due to the high proportion of human-caused ignitions. Fire behavior is driven by fuels, weather, and topography. In addition to fuel loading, the analysis also includes two fuel moisture scenarios which are driven by two weather scenarios, as noted in the Fuels Report. The intention of the project is not to stop fires, but to reduce their intensity.
11	Bark	Please provide rationale for not closing the two roads which have high combined resource risk (2130-281 and 2110-220).	The 2130-281 is a maintenance level 2 road, approximately 0.23 miles long. The Proposed Action has been updated to close this road (i.e., change to maintenance level 1) (EA, Sections 2.2.3 and 2.5). The 2110-220 is a maintenance level 2 road, approximately 1.55 miles long. This road provides access to private land; therefore, it was not considered for closure (EA, Section 2.5).

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#	Commenter	Comment	Response
12	Bark, Jeremiah Jenkins, Lindsay Ruoff, Shawn Poirier, Lola Goldberg, Devyn Riley	<p>Please pursue an alternative which implements an actual reduction in road density in the project area, through additional road decommissioning. If this is viewed as unfeasible by the agency, please provide rationale for keeping more roads on the landscape than is ecologically and economically sustainable.</p> <p>The project area includes approximately 555 miles of roads, or 2.59 miles of road per square mile. Reduce road density in the project area through active road decommissioning, closures, and road-to-trail conversions.</p>	<p>The interdisciplinary team utilized the recommendations in the 2015 Travel Analysis Report to develop the Proposed Action. Also, the interdisciplinary team reviewed all of the roads within the planning area that have been previously decommissioned, converted to trails, and remain as part of the transportation system. National Forest System road densities would be reduced with the Proposed Action by closing 5.43 miles of roads and decommissioning 0.3 miles of system roads (EA, Section 2.2.3). After the 30-day comment period, the interdisciplinary team re-looked at the roads within the project area and one road was added to the Proposed Action for closure (see response #11).</p>
13	Bark	<p>In the B2/Scenic Viewshed land allocation, open road density between December 1st and April 1st shall not exceed 1.5 miles per square mile. This is clearly not currently the case for this land allocation within the project area, according to the numbers on Table 53. The Forest Service, in order to achieve their Standards and Guidelines in the LRMP, must reduce additional road density in this land allocation.</p>	<p>While the existing road density does not meet current Forest Plan standards outlined in B2, no new system roads are proposed for this project within the B2 land use allocation.</p> <p>(Note: The Proposed Action closes 5.43 miles of roads and decommissions 0.3 miles of system roads. The OHV trail that is proposed be converted to a maintenance level 2 road and managed as a trail is located within C1-Timber Emphasis land use allocation.)</p>
14	Bark	<p>The current open road density in summer range (lands not in B10 LUA or inventoried winter range) is 2.78, which is above the 2.5 miles per square mile for the LRMP Standard in inventoried summer range. The Forest Service, in order to achieve their Standards and Guidelines in the LRMP, must reduce additional road density in this land allocation.</p>	<p>The Proposed Action would reduce the open road density for the project area to 2.48 miles of open roads per square mile, and would reduce the open road density in summer range to 2.66 miles of open roads per square mile. Although after implementation of this project would still be above the Forest Plan standard of 2.50 miles per square mile, the Proposed Action does reduce the open road density in summer range.</p>
15	Bark	<p>Will these roads (previous alignments used as temp roads) then be decommissioned directly following the timber sale implementation? If so please provide a table showing this reduction in road density.</p>	<p>Roads that were identified for decommissioning under previous NEPA decisions but never implemented are not currently considered in the review of the open road density, regardless of their physical status on the ground. All roads proposed to be used in this project that have a previous decision to decommission, and are still physically present on the ground, would be decommissioned before the unit is released as outlined in project design criteria #22, located in Section 2.3.3 of the EA.</p>

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#	Commenter	Comment	Response
16	Bark	Will these roads (previous alignments converted to trail) then be converted directly following the timber sale implementation? If so please provide a table showing this reduction in road density.	The temporary roads proposed on existing OHV trails (14.5 miles) and the temporary roads proposed on old alignments that were decided in the 2010 Travel Management Record of Decision to become OHV trails (8.5 miles out of 19 miles) would all be converted to OHV trails upon project completion. Trail conversion would likely be funded under the authority of the Knutson-Vanderburg Act, and partner organizations would likely help with this work.
17	Bark	Any final decision should mitigate impacts to the environment, including potential increased fire risks, by limiting construction of new roads, and reconstruction of already decommissioned roads.	The project design criteria included in the EA in Section 2.3 are designed to mitigate impacts to the environment. The rationale for the converting the 2110-240 from an OHV trail to a maintenance level 2 road managed as an OHV trail is discussed in the transportation section of the EA, as well as in Section 2.2.3. The rationale for using decommissioned and old temporary alignments as temporary roads for this project is discussed in the EA, which includes lessening impacts within the project area (EA, Sections 1.8 and 2.2.5).
18	Bark, Wild Earth Guardians	Please analyze an alternative which excludes new roadbuilding from the Proposed Action. Consider an alternative that includes decommissioning more than 0.3 miles of road.	No new system roads would be constructed for this project. An alternative was considered that eliminated temporary road construction within Riparian Reserves (EA, Section 2.5). Temporary roads are also discussed in the EA in Section 1.8. The Responsible Official determined not to develop an alternative that removed the use of temporary roads since this would reduce treatment areas by approximately 40%. The use of temporary roads is consistent with Forest Service policy (FSM 7703.22). All roads that were identified as “not likely needed” in the Travel Analysis Report (2015) that would be used in this project were reviewed for decommissioning. Roads not identified for decommissioning, but labeled as “not likely needed,” were already decided upon in previous NEPA decisions.
19	Bark	As stated by the Forest Service on numerous occasions, the actual rationale for this project is commercial, not restorative. Re-write the project’s Purpose and Need for this project to reflect this motivation.	The purpose and need for the project is discussed in Section 1.4 of the EA, which is to provide a sustainable supply of forest products where there is an opportunity to restore resiliency to forested areas and reduce the risk of uncharacteristic wildfire behavior. Although specific mechanisms for funding are not typically relevant in a NEPA document, for clarity, a discussion was added to the EA in Section 1.6 about the Timber Sales Pipeline Restoration Fund.

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#	Commenter	Comment	Response
20	Wild Earth Guardians	Clearly articulate the statement of purpose and need to address the agency’s duty to identify the minimum road system, and provide support for the claimed needs.	The Forest’s minimum road system is identified in the 2015 Travel Analysis Report, which has been discussed and incorporated by reference in the EA, Section 1.6. The interdisciplinary team analyzed the road system within the project area and determined which roads were needed for future use, needed to be reconstructed or reopened, and decommissioned or closed.
21	Wild Earth Guardians	The Forest Service must conduct site-specific analysis by explicitly delineating where roads will be constructed, and the resulting impacts of such activity on important Forest resources. Please provide a list of all road segments in the project area (not just roads proposed for closure or decommissioning, see Table 7 of EA) and proposed actions for those roads by alternative, and include the recommendations from Mt. Hood’s Forestwide travel analysis report.	All roads within the project area are included on the map in the EA in Figure 5. The transportation system was examined in light of the recommendations found in the Travel Analysis Report (2015) (EA, Sections 2.2.3 & 3.4).
22	Wild Earth Guardians	What scientific support does the Forest Service rely on for its assumption that the project area is susceptible or likely to experience uncharacteristically severe burns? What scientific support does the Forest Service rely on for its conclusion that logging will reduce the risk of uncharacteristic wildfire behavior?	Flammap (Finney et. al, 2015) was used to determine the potential characteristics of fire behavior for the project area pre- and post-treatment (see the Fuels Report for further discussion of Flammap). Characteristic fire behavior was determined using Fire Regimes (rice et. al, 2006). Based on the model outputs, high proportions of the low severity regime will burn as crown fire. This is uncharacteristic for a low severity fire regime. High portions of the mixed severity regimes also will burn as crown fire. This may be characteristic or uncharacteristic depending on the scale of a particular fire regime and scale of crown fire. Crown fire is deemed undesired for this project in order to meet the purpose of keeping fires on NFS lands and protecting spotted owl habitat. Agee and others (1996 and 2005) found that the canopy base height of a stand is an important factor in initiation of crown fire. Additionally, Agee and others found canopy bulk density of stands is a primary influence for the ability of the stand to carry fire within the canopy. Silvicultural treatments would increase the base height and reduce the canopy bulk density of the stand through removal of trees; thereby reducing the potential for crown fire.

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23	Wild Earth Guardians	<p>The Forest Service consistently refers to the “physical” status of roads or trails on the landscape, as opposed to the objective maintenance level based on decisions that have undergone a NEPA analysis. It should disclose the objective maintenance level, any decisions that have been subject to NEPA that may differ from those objective maintenance levels, and the proposed maintenance levels of each road under each alternative.</p> <p>The agency states that it considered recommendations from Mt. Hood’s forest-wide travel analysis report, the NEPA status of the road, needs for this project and potential future needs for each road. EA at 33. But it fails to disclose that analysis.</p>	<p>The Engineering Roads Matrix (which details objective maintenance levels for each road), the 2015 Travel Analysis Report, and the 2010 OHV Travel Management FEIS and ROD have been incorporated by reference in the EA and are a part of the project record. Because the physical conditions of many alignments on the ground differs from what might be expected given a particular alignment’s current status (whether it be road or trail), it is necessary to assess and disclose the existing conditions in order to analyze the impacts of all alternatives considered. Table 8 in the EA includes a list of the roads proposed for maintenance level change in this project.</p>
24	Wild Earth Guardians	<p>Several aspects of the Hungry Lion Restoration Management Project appear to be inconsistent with the Flathead Forest Plan, and therefore would constitute a violation of NFMA. For example, the Forest Service proposes logging in late successional reserves (LSR), B10-Deer Winter Range, and B5-Pileated Woodpecker and Pine Marten Habitat Area. It must demonstrate how the proposed actions are consistent with Forest Plan standards for management in these areas.</p>	<p>This project is not applicable under the Flathead Forest Plan. Consistency with Mt. Hood Forest Plan land use allocations is discussed in the EA in Section 1.6. Forest Plan exceptions are also discussed in the EA in Section 1.6.</p>
25	Oregon Wild	<p>We could not find a terrestrial wildlife specialists report on the project website. An email to the project lead went unanswered because they were out on fire duty during the public comment period.</p>	<p>An email from Oregon Wild requesting the wildlife report was received on 9/20/17 at 5:04pm and was responded to on 9/21/17 at 2:29pm. The document was re-uploaded to the Forest’s website, and at 9/21/17 at 2:52pm the document was found to be online and accessible.</p>
26	Oregon Wild	<p>The Preliminary Assessment does not fulfill NEPA’s mandate to carefully consider trade-offs such as logging to protect wildlife and carbon from fires.</p>	<p>Effects to wildlife are discussed in the EA in Section 3.9.3. Effects to air quality and climate change are discussed in the EA in Sections 3.3.3 and 3.15.</p>

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27	Oregon Wild	The Preliminary Assessment failed to consider all reasonable alternatives, such as optimizing the mix of treated and untreated areas by treating a smaller fraction of the landscape, focusing on culturing legacy trees in mature forests, applying an 18” diameter limit, retaining more canopy cover and basal area, avoiding road construction, etc.	Alternatives considered in the EA are discussed in Section 2.5. Also, refer to the responseto comment #7.
28	Oregon Wild	The agency must address opposing viewpoints regarding the manifold values of retaining more canopy to retain cooler temperatures and moisture.	In variable density thinning, selected trees of all sizes, including saplings (i.e., 3-inches or less in diameter), would be removed. The focus would be on leaving the most vigorous, healthiest trees and favoring shade intolerant species. Thinning from below focuses on the removal of the smallest trees first, but must retain some young trees of desired species if stands are to retain a healthy age structure (Perry et al. 2004). Overall, the average stand diameters would be maintained or increased (Lindh and Muir 2004).
29	Oregon Wild	The agency must consider a range of NEPA alternative that protects more than just the “structurally complex older forest” in order to increase the chances that spotted owls and barred owls can co-exist.	The effects of the Proposed Action on northern spotted owls in relation to the barred owls is discussed in the EA in Section 3.9.2.
30	Oregon Wild	The Preliminary Assessment failed to conduct a probabilistic analysis and disclose that spotted owls are more likely to be harmed by logging than by wildfire.	An analysis of the effects of the Proposed Action to spotted owls was conducted using the best available science (EA, Section 3.9.2).
31	Oregon Wild	The agency must avoid portraying the effects of the Proposed Action in uniformly positive terms, while describing the effects of no action in uniformly negative terms. NEPA requires disclosure of the trade-offs among competing uses.	All of the effects from the Proposed Action are outlined in Section 3 of the EA. This includes both positive and negative effects from both the No Action Alternative and the Proposed Action Alternative.
32	Dick Artley	You have no intention of “considering” public comments critical of your timber sale as required by NEPA do you?	This appendix of the EA, Response to Comments, documents the agency’s consideration of all of the comments received as required by NEPA.
33	Dick Artley	It’s clear the IDT has consciously excluded many science documents written by independent scientists from the References Cited section of your pre-decisional EA that describe the likely resource harm that will be inflicted by commercially logging this timber sale.	The effects of this project are discussed in Section 3 of the EA. The EA also includes a list of references.

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#	Commenter	Comment	Response
34	Dick Artley	Ranger Kameron, what are your qualifications that permit you to ignore the conclusions of USDA Office of Inspector General scientists? You must believe you are special. In 2001, the OIG scientists said: “We concluded that commercial timber sales do not meet the criteria for forest restoration.” (Pg. 11)	This citation is from an audit report from the Office of Inspector General on the implementation of the National Fire Plan by the Forest Service in the Western Region. The report goes on to state, “Our survey did not question the use of NFP rehabilitation and restoration program funding to fund the NEPA analysis performed pertaining to the projects in question. Rather, we questioned the Bitterroot National Forest’s plans to use NFP rehabilitation and restoration program funds to fund the cost to prepare and administer these projects when the primary purpose of the projects may be a commercial timber sale. The FS WO NFP Implementation Program Coordinator for Rehabilitation and Restoration needs to review these projects once their primary purpose has been established to ensure they meet NFP selection criteria.” This audit pertained to use of funds for certain aspects of project administration on the Bitterroot National Forest. It is not relevant to the Crystal Clear Restoration project on the Mt. Hood National Forest, or all commercial timber harvest projects in general.
35	Dick Artley	Ranger Kameron, your proposed timber sale is called Crystal Clear Restoration project. The Collins dictionary defines “restore” as “to return something to an original or former condition.” Please 1) identify the “original” or “former” condition you will emulate. 2) describe how the prior condition came about without commercial logging, 3) tell the public the year(s) the prior condition existed, and 4) disclose how you determined the prior condition existed when you say it did.	The purpose and need for the project is located in Section 1.4 of the EA, with the desired future conditions located in section 1.3. The desired future conditions for the stands would be to move them towards a more properly functioning plant community. By moving stands towards the desired future condition, they would become or maintain a multi-storied, uneven-aged stands in the moist mixed-conifer communities. The dry mixed-conifer stands would be moved towards a more open two-storied stands. After treatment, the planning area would become more resilient to perturbations such as insect attack and large scale fire occurrence. The desired future condition of the project areas is a multi-layer canopy with large diameter trees, well-developed understory, more than one age class, and snags and down woody debris, as well as canopy closure and stand species composition reflecting Condition Class 1. While the prior condition was developed without thinning activities, multiple uses, regulations, and continued pressures placed on natural landscapes have created a condition where active management helps develop a more restored condition.

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#	Commenter	Comment	Response
36	Dick Artley	Ranger Kameron, how will exposing the forest’s natural resources to noisy skidders and tractors weighing 17 tons with spinning wheels and tracks create a healthier”, “restored” forest? A forest is infinitely more than trees.	Refer to the response to comment #35. The purpose of the project is described in Section 1.4 of the EA; all the effects of the Proposed Action are discussed in Section 3 of the EA.
37	Dick Artley	Accumulating volume and spending all your NFTM allocation this FY simply isn’t worth the natural resource damage you will inflict. How can you possibly claim the Crystal Clear timber sale is a “restoration project?” This is not a rhetorical question.	Refer to the response to comment #35.
38	Dick Artley	You plan to construct 39 miles of new road as part of the Proposed Action. A report authored by Gerald Coghlan, WO Acting Director of Engineering in 1998 indicates there are 372,956 miles of existing road in our national forests (page 5 of the 1998 report). The agency currently constructs 2,000 miles of system road per year. At this rate there are 409,000 miles now in our national forests. In addition to that, there is at least double this amount of unsurfaced, sediment producing, outsloted, temporary roads that have not been obliterated by “putting them to bed” where the fill is returned to the cut. The average distance to the moon is 384,403 miles. There is enough road in our national forests to go to the moon and 17% of the way back ... and you propose more. Can you comprehend this? Isn’t there enough road?	<p>Authority for the agency to construct or give authorization for the construction and use of temporary roads is given under 16 U.S.C. § 1608 – National Forest Transportation System and further governed under 36 CFR 212.1. Agency policy and direction on the construction and use of temporary roads is given in Forest Service Manual 2432.34 and Forest Service Handbook 2409.18.</p> <p>The project design criteria for roads and log haul included in this project were developed specifically to reduce and/or mitigate the detrimental effects of transportation on other natural resources best management practices for water quality.</p> <p>Decommissioning and rehabilitation of all temporary road alignments is required in all timber sale contracts per contract provision BT6.63 – Temporary Roads (applicable to all timber sale contracts), with site specific treatments defined under CT6.63# - Temporary Roads (specific to each timber sale contract). After use, temporary roads are water barred, culverts removed, decompacted, and roughened as needed with the jaws of a loader or excavator. Also, debris, such as rootwads, slash, logs or boulders, are placed near the entrance and along the first portion of the road. In the case where a temporary road is located along an existing OHV trail, work will be conducted to re-contour and re-develop the trail system.</p> <p>As stated in previous responses, the Forest’s minimum road system is identified in the 2015 Travel Analysis Report, which has been incorporated by reference in the EA.</p>

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#	Commenter	Comment	Response
39	Dick Artley	Don't exclude a "no new road" alternative from analysis in detail by claiming the P&N will not be met. The P&N includes timber harvest but it does not specify a volume that must be produced. The "no new roads" alternative will reduce the volume, but will meet the P&N since some harvest would still occur. This alternative is very important because it eliminates road-construction related natural resource destruction. To reject it by claiming it does not meet the P&N would be a lie.	No new system roads would be constructed for this project. New temporary road construction includes approximately 5.5 miles of the 39 miles proposed for use to implement the project. All project design criteria would be implemented with new temporary roads. See Section 2.5 of the EA for other alternatives considered. See response to comment #38.
40	Dick Artley	Since best science and Dr. Dombek agree that there are "few more irreparable marks we can leave on the land than to build a road", isn't this a valid reason to analyze a "no new road" alternative in detail?	The quoted excerpt is from a Federal Register Notice posted by the Forest Service on March 3, 2002, in which the Forest Service concluded that it needed to review its forest road system policy, one of four emphasis items in the agency's National Resource Agenda. The agency proposed to revise 36 CFR Part 212 to shift the emphasis from transportation development to managing environmentally sound access. See response to comment #38.
41	Dick Artley	The Administrative Procedures Act directs judges to 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. § 706(2)(A). A line-officer who ignores best-science and instead makes a Decision on weak, meager evidence provided by people with financial interest in a sale being sold (i.e. IDT members that represent timber and engineering) is guilty of violating the APA. You will violate the Act if the final EA does not contain an action alternative with no new road work.	See responses to comments #38-40.

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42	Dick Artley	<p>“Restoration means creating and maintaining healthy, resilient forests capable of delivering all the benefits that people get from them—clean air and water, carbon sequestration, habitat for native fish and wildlife, forest products, opportunities for outdoor recreation, and more. When we restore our Nation’s forests, we create jobs in rural communities and benefit the environment at the same time.”</p> <p>For thousands of years healthy forests have contained many unhealthy areas and thankfully were never resilient to the following beneficial disturbance events: insect activity, disease and fire. These undeveloped forests currently deliver clean air and water, carbon sequestration, habitat for native fish and wildlife, opportunities for outdoor recreation, and more. Best science teaches us that in most cases logging that removes the trees will muddy the water and harm fish habitat, contribute to climate change, destroy wildlife habitat where the trees are removed, and destroy the scenery so loved by recreationists. It’s time the USFS stops deceiving the public hoping they will think logging is ecosystem friendly. Analyze a no road construction (including temp roads) action (emphasis added) alternative in detail and assure the environmental effects disclosures are accurate.</p>	<p>Authority for the agency to construct or give authorization for the construction and use of temporary roads is given under 16 U.S.C. § 1608 – National Forest Transportation System and further governed under 36 CFR 212.1. Agency policy and direction on the construction and use of temporary roads is given in Forest Service Manual 2432.34 and Forest Service Handbook 2409.18.</p> <p>The project design criteria for roads and log haul included in this project were developed specifically to reduce and/or mitigate the detrimental effects of transportation on other natural resources best management practices for water quality.</p> <p>Decommissioning and rehabilitation of all temporary road alignments is required in all timber sale contracts per contract provision BT6.63 – Temporary Roads (applicable to all timber sale contracts), with site specific treatments defined under CT6.63# - Temporary Roads (specific to each timber sale contract). After use, temporary roads are water barred, culverts removed, decompacted, and roughened as needed with the jaws of a loader or excavator. Also, debris, such as rootwads, slash, logs or boulders, are placed near the entrance and along the first portion of the road. In the case where a temporary road is located along an existing OHV trail, work will be conducted to re-contour and re-develop the trail system.</p> <p>As stated in previous responses, the Forest’s minimum road system is identified in the 2015 Travel Analysis Report, which has been incorporated by reference in the EA.</p> <p>See responses to comments #38-40.</p>
43	Dick Artley	<p>Ranger Kameron, you propose to construct new roads in the forest to give you the opportunity to log the forest knowing both activities cause unacceptable natural resource damage. Research conclusions made by over 100 independent Ph.D. scientists constitute “best science” which Chief Tidwell tells the public drives USFS projects.</p>	<p>See responses to comments #38-42.</p>

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#	Commenter	Comment	Response
44	Dick Artley	In the 1999 GAO report titled Western National Forests: A Cohesive Strategy is Needed to Address Catastrophic Wildfire Threats they state: “past commercial logging, road-building, livestock grazing and aggressive firefighting are the sources for “forest health” problems such as increased insect infestations, disease outbreaks, and severe wildfires.” Ranger Kameron, please tell the public why you reject the opinion and conclusions of GAO experts and instead rely on a few USFS interdisciplinary team members who are financially motivated to sell timber. Their proposal to commercially log what you refer to as “hazardous fuels” to reduce fire intensity and rate of spread is the antithesis of what “best science” recommends.	The purpose and need of the project is located in Section 1.4 of the EA. The referred report discusses (1) the extent and seriousness of forest-health-related problems on national forests of the interior West; (2) the status of efforts by the Forest Service to address the most serious of these problems; and (3) barriers to successfully addressing these problems and options for overcoming them. The report is consistent with the purpose and need of this project and recommends that the agency reduce fuels and maintain fuel at acceptable levels across the interior West (p. 49).
45	Dick Artley	Ranger Kameron, your actions show you are either 1) uncontrollable and clinically obsessed by the need to accumulate volume, or 2) happy to ignore and reject the statements by USFS Associate Chief Sally Collins describing the new forest service.	The project’s proposed activities are designed to be in compliance with the Mt. Hood Forest Plan, as amended, all other applicable laws, regulations and policies applicable to this specific project.
46	Dick Artley	You reject the research conclusions of 241 Ph.D. scientists quoted in Opposing Views Attachment #1 who demonstrate how logging-related harm (and in a few cases destruction) is inflicted on multiple natural resources in and near the sale area. Incredibly, you rely on the advice of 3 or 4 timber employees financially motivated to sell timber. You know the log for community stability P&N statement appears in at least 80% of all timber sale NEPA documents.	Project planning is guided by the management direction set forth in the Mt. Hood Forest Plan, as well as the Northwest Forest Plan. The positive and negative effects are discussed in Section 3 of the EA.
47	Dick Artley	Pretending to pass a project through the NEPA process with only 1 action alternative (the Proposed Action) makes a mockery of the National Environmental Policy Act. A “do it” or “don’t do it” NEPA analysis is not a NEPA analysis but a justification of the Proposed Action	Alternatives considered are discussed in Section 2.5 of the EA.

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#	Commenter	Comment	Response
48	Dick Artley	The vast majority of the scoping comments submitted by the public are critical of the project and suggest changes in the Proposed Action. Therefore to comply with NEPA you must analyze another action alternative that is more ecosystem friendly and has much less adverse natural resource impact than the Proposed Action.	In addition to the Proposed Action, a no action alternative was analyzed in detail and four other alternatives were considered (EA, Section 2.5). These additional alternatives were developed in response to the comments received during scoping and the comment period. The Proposed Action was also modified based on public comment.
49	Dick Artley	Ranger Kameron, are your qualifications comparable to Dr. Freeman who works for the Shipley Group? They must be for you to ignore Dr. Freeman’s advice that “A single action alternative is a risky agency choice, especially if you determine that your EA or EIS is likely to be a high-risk and controversial document.	A discussion of alternatives considered is included under Section 2.5 of the EA.
50	Dick Artley	Ranger Kameron, what is your reason for concluding your Proposed Action cover the “full spectrum of alternatives?”	See response to comment #49.
51	Dick Artley	Analyze at least 1 additional action alternative in detail ... preferably an alternative suggested by the public as part of their scoping comments.	See response to comment #49.
52	Dick Artley	My scoping comments specifically asked you to analyze at least 2 action alternatives.	See response to comment #49.
53	Dick Artley	There is absolutely no reason to keep information from the public by hiding important documents in the project file. You could scan information and post the PDF files online. All information on file can be made available to the public as attachments. Especially relevant documents should be included in their entirety in an Appendix. Clearly, you do not want the public to see the information in the Project File.	In addition to the EA, all specialist reports were also provided on the Forest’s website. Links to many of the supporting information is included in the specialist reports, and all comments and requests from the public for specific information has been made available on the project website at https://www.fs.usda.gov/project/?project=50582 .

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#	Commenter	Comment	Response
54	Dick Artley	As you can see above, 40 CFR 1502.9(b) requires meaningful responses to all “responsible” opposing views. If the Responsible Official feels the opposing view is irresponsible then please describe why. The law does not exclude opposing views because of the source. Opposing views contained in newspapers, magazines, and other sources are still opposing views and require a response. Please do not conclude an opposing view is not responsible because they are opinions. “Viewpoint” and “opinion” are synonyms	This appendix of the EA, Response to Comments, documents the agency’s consideration of all of the comments received as required by NEPA.
55	Rocky Mountain Elk Foundation	RMEF strongly supports the active forest management proposed in the Crystal Clear Restoration Project	Comment noted.
56	Rebecca Lexa	I am also in favor of any studies on the impact of these activities on wildlife, soil health, and the overall ecosystem.	Comment noted. The effects from this action are outlined in Section 3.9 for effects to wildlife and 3.5 for effects to soils.
57	Art Carroll	I support these more grand scale efforts which will promote forest health and sustainability yet integrate strategies to reduce adverse impacts of wildfire	Comment noted.
58	Bark	The FS should be quantifying climate change emissions from its projects, and taking the analysis a step further to examine the carbon tradeoffs, including carbon emitted from the project and the loss of future carbon sequestration because of the project.	The Proposed Action would result in some carbon emissions and some carbon sequestration. Climate change occurs on a global scale. Section 3.15 in the EA describes that "the Proposed Action's contribution to the cumulative effects on global greenhouse gases and climate change would be negligible."
59	Bark, Jeremiah Jenkins	The CCTS EA includes a page and a half on climate change. Complete a full review of this project’s relationship to climate change in our region, and pursue an alternative that limits greenhouse gas emissions and promotes carbon storage.	Section 3.15 in the EA summarizes that the proposed action would result in some carbon emissions and some carbon sequestration. The benefits to forest health and resiliency with the Proposed Action would likely allow stands to be resilient to natural disturbances.

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#	Commenter	Comment	Response
60	Wild Earth Guardians	The Forest Service must consider how the proposed actions may reduce the extent to which the forest in the project area is able to act as a carbon sink.	The proposed action is meeting the purpose and need by ensuring forest resiliency against stand-replacing fire events through the proposed thinning and fuels reduction activities. Section 3.15 of the EA references “Actions aimed at enhancing forest resilience to climate change by reducing the potential for large-scale, catastrophic disturbances such as wildfire also prevents release of GHG and enhances carbon stocks (Smith et al. 2014)”. By improving forest conditions, the proposed action would ensure carbon storage into the future.
61	Wild Earth Guardians	The Forest Service must analyze in detail the impact of climate change on forest roads and forest resources. It should start with a vulnerability assessment, to determine the project area’s exposure and sensitive to climate change, as well as its adaptive capacity.	Section 3.15 describes that the Proposed Action would have a positive impact to carbon sequestration by improving forest conditions and the capacity to grow trees. Additionally, “The release of carbon associated with this project is justified given the overall change in condition increases forest resistance to release of much greater quantities of carbon from wildfire, drought, insects/disease, or a combination of these disturbance types (Millar et al. 2007).”
62	Wild Earth Guardians	The agency should also consider the cumulative impacts likely to result from the proposed project, proposed road activities, and climate change.	As described in the climate change analysis in Section 3.15 of the EA, climate change occurs on a global scale. Since the direct and indirect effects would be negligible at this scale, the Proposed Action’s contribution to cumulative effects on global greenhouse gasses and climate change would also be negligible.
63	Oregon Wild	Forests play a significant role in the global carbon cycle, and the FS needs to revise its LRMP to focus on maintaining and increasing carbon storage to help mitigate this global crisis. Logging will accelerate the transfer of carbon from the forest to the atmosphere and exacerbate global climate change.	Climate change Section 3.15 in the EA described that in the longer-term, the forest conditions and enhanced resiliency of the forest stands within the project area would improve thereby ensuring carbon sequestration into the future.
64	Oregon Wild	The NEPA analysis must avoid minimizing this project’s contribution to carbon emissions and global warming by saying the effects of this project would be negligible on a global scale.	When measuring greenhouse gases of the earth by the gigatonne (as described in Section 3.15 of the EA), the (approximately 1 million acre) Mt. Hood National Forest would have an infinitesimal contribution to the impacts of greenhouse gasses in the earth’s atmosphere, or forest storage. Therefore, the measures would be negligible at the approximate project area scale or site-specific treatment unit scale.

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#	Commenter	Comment	Response
65	Oregon Wild	The NEPA analysis should start with an accurate and up-to-date inventory of carbon storage and carbon flows on federal lands in the project area. This is required by both the National Forest Management Act (16 USC §1601(a 1) & (2)) and the Federal Land Policy & Management Act (43 USC §1711(A)).	Global measures are cited from as recent as 2010-2015 (as described in the Climate Change section of the EA, 3.15) utilizing the best available science.
66	Oregon Wild	Disclose the Social Cost of Carbon Dioxide as a proxy for the impacts of GHG emissions.	The influence of timber management projects on carbon sequestration is discussed in Section 3.15 of the EA
67	Cascadia Wildlands	Forest Service should disclose the social cost of carbon dioxide emissions.	Comment noted.
68	Lola Goldberg, Devyn Riley	Complete a full review of this project's relationship to climate change in our region, and pursue an alternative that limits greenhouse gas emissions and promotes carbon storage.	The Climate Change Section 3.15 of the EA described that climate change is a global phenomenon. Since it is a global phenomenon, the analysis considers the Proposed Action's effects to climate change in that scale.
69	Bark	Please list all roads in the CCTS project area that have existing NEPA decisions to close or convert to trails.	Proposed road treatments and status changes are listed in the EA under the effects analysis for the transportation in section 3.4.3. Proposed road treatments and status changes are described in further detail in the Transportation Report which is part of the project file.
70	Wild Earth Guardians	The Forest Service proposes to convert 1.6 miles of forest service road to motorized mixed use. EA at 45. Any decision to designate motorized use requires an assessment of whether those decisions satisfy the minimization criteria and other relevant legal requirements.	Mixed use with public traffic is not expected to occur on this road (2110-240). This road will exist in the future as a 'Road Maintained as a Trail' maintenance level 2 with public traffic prohibited. Commercial use may be granted access via contract or Special Use Permit, in which case the road will be temporarily closed to recreational use during commercial operations. Administrative use may occur sporadically and on an intermittent basis at very low volumes and at low speeds. During periods of administrative use advance notice will be given and warning signs will be posted. This is described in the Proposed Road Status Changes table found in the Proposed Action effects analysis of the Transportation section of the EA (3.4.3).

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#	Commenter	Comment	Response
71	Dick Artley	The pre-decisional EA mentions nothing about the need to secure NPDES permits for the roads planned to be constructed for this timber sale.	No new system roads would be constructed for this project. The EA describes the road treatments as part of the proposed action in Section 2.2.3. The Proposed Action would decommission approximately 0.3 miles of NFS road, close approximately 5.43 miles of NFS road, and convert 1.6 miles to motorized mixed use All PDCs would be implemented with new temporary roads. See Section 2.5 of the EA for more information on alternatives considered but not fully developed for additional information about a “no temporary road” alternative.
72	Bark	Please list all roads in the CCTS project area that have existing NEPA decisions to close or convert to trails.	Proposed road treatments and status changes are listed in the EA under the effects analysis for Transportation in section 3.4.3. The proposed road treatments and status changes are described in further detail in the Transportation Report which is incorporated by reference and part of the project file.

#	Commenter	Comment	Response
73	Bark, Carla, and Hanson	<p>Between operating seasons and at the conclusion of the contract, include seasonal erosion control measures such as waterbar placement, and diversion ditch creation:</p> <ul style="list-style-type: none"> · Between operating seasons and at the conclusion of the contract, include piling slash on the first few hundred feet of temporary road or skid trail, and placing boulders at the entrance to units from main road; · Incorporate skips to help obstruct unauthorized OHV use in thinned units. Leave a thick, “vegetated screen” along roads in areas where OHV use is expected based on past and current use. If there are areas within the units in question that would benefit ecologically from skips (such as seeps or other riparian areas), do not remove these in exchange for the vegetated screens, but look to achieve both the visual and ecological goals of the skips in these units; · Provide adequate Sale Administration staffing for workload, so that coverage is available when the assigned Sale Administrator is not working; · Require the Sale Administrator to discuss all requirements with contractor at pre-work meeting, review all pre-work discussions with contract representatives on site, and reemphasize as unit completion is eminent; · Require inspection by Sale Administrator before contractor’s equipment is moved offsite; · Require implementation and effectiveness monitoring of PDCs by both Sale Administrator and other specialists, including during the harvest activities; · After project implementation and before conclusion of the contract, fully implement and monitor effectiveness of the aforementioned activities in order to impede further damage from unauthorized motorized access to units after thinning has taken place. 	<p>Project design criteria, including seasonal and final measures, are included in Section 2.3 of the EA. A regular timber sale contract, by default, includes B provisions that are applicable to all timber sales as well as C provisions which can be developed to be specific to each timber sale contract and will include measures developed and included in Section 2.3 of the EA as PDCs.</p>

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#	Commenter	Comment	Response
74	Wild Earth Guardians	The agency must consider the effects of its proposal to use or reconstruct temporary roads when combined with the effects of its minimum road system.	The Forest's minimum road system is identified in the TAR, which has been incorporated by reference (EA Section 3.4.1). It is available to the public online, at all four Ranger District Offices, and the Forest Supervisor's Office. The rationale for using decommissioned and old temporary alignments as temporary roads for this project is discussed in the EA, and are utilized to minimize cumulative impacts to the landscape. Effects analysis of the road treatments are discussed in several sections of the EA including Transportation Section 3.4, Water Quality Section 3.6, Best Management Practices 3.6.5, Aquatic Conservation Strategy 3.7, Wildlife 3.9.3, Recreation, 3.12.3, and Visual Quality 3.13.
75	Wild Earth Guardians	The Forest Service should ensure that the temporary roads will in fact be temporary by committing to decommission all temporary roads within 10 years following completion of this project, and identify monitoring and enforcement to confirm that commitment.	Decommissioning and rehabilitation of all temporary road alignments utilized for this project is part of the project design criteria for multiple resource objectives as described in section 2.3 of the EA. Decommissioning and rehabilitation of all temporary road alignments utilized for this project is required in all timber sale contracts per contract provision BT6.63 - Temporary Roads (applicable to all timber sale contracts), with site specific treatments defined under CT6.63# - Temporary Roads (specific to each timber sale contract).
76	Dick Artley	Does your supervisor know you do not construct temporary roads that are really temporary. You tell the public you will decommission your temporary roads after use. Your decommissioning still leaves the running surface in place. You lie to the public by calling these roads "temporary" because you plan to use them again, and again, and again etc.	Decommissioning and rehabilitation of all temporary road alignments utilized for this project is part of the project design criteria for multiple resource objectives as described in Section 2.3 of the EA. Decommissioning and rehabilitation of all temporary road alignments utilized for this project is required in all timber sale contracts per contract provision BT6.63 - Temporary Roads (applicable to all timber sale contracts), with site specific treatments defined under CT6.63# - Temporary Roads (specific to each timber sale contract).
77	American Forest Resource Council	AFRC supports the condition that log haul, rock haul, and transport of heavy equipment may be allowed during the wet season on paved or aggregate Forest System Roads if approved by the District Ranger. Purchasers are going to need extended operation time to get the volumes removed and having the flexibility to haul during the winter months will provide some of this flexibility.	Road use restrictions will be implemented as described in Section 2.3.4 of the EA that describe the project design criteria for log haul.

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#	Commenter	Comment	Response
78	Bark	Reopening routes which that are currently intentionally closed to OHVs can also reopen the door for illegal and damaging activities if the roads are left open for an extended period of time.	Closure of routes would be closely coordinated with recreation and engineering to ensure that routes are quickly closed once operations cease, to ensure that they are not reestablished. PDC have also been included and are listed in Section 2.3.11 of the EA that address barriers to discourage OHV access off trails.
79	Bark	Some road closure and trail rehabilitation projects completed recently within the Clackamas River Ranger District's Goat Mountain project area have been effective in reducing unauthorized target shooting, OHV use, and garbage dumping and encourage the FS to employ these types of strategies within the CCTS project.	The Mt. Hood National Forest utilizes a full suite of road treatment tools to address access and use issues on a case-by-case basis. Decisions made with regard to road status changes are site specific and give consideration to on-the-ground conditions and multiple use objectives as appropriate for each road. Sections 2.3, 3.4, and 3.12, describe how road closure and trail rehabilitation work would be completed with the intention of discouraging unauthorized uses on NFS Lands and improving trail sustainability while decreasing heavy maintenance needs in the long term.
80	Bark	Enforce effective barricades on roads built or rebuilt for this project when operations are not occurring. This includes time when the area is still under contract but outside the normal operating season.	Barricades would be used to ensure that unauthorized use was precluded from the project area when operations cease but roads are not yet removed. Public access and temporary traffic control during road reconstruction work on Forest System Roads is enforced by contract specification Section 156 - Public Traffic (reference Standard Specifications for Construction of Roads and Bridges on Federal Highway Project; FP-14). 'Public Access' vs. 'Purchaser Use Only' on Forest System Roads, along with requirement for Purchaser to provide temporary traffic control during operations is covered and enforceable by contract provision CT5.12# - Use of Roads by Purchaser, which is specific to each timber sale contract. Purchaser requirement to winterize and close temporary roads outside of the designated operating season is covered under standard contract provision BT6.66 - Current Operating Areas, applicable to all timber sale contracts. The PDC listed in Section 2.3.11 of the EA describe barriers to access on roads where such use should not occur, as well as 3.12.3 in the effects analysis to recreation resources.

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#	Commenter	Comment	Response
81	Bark	The CCTS project area is a popular destination for Off Highway Vehicle (OHV) use, which sometimes results in unauthorized trail creation and illegal use of closed roads. Help reduce OHV impacts on the forest by limiting road construction and thoroughly closing all temporary routes used for logging after the project is complete.	The Mt. Hood National Forest utilizes a full suite of road treatment tools to address access and use issues on a case-by-case basis. Decommissioning and rehabilitation of all temporary road alignments is required in all timber sale contracts per contract provision BT6.63 - Temporary Roads with site-specific treatments defined under CT6.63# - Temporary Roads. The PDC listed in Section 2.3.11 of the EA describe barriers to access on roads where such use should not occur, as well as 3.12.3 in the effects analysis to recreation resources.
82	Lola Goldberg, Devyn Riley	Reduce OHV impacts on the forest by limiting road construction and thoroughly closing all temporary routes used for logging after the project is complete.	The Mt. Hood National Forest utilizes a full suite of road treatment tools to address access and use issues on a case-by-case basis. Decommissioning and rehabilitation of all temporary road alignments is required in all timber sale contracts per contract provision BT6.63 - Temporary Roads with site specific treatments defined under CT6.63# - Temporary Roads. The PDC listed in section 2.3.11 of the EA describe barriers to access on roads where such use should not occur, as well as 3.12.3 in the effects analysis to recreation resources.
83	Bark	Provide a credible economic analysis of the project for public consideration.	An economic review has been completed for the project and included in Section 3.1.3 of the EA.
84	Dick Artley	Please describe why Dr. Power’s research (“The relatively high unemployment rates in many of the eastern Washington counties adjacent to National Forests cannot be attributed to the decline in federal harvests. Those counties had even higher unemployment rates at the time of peak harvests in the late 1980s”) does not apply to the Mt. Hood National Forest.	The economic review, and projection of employment rates from timber sale activities is derived from the data in the FSEIS of the NWFP as described in the economic review section in Section 3 of the EA.
85	Cascadia Wildlands, Reed Wilson	An economic analysis of our varied recommended alternatives would be beneficial in an EIS, especially one that considers recreation impacts, impacts of increased timber supply to an already saturated timber market, and community impacts.	An economic review has been completed for the project and included in Section 3.1.3 of the EA. Recreation resource effects analysis is in Section 3.12.3.
86	Boise Cascade	Please analyze the economic effects of this project on the local community	Refer to the response to comment #83.
87	Boise Cascade	How will this project contribute to both the employment and the county budgets for schools and roads?	Refer to the response to comment #83.

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#	Commenter	Comment	Response
88	American Forest Resource Council	AFRC is very disappointed that the Environmental Assessment (EA) does not provide an analysis of the many economic and social benefits this project will create.	Refer to the response to comment #83.
89	Dick Artley	Ranger Kameron, after reading your pre-decisional EA its clear you reject the following scientific advice. Please assure the Chapter 3 effects disclosures for fisheries and aquatic habitat in your final EA explain why Dr. Ehrlich's, Dr. Foster's and Dr. Raven's conclusions below do not apply to the Mt. Hood National Forest.	Impacts to fisheries and their aquatic habitat identified in the Crystal Clear Restoration Environmental Assessment (EA) were analyzed in section(s) 2.3, 3.6, 3.7, 3.8, and 3.18. The reference of Dr. Ehrlich's, Dr. Foster's and Dr. Raven's 2002 "Scientists Seek Logging Ban on U.S.-Owned Land" is outside the scope of this EA.
90	Cascadia Wildlands	The Forest Service fails to adequately consider the impacts of road construction. The analysis does not properly analyze impacts to water quality and fish, especially as it is related to haul.	The Proposed Action does not include new road construction. Road work associated with impacts to fisheries and their aquatic habitat identified in the Crystal Clear Restoration Environmental Assessment were analyzed in section(s) 2.3, 3.6, 3.7, 3.8.
91	Bark, Jeremiah Jenkins	"The majority of National Forest System lands have been mapped as Fire Regime Condition Class 2 or 3, thereby indicating they have missed one or more natural fire events." EA at 18. As this seems to be a general statement about the entire National Forest System it is misleading in the context of this specific location, as elsewhere the EA acknowledges that in the CCTS project area, 95% of the "moist fuel treatment" and 97% of the "moist forest health treatment" is in Condition Class 1. EA at 104.	Fire Regime Condition Class within the project area is described and shown a measure of departure from historical conditions, by treatment type under the Existing Conditions Section of the Fuels section of the EA, 3.2.2.
92	Bark	The Wasco County Community Wildfire Protection Plan (WCCWPP) does not suggest actions for the project area.	Comment noted.
93	Bark	The EA mentions an interview with Jane Kurtis where she stated FRCC for sites at mid to higher elevations is likely higher since this analysis has taken place. Please provide more information, such as who is Jane Kurtis? What does she know about the FRCC in this area? Why would it be higher in the 10 years since the FRCC was mapped? Especially for the mid & high elevation areas that have the longest fire return interval?	This statement has been removed from the EA and from the Fuels Report.

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#	Commenter	Comment	Response
94	Bark	Only 15% of the project area has “low severity” as its natural fire regime. Most of the project area is not outside its historic fire regime interval. Most of the project area burns with mixed severity fires, with equal parts high & low severity.	A natural fire regime is the general classification based on the role fire would play across a landscape in the absence of modern human mechanical intervention. Therefore, the identification process for fire regimes incorporates the historical role of fire rather than changing the regime over time. Section 3.2.2 of the EA describes Fire Regime Condition Class.
95	Bark	With this in mind, do modern fire regimes in the project area differ greatly from historic fire regimes? What was the temporal variability of the fire regime over multi-century reference periods? What are the ecological benefits of mixed severity fires in the project area?	A natural fire regime is the general classification based on the role fire would play across a landscape in the absence of modern human mechanical intervention. Therefore, the identification process for fire regimes incorporates the historical role of fire rather than changing the regime over time. Section 3.2.2 of the EA describes Fire Regime Condition Class.
96	Bark	Most fuel reduction projects have little to no influence on fire severity because the probability that a fire will encounter a project in the time frame when fuel reductions are presumed to work is extremely small.	The proposed fuels reduction activities attempt to reduce the intensity of fire which impacts flame length and rate of spread. When fire intensity is low, there is more opportunity for successful direct attack methods by firefighters (EA Section 3.2.3).
97	Bark, Reed Wilson	The primary approach to fire management and adapt to greater fire frequency and severity through: 1) recognizing that fuels reduction cannot alter regional wildfire trends, 2) targeting fuels reduction specifically around residential communities, 3) actively managing more natural and prescribed fires for a range of severities, and 4) planning residential areas to withstand inevitable wildfires	The Proposed Action (EA Section 2.2) includes activities within the project area such as thinning to provide forest products, improve stand health conditions and resilience through fuels treatments, while also addressing wildfire concerns near the Juniper Flats WUI.
98	Bark	Opening closed roads, and building news ones, increases risk of fire ignition, Any final decision should mitigate potential fire risks associated with future development by limiting construction of new roads, and reopening of decommissioned or closed roads.	Opening of decommissioned or closed roads would be temporary. While these roads are open, there may be an increase in human-caused ignitions. The Roads PDC (EA Section 2.3.3) describe that temporary roads for project use would be closed to the public and appropriately signed. The Recreation PDC (EA Section 2.3.11) further describes that closures would be implemented where appropriate, and that roads and trails used for operations would be rehabilitated to meet standards associated with use.
99	Bark	The beneficial impacts of fire, compared to the adverse impacts of logging, were not discussed in the EA.	In some areas, thinning is needed to reduce existing fuel loads in an area in order to necessitate an underburn fuel treatment (EA Section 2.2.1).

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#	Commenter	Comment	Response
100	Bark, Reed Wilson, Gradey Proctor, Daniel Kaufman, Rachelle Dixon, Patch Perryman	Much of the CCTS project area is in Fire Regime Condition Class 1 (FRCC 1), which is described as areas within the natural range of variability of vegetation characteristics including fuel composition, fire frequency, severity and pattern, and other associated disturbances. Analyze an alternative that would remove all units proposed for logging within FRCC 1, which are healthy forest stands in no need of logging.	A natural fire regime is the general classification based on the role fire would play across a landscape in the absence of modern human mechanical intervention. Therefore, the identification process for fire regimes incorporates the historical role of fire rather than changing the regime over time. Section 3.2.2 of the EA describes Fire Regime Condition Class.
101	Wild Earth Guardians	The Forest Service states that the three roads proposed for closure will, inter alia, reduce the risk of human-caused wildfires. EA at 45. The agency must provide a basis for this conclusion, which is not supported by and may even run contrary to existing science.	Section 3.2 of the EA analyzes the effects of the Proposed Action on fuels and fire. Fuels is defined as the accumulation and distribution of burnable vegetation within the project area including but not limited to live and dead standing trees, brush, and down woody debris.
102	Oregon Wild	Fuels should be piled at least 50 feet from streams including ephemeral channels.	The PDC in Section 2.3.2 define how piles would be managed. Piles would not be placed in "the bottom of ephemeral channels, or within perennial or intermittent stream protection buffers."
103	Oregon Wild	Preparing for fire can often be done best by doing non-commercial pre-treatment followed by prescribed fire at the appropriate time, when the weather and fuels are relatively cool and moist. Fire is preferable because it has a lighter ecological footprint on soil, water, and large wood habitat.	Proposed fuels treatments as described in Sections 2.2.2 and 3.2.1 of the EA include treating brush and underburning. These are examples of non-commercial treatment.
104	Dick Artley	Ranger Kameron, one of your fellow USFS employees' research conclusions indicates fine fuels removal is far superior to commercial hazardous fuels logging farther away from the WUI than 100 yards, yet your draft EA doesn't mention Dr. Cohen's research conclusions. Dr. Cohen states several times in the many scientific papers he authored that commercial fuels removal farther than "100 to 200" feet from the WUI in ineffective. Why then do you propose widespread fuels logging?	The Purpose and Need includes fuels reduction as an activity that would provide forest products and would keep fires from leaving the NFS lands onto neighboring lands, as well as improving safety/reducing risk for fire suppression personnel. The Proposed Action's effects to fuels as described in section 3.2.1 of the EA was analyzed across the project area (which includes the WUI and other non-WUI stands) in relation to the landscape scale.

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#	Commenter	Comment	Response
105	Dick Artley	My scoping comments specifically requested you to apply Dr. Cohen’s fine fuels removal methods. I was ignored.	Fuels reduction treatment methods would generally be completed mechanically or by hand to meet resource objectives. The computer programs and modeling systems that were utilized for fuels analysis include common stand exams (CSE), Forest Service Vegetation (FSVeg) module, Forest Vegetation Simulator (FVS) east cascade variant, the Fire and Fuels extension for FVS (FFE-FVS), Fire Family Plus, FlamMap, ArcFuels, and Real Statistics Resource Pack. Additionally, the following is cited multiple times in the proposed action effects analysis of the Fuels Report: "Reinhardt, Elizabeth D, Keane, Robert E., Calkin, David E., Cohen, Jack D., 2008, Objectives and considerations for wildland fuel treatments in forested ecosystems of the interior western United States. Forest Ecology and Management, 256, pp. 1997-2006." (EA Section 3.2.1, references list, and Fuels Report).
106	Dick Artley	Dr. Cohen (a USFS employee) is an expert in fire behavior. In his paper Objectives and Considerations for Wildland Fuel Treatment in Forested Ecosystems of the Interior Western United States he states: “Treating fuels to reduce fire occurrence, fire size, or amount of burned area is ultimately both futile and counter-productive.” Ranger Kameron, please tell the public why you reject the opinion and conclusions of a fire physicist employed by the USFS who spent his entire career developing ways to reduce fire damage to homes in the WUI and instead rely on a few USFS interdisciplinary team members who are financially motivated to sell timber. Their proposal to commercially log what you refer to as “hazardous fuels” to reduce fire intensity and rate of spread is the antithesis of what “best science” recommends.	Commenter refers to a paper by Reinhardt and others (2008), Dr. Cohen was a co-author. Within the paper it is also stated, "Although general wildfire control efforts may not benefit from fuel treatments during extreme fire behavior, fuel modifications can significantly change outcome of a wildfire within a treatment area." This statement is specific to WUI of which the eastern portions of the CCR project are identified as WUI in the Wasco County CWPP. Additionally, the following is cited multiple times in the Proposed Action effects analysis of the Fuels Report: "Reinhardt, Elizabeth D, Keane, Robert E., Calkin, David E., Cohen, Jack D., 2008, Objectives and considerations for wildland fuel treatments in forested ecosystems of the interior western United States. Forest Ecology and Management, 256, pp. 1997-2006."
107	Boise Cascade	(Based on experience of backlogged application of prescribed fire) The Forest Service should look at alternatives to fire such as mastication.	Mastication (mechanical fuels reduction treatments) is included in the summary of the Proposed Action and may be used in some units where it is appropriate for the project and for resource goals and objectives. This kind of fuels treatment method is discussed in Sections 1.5, 2.2.2, and 3.2.3 of the EA.

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#	Commenter	Comment	Response
108	American Forest Resource Council	AFRC strongly encourages the Forest to enter into the riparian areas to remove some of the fuel loading and cover.	While igniting prescribed fire within Riparian Reserves would not occur under this proposed action, Section 2.3.2 of the EA describes that a low severity burn may burn into riparian reserves which would result in a mosaic burn fuel reduction pattern in these areas.
109	Lloyd Johnston, James Mickel, Bradley Lyons, Chris Richard, Jacob Alexander, Steve Courtney, Brad Prater, Jason Martin, Jay Sandmann, John Paul Anderson, Diana Partin, Ron Schneider, Rob Freres, Austin Woodward, John Fullerton, Ann Walker, Kaden Titus, Jordan Lanman, Dale Phelps, Jesse Lene	Recent fire underscores the need to reduce fuel loading and protect nearby communities.	The analysis in Section 3.2.3 summarizes that this project would result in incremental positive outcomes that continue to minimize the likelihood for stand replacing fires in the project area and result in a trend of improving conditions. Other land owners and community members must also treat fuels on their lands and around structures to prevent damage or loss.

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#	Commenter	Comment	Response
110	Dick Artley	Dr. Art Partridge is an expert in fire behavior. In his testimony to the US Senate he stated: “The current focus on ‘fuels’ is, in itself, misguided because almost anything in a forest will burn, given the right conditions.” Ranger Kameron, please tell the public why you reject the opinion and conclusions of experts and instead rely on a few USFS interdisciplinary team members who are financially motivated to sell timber. Their proposal to commercially log what you refer to as “hazardous fuels” to reduce fire intensity and rate of spread is the antithesis of what “best science” recommends.	Section 1.4 of the EA describes the purpose of the Crystal Clear Restoration Project is to provide forest products where there is an opportunity to restore resiliency to forested areas and reduce the risk of uncharacteristic wildfire behavior. The need for action in this project area, consistent with Forest Plan direction, is to promote the overall sustainability of vegetative systems. Sustainability would be enhanced by increasing the resiliency of the area to withstand severe, uncharacteristic fires, or widespread occurrence of mortality from insects and disease. As described in the fuels analysis, Section 3.2 of the EA, this includes providing for the ability of fire suppression personnel to actively engage a fire safely in high consequence infrastructure areas and the WUI, as well as reducing the impacts of human-caused fires spreading to or from public access areas and adjacent landowners. "Fuel treatments may be effective at reducing fire behavior and severity, especially under moderate burning conditions, but this does not guarantee a similar reduction in fire size and occurrence" (Reinhardt et al. 2008). From a landscape perspective, the goals of a fuels treatment should not be to reduce spread rate, but reduce burn severity (Reinhardt, et al, 2008, 2.4).
111	Rachel Freifelder, Rebecca Lexa, Wendy Marshall,	It is further well known that clear cutting, or the “heavy thinning” that is typical of the “fuels reduction treatment” creates sites that are much more fire prone.	In variable density thinning, selected trees of all sizes down to saplings (i.e., 3-inches or less in diameter) would be removed. The focus would be on leaving the most vigorous, healthiest trees and favoring shade-intolerant species. Thinning from below focuses removal of the smallest trees first, but must retain some young trees of desired species if stands are to retain a healthy age structure. (Perry et al. 2004). Overall, the average stand diameters would be maintained or increased (Lindh and Muir 2004). An analysis of the proposed action shows that the proposed VDT and fuel treatments would likely reduce flame lengths, fire line intensity, rate of spread, crown bulk density and crown fire potential. Refer to Sections 3.1.3 and 3.2.3 of the EA.
112	Dave Corkran	Get rid of timber targets. You cut trees based upon where and when you think cutting trees will help you manage a future fire.	This is beyond the scope of this analysis and project. The desired condition of the planning area is defined by the Mt. Hood National Forest Land and Resource Management Plan (USDA Forest Service, 1990), as amended, the White River Watershed Analysis (USDA Forest Service, 1995), and the White River Late-Successional Reserve Assessment (USDA Forest Service, 1996).

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#	Commenter	Comment	Response
113	Wendy Marshall	Remove tinder-dry under layer to help control some of the fires we've been dodging here lately, but leaving the larger trees to reproduce and shelter.	The Proposed Action as described in Section 2.2.2 of the EA includes variable density thinning from below which includes removal of the under first along with fuels treatments that treat the existing understory build of fuels.
114	Wild Earth Guardians, John Harris Knight	The Forest Service improperly concludes, without a basis for its assumption, that road closures will reduce impacts to water quality. See, e.g., EA at 34. It improperly relies on road closures as a proxy for road decommissioning. Closing roads—rather than decommissioning—is inconsistent with Forest Service policy, under which the agency is supposed to prioritize unneeded roads for decommissioning or other uses.	Section 3.6.2. Existing Condition, Stream Channel Condition and Sediment includes closed road miles as part of the road density to be evaluated for water quality impacts. In addition, Section 3.6.3. Effects Analysis, assess road densities resulting from the proposed action for both open and closed roads, only decommissioned roads are excluded because they are considered to no longer effect water quality. This section also discusses the roads that were planned to be decommissioned, but were changed by the Proposed Action to being closed instead.
115	Wild Earth Guardians	Forest Service must ensure that the project will comply with the CWA by not causing or contributing to a violation of Oregon's water quality standards	Section 3.6.4 describes the Proposed Action consistency with the Clean Water Act through inclusion of Best Management Practices (BMP), Riparian Reserves and protection buffers.
116	Dick Artley	You cannot comprehend the aquatic damage these (temporary) roads will cause.	Effects to water quality from temporary roads as part of the Proposed Action are addressed in Section 3.6.3. Effects Analysis.
117	Cascadia Wildlands	The proposed logging violates recommendations in the White River WA that are not fully disclosed or discussed in the EA.	The White River Watershed Assessment provided recommendations in its Chapter 6. These recommendations include a suite of desired conditions for multiple resource objectives. The areas where the purpose and need for the planning area and the recommendations aligned include items such as: Size, quantity and potential for downed wood after treatments; Protect old growth in the Crest Zone from a stand-replacing wildfire; Manage for ponderosa pine/Douglas-fir dominating in the Transition zone (dry mixed conifer) areas of the White River Late Successional Reserve; and A regular program of underburning should occur in... Transition zones. Water quality improvement projects identified in the White River Watershed Analysis are listed in Section 3.6.2., Water Quality Effects Analysis. The White River Watershed analysis is also discussed under the Vegetation Resources section of the EA (3.1).
118	Dave Corkran	Cut trees to restore hydrological function so that stream flows and riparian area moisture in late summer don't drop as far as they do now.	The Proposed Action includes a variable density thin from below which focuses on the removal of the smallest trees first along with fuels treatments that treat the existing understory build of fuels as summarized in the EA under Sections 2.2, and 3.1.3

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#	Commenter	Comment	Response
119	Dave Corkran	Leave as many big, old fire-resistant trees as are consistent with restoring hydrological function.	As described in Sections 2.2.1 and 3.1.3 of the EA, with variable density thinning, selected trees of all sizes down to saplings (i.e., 3-inches or less in diameter) would be removed. The focus would be on leaving the most vigorous, healthiest trees and favoring shade-intolerant species. Thinning from below must retain some young trees of desired species if stands are to retain a healthy age structure. (Perry et al. 2004). Overall, the average stand diameters would be maintained or increased (Lindh and Muir 2004).
120	Dick Artley	Without exception, road construction and reconstruction are activities that cause 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.	Effects to water quality from road construction as part of the Proposed Action are addressed under the effects analysis for water quality, Section 3.6.3. The impacts to wildlife from road work activities proposed are discussed in the effects analysis for wildlife, Section 3.9.3. New road construction is not proposed as part of this project as described in in Section 2.2.3 of the EA.
121	Cascadia Wildlands	There needs to be some measurement and quantification from the Forest Service concerning the spread of invasive species and noxious weeds. How effective are the Forest Service's requirements on the logging companies. Are the expectation realistic? Are they regularly enforced? What percentage of the time is it not enforced? How effective is it? What does minimization mean? Is there an assumed increase in noxious weed spread?	This project is consistent with all law, regulation and policy regarding invasive species. This is enforced through contract and monitoring. Please refer to the project design criteria in Sections 2.3.8 and 2.3.9 of the EA for measures that address invasive plants. For all other concerns, please refer to the analysis within the 2008 FEIS for Site-Specific Invasive Plant Treatments for Mt. Hood National Forest and Columbia River Gorge National Scenic Area.
122	Bark	The FS must provide much more information, including answering the following questions: How many landings will be built? How many of each type: ground-based, skyline and helicopter? With what frequency? How much area will be cleared for landings? How many landings will use existing cleared areas and how many will be new? How does this increase the overall impact of the project? How long will the landings persist on the landscape? In addition to answering these questions, please include a map of the proposed landing sites with the final NEPA document.	Landing location, size and frequency is dependent on a variety of factors including road access, land form, treatment type and volume removed. The exact location/size of landings would be determined at the time of implementation with Forest Service approval per contractual specification derived from project design criteria identified in Sections 2.3, 2.2.4, and 2.2.5.

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#	Commenter	Comment	Response
123	Bark	There is no differentiation in the EA maps between, new, existing, previously decommissioned, or converted temporary road alignments. Please include this separation through map posted on the MHNH projects page	Figure 12 Section 2.2.5 of the EA shows a map of roads in the project area. Additional information on roads is available in the project file.
124	Dick Artley	Your P&N tells the public one of your timber sale purposes is to “maintain the stability of local and regional economies.” If this is really your goal, you would keep large mills from areas that aren’t near your local communities from bidding on the sale if it were offered under the small business authority. If you don’t offer it as an SBA sale it shows community economic stability was an excuse to generate volume. Thus, your real reason for offering this sale was hidden from the public.	An economic review has been completed for the project and included in Section 3.1.3 of the EA
125	American Forest Resource Council	AFRC questions why you are using 30% slopes for the cutoff of ground based skidding systems.	Direction in the MTH LRMP (Standards and Guidelines FW-022/023) states that the combined cumulative extent of detrimental soil impacts from both past and planned actions should not exceed 15 percent of an activity unit. The 30 percent slope limit is a BMP intended to minimize and contain the extent of detrimental soil disturbance that can result from ground-based logging systems to meet those S&Gs. Observations and monitoring over the last several decades of post-harvest ground conditions across National Forests throughout the Pacific Northwest have indicated that soils on slopes exceeding 30 percent are typically vulnerable to detrimental impacts from ground-based logging equipment, particularly skidding. For this reason, the 30 percent slope limit has been a standard BMP on the MTH for many years, and during planning phases helps to identify where ground-based logging systems are best suited, compared to cable systems, or where they should be closely administered through the timber sale contract.
126	Rachel Freifelder	How will the operations be monitored to assure that the timber company complies with plans and regulations?	All project design criteria related to timber sale operations would be implemented by a Timber Sale Administrator per contractual specifications that include the PDC identified in Chapter 2 of the EA.

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#	Commenter	Comment	Response
127	Jordanna	Congress is unethical in its decree that so many board feet must be extracted from our beloved ecosystem, just to be shipped across seas in exchange for money.	According to the Code of Federal Regulations (36 CFR 223.48 - Restrictions on export and substitution of unprocessed timber) unprocessed timber from Forest Service managed lands may not be exported except under approval of the secretary of Agriculture.
128	Bark	We request that the FS revisit this section of stream (Unit 466L) and re-fence it so the stream can have a chance to revegetate, and regain some functionality, and to protect the Wilderness area from additional cattle impacts.	The upper portion of this riparian enclosure was rebuilt this last June and the lower portion of this enclosure is planned for replacement in June of 2018.
129	Bark	Does the current level of grazing allow compliance with the Aquatic Conservation Strategy? What about State Water quality standards? Please indicate if there has been monitoring in recent years to assess this compliance.	Range monitoring involves "use supervision and compliance" during the grazing season and this indicates no problems with current numbers or system of use. As far as ACS monitoring that would be done by aquatics personnel. State Water Quality monitoring would be done by State personnel.
130	Dick Artley	Why do you reject the findings and conclusions of Undersecretary of Agriculture Jim Lyons who states "recreation revenues from national forests significantly exceed timber revenues." Elsewhere in these comments are the results of public survey information indicating the public is less likely to recreate near areas that have been logged, thus logging diminishes recreation revenue. Since recreationists avoid areas that have been logged the many "ma and pa" businesses that depend on recreation & tourism dollars are harmed. How do you justify harming the revenues of motels, gas stations, restaurants etc. to increase the profits of a large corporations?	The Proposed Action may have the largest impact on Off Highway Vehicle Recreation, however, the funds generated by the project would assist with improving the OHV system over the long term as work would go into rehabilitating and improving the trails, making them more purpose-built for OHV enthusiasts and more sustainable at the same time. This is described in the Management Direction Section 1.6 of the EA.

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#	Commenter	Comment	Response
131	Dick Artley	Ranger Kameron, I have presented you with verified information showing outdoor recreation generates 790 billion dollars and 65 million jobs annually. Most of this benefits local economies. I have presented surveys showing people who recreate in the forest avoid developed areas like timber sales. See Opposing Views Attachment #10 showing 16 nationwide polls validating this fact. The fact is, the Crystal Clear timber sale will harm the economy of the communities near it.	The Proposed Action may have the largest impact on Off Highway Vehicle Recreation, however, the funds generated by the project would assist with improving the OHV system over the long term as work would go into rehabilitating and improving the trails making them more purpose-built for OHV enthusiasts and more sustainable at the same time. This is described in the Management Direction section 1.6 of the EA.
132	Bark	Compare that field data with that generated through Bark's Forest Watch program.	Refer to the Project Record and/or Silviculture Report for stand evaluations data and field notes and/or more information on analysis of field data.
133	Bark	Clarify: Ultimately, with no vegetation treatments, the stand would remain in dense overstocked conditions, no mosaic re-initiation of understory; risk of insect and disease levels and vulnerability of the stands to infestations would remain high; and stand density would continue to increase.	Refer to the Effects Analysis for Vegetation Management in Section 3.1.3 of the EA for more detail and clarification on how stands would response to no treatment alternative. Refer to the Silviculture Report for more information.
134	Bark, Mia Pisano, Bryan Cicco, Ashley Baldwin	Stands: 471, 383, 390, 33, 70, 456, 452, 451, 122, 38, 458, 34, 370, 54, 8, 15, 422, 445, 386, 52, 9L, 8L, 3, 7, 429, 8, 9, 47, 56, 110, 108, 1, 475, 445, 53, 479, 379, 468, 301, 386, 452, 429, 456, 104, 125, 35, 40, and 82 already meet Desired Future Conditions.	The purpose and need for the project is located in Section 1.4 of the EA, with the desired future conditions located in Section 1.3. The desired future conditions for the stands would be to move them towards a more properly functioning plant community. By moving stands towards the desired future condition, they would become or maintain a multi-storied uneven-aged stands in the moist mixed-conifer communities. Within the dry mixed-conifer, stands would be moved toward more open, two-storied stands. After treatment, the planning area would become more resilient to perturbations such as insect attack and large-scale fire occurrence. The desired future condition of the project areas is a multi-layer canopy with large diameter trees, well-developed understory, more than one age class, and snags and down woody debris, as well as canopy closure and stand species composition reflecting Condition Class 1. While the prior condition was developed without thinning activities, multiple uses, regulations, and continued pressures placed on natural landscapes have created a condition where active management helps develop restored condition.

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#	Commenter	Comment	Response
135	Bark	Stands: 1, 3, 7, 8, 15, 33, 34, 38, 47, 52, 54, 70, 109, 144, 210, 219, 223, 331, 332, 383, 386, 390, 429, 445, 451, 456, 458, 471, 452, 122, 370, 422, 9L, 8L, 56, 110, 108, 475, 53, 479, 379, 468, 301, 452, 104, 125, 35, 40, and 82 has past treatment and does not match Table 18 in the EA	Table 18 is included in the Silviculture Report. The Table shows resulting density levels predictions from FVS modeling of the Proposed Action within moist mixed-conifer plant communities. Modeling is based off site data and existing conditions. Refer to the project record for Existing conditions data collected in the summer of 2016.
136	Bark, Justin Hagar	Bark requests that FS provide an analysis of and plan for increasing, not decreasing, the number of snags in the project area in the final assessment.	While some snags may be created during underburning activities. Prescriptions plans for burning generally do not allow for greater than 10% mortality.
137	Bark	Why do trees need to be logged from a former shelterwood cut, where overstory trees are already spaced 25-40 feet apart, there are no ladder fuels, and there is a diverse understory such as stands 144, 109, 210, 219, 223.	The stands are either proposed under the sapling thinning Proposed Action or under non-plantation thinning's as described in Section 2.2.1 of the EA. The proposed sapling thinning stands are relatively new plantations that were planted at a high density to ensure tree survival. These areas typically have an overabundance of trees that are small diameter and in very close proximity to each other. Treatments would mechanically thin small trees, leaving approximately 80 to 150 trees per acre in the dry forest type and 150 to 250 trees per acre in the wet forest type to promote and develop more resilient stand conditions.
138	Bark, Jordanna MacIntyre, Adam Brockman, Tara Hershberger	Stands: 8, 8L, 9, 9L, 104, 375, 447, 470, 471, 472, 473, 474, 475, 478, 479, 504, 505, 507, 508, 509, and 510 already meet desired future condition.	The desired future conditions for the stands would be to move them towards a more properly functioning plant community as defined by Watershed Assessment Plan, Forest plant association guides, and White River Late-Successional Reserve Plan. By moving stands towards the desired future condition, they would become, or maintain multi-storied uneven-aged stands in the moist mixed-conifer communities. The dry mixed-conifer stands would be moved toward more open, two-storied stands. Achieving this desired future condition would enable meeting the overall goals of the land allocations within the planning area. Desired future condition is discussed further in Section 1.3 of the EA.

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#	Commenter	Comment	Response
139	Bark	Logging and removal of the trees that would otherwise die naturally will certainly retard meeting the MHNF Land and Resource Management Plan (LRMP) standard for snags for decades.	Based on the snag analysis in Tables 13 and 14 found in the Silviculture Report, the Proposed Action Alternative would recruit fewer snags over time compared to the No Action alternative, with the exception of small snags ≥ 12 inches DBH in the dry habitat type. This is due mainly to the creation of healthier stands that become less susceptible to stress and disease-caused mortality. Over the next 100 years, the numbers of snags in these stands would be slightly reduced as existing snags fall and become down wood. Snags would then eventually be recruited as the stands age and current snag levels would be again be achieved or exceeded. Some snags may be created during underburning activities. Prescriptions plans for burning generally do not allow for greater than 10% mortality.
140	Bark	Units 9, 9L, 104, 375, 447, 470, 471, 472, 473, 474, 475, 478, 479, 504, 505, 507, 508, 509, and 510, 3, 7, 8, 15, 33, 34, 38, 47, 52, 54, 70, 109, 144, 210, 219, 223, 331, 332, 383, 386, 390, 429, 445, 451, 456, 458, 33, 452, 122, 370, 422, 8L, 56, 110, 108, 1, 53, 379, 468, 301, 452, 104, 125, 35, 40, and 82 and any other units which already meet the FS's desired future condition for the area. Remove from proposed action.	The desired future conditions for the stands would be to move them toward a more properly functioning plant community as defined by Watershed Assessment Plan, Forest Plant Association guides, and White River Late-Successional Reserve Plan. By moving stands toward the desired future condition, they would become, or maintain multi-storied uneven-aged stands in the moist mixed-conifer communities. The dry mixed-conifer stands would be moved toward more open, two-storied stands. Achieving this desired future condition would enable meeting the overall goals of the land allocations within the planning area. For more information you can reference the White River LSR Assessment pgs. II-4, II 21-22, IV 3, V6, and V 21, and the EA at the following Sections: 1.3, and 3.1.2.
141	Bark	Stands 466 between 466L and 281 already has met Desired Future Conditions	The desired future conditions for the stands would be to move them toward a more properly functioning plant community as defined by Watershed Assessment Plan, Forest Plant Association guides, and White River Late-Successional Reserve Plan. By moving stands toward the desired future condition, they would become, or maintain multi-storied uneven-aged stands in the moist mixed-conifer communities. The dry mixed-conifer stands would be moved toward more open, two-storied stands. Achieving this desired future condition would enable meeting the overall goals of the land allocations within the planning area. For more information you can reference the White River LSR Assessment pgs. II-4, II 21-22, IV 3, V6, and V 21, and the EA at the following Sections: 1.3, and 3.1.2.

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#	Commenter	Comment	Response
142	Bark	Proposed units in CCR overlap with Bear Springs EA units that are currently being thinned. Does the FS plan to re-thin these stands?	Previously entered stands would be evaluated for desired stand conditions and may not require re-entry thinning, but other aspects of the CCR Proposed Action may be needed to move the stand toward the desired future conditions. Examples of such activities are, but are not limited to, piling of existing fuel loading or underburning, as described in Section 2.2.2 of the EA.
143	Bark	Units 3, 5, 7, 8L, 9L, and 458 already meet desired future conditions and should be removed from treatment.	The desired future conditions for the stands would be to move them toward a more properly functioning plant community as defined by Watershed Assessment Plan, Forest Plant Association guides, and White River Late-Successional Reserve Plan. By moving stands toward the desired future condition, they would become, or maintain multi-storied uneven-aged stands in the moist mixed-conifer communities. The dry mixed-conifer stands would be moved toward more open, two-storied stands. Achieving this desired future condition would enable meeting the overall goals of the land allocations within the planning area. For more information you can reference the White River LSR Assessment pgs. II-4, II 21-22, IV 3, V6, and V 21, and the EA at the following Sections: 1.3, and 3.1.2.
144	Oregon Wild	We could not find a map of treatments that showed which units are plantations and saplings and which are natural/unmanaged stands	Refer to veg project record for a map of unit locations based off proposed treatment types. A description of existing conditions can be found in Vegetation Section, 3.1.2 of the EA.
145	Oregon Wild	We are concerned that commercial logging in natural mature stands, because such logging is likely to cause more harm than good. Simply put, removing large wood from mature forests Is NOT restoration.	In variable density thinning, selected trees of all sizes down to saplings (i.e., 3-inches or less in diameter) would be removed. The focus would be on leaving the most vigorous, healthiest trees and favoring shade-intolerant species. As described in Section 3.1.3, Vegetation resources effects analysis of the Proposed Action, thinning from below focuses removal of the smallest trees first, but must retain some young trees of desired species if stands are to retain a healthy age structure. (Perry et al. 2004). Overall, the average stand diameters would be maintained or increased (Lindh and Muir 2004).

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#	Commenter	Comment	Response
146	Oregon Wild	The PDC say that gaps in plantations >20 years will “maintain a minimum of 30% canopy cover.” This requirement should apply to gaps in unmanaged stands as well, not just in plantations. Gaps should be limited to 15% of any unit.	In the dry mixed-conifer forest types, skips and gaps would be included only in the existing plantations and would not exceed two acres, and would maintain a minimum of 30% canopy cover. Gaps would likely not be created in mature dry mixed-conifer, and the use of heavier thinning would occur. Gap size and distribution (i.e. location and number) would vary depending on stand-specific conditions and treatment types. Section 2.3.1 lists out the PDC for each resource area. PDC number 1 under the Vegetation section describes that Gap size and distribution (i.e., location and number) would vary depending on stand-specific conditions and treatment types.
147	Oregon Wild	The PDC says that planting would occur in gaps larger than 2 acres, but gaps larger than 2 acres are not prescribed.	Vegetation PDCs are described in Section 2.3.1 of the EA. PDC # 2 is updated to say "Tree planting would occur in gaps that are 2 acres and interplanting would occur only where canopy cover is open enough to support the establishment of shade-intolerant and/or fire-resistant species (i.e., ponderosa pine, western larch, western white pine)."
148	Oregon Wild	Planting in gaps is not necessary. Non-conifer vegetation provides valuable habitat diversity and Conifer seed sources are close by.	Planting in gaps will be utilized to help reestablish conifer tree diversity in plantations and non-plantations where needed. Vegetation PDC # 2 and # 3 are updated to say “could occur” (EA Section 2.3.1).
149	Oregon Wild	Over the long term, not logging will result in more large trees than thinning.	Over time, lower densities and larger tree heights are maintained in the Proposed Action versus No Action Alternative within the first 50 years of treatment. The quadratic mean diameter (QMD) of the Proposed Action would lower, due to the variety of size classes thinned and because created openings would contribute to an increase in small tree establishment. These small trees would contribute to the stand BA thus lowering the overall QMD. Again, the use of the quadratic mean gives greater weight to larger trees. The QMD analysis is discussed Section 3.1.3 of the EA and in more detail in the Silviculture report.

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#	Commenter	Comment	Response
150	Dick Artley	Ranger Kameron, please tell the public why you propose to commercially log large, merchantable trees that are NOT small in diameter and have little or no commercial value.	In variable density thinning, selected trees of all sizes down to saplings (i.e., 3-inches or less in diameter) would be removed. The focus would be on leaving the most vigorous, healthiest trees and favoring shade-intolerant species. As described in Section 3.1.3, Vegetation resources Effects Analysis of the Proposed Action, and in Section 2.2.1 as a description of the vegetation treatments under the Proposed Action, thinning from below would focus removal of the smallest trees first, but must retain some young trees of desired species if stands are to retain a healthy age structure. (Perry et al. 2004). Overall, the average stand diameters would be maintained or increased (Lindh and Muir 2004).
151	Boise Cascade	Why are you not harvesting timber in all of the identified matrix land?	As described in Section 2.5 of the EA, Alternatives Considered, “when the Forest initially began planning this project, it identified more acres that could be treated to provide forest products. In this alternative, approximately 15,122 acres were considered for treatment. However, this alternative was not considered in detail because of the Forest’s desire to address the recommendations of the <i>Revised Recovery Plan of Northern Spotted Owl</i> (USFWS 2011).”
152	Boise Cascade	Please identify how much volume is expected to be harvested on this project	An estimated 7,000 board feet per acre could potentially be produced from the commercial treatment units, as described in the Economic Review section of the EA
153	Boise Cascade	What is the planned return interval for the project area?	There is no set return interval for the project area.

#	Commenter	Comment	Response
154	Boise Cascade	Will these treatments meaningfully reduce the insect and disease risk in the project area?	Treatments would lower the stand density and would prolong the time they remain at the lower the risk of density-related mortality, and insect and disease activity. By creating less-dense stands with less tree competition, residual trees would benefit from the increased availability of sunlight, nutrients and water. With the increase of available nutrients, trees should be more vigorous and less susceptible to large-scale insect outbreaks. Small scale insect outbreaks would continue still, including the balsam wooly adelgid due to availability of noble fir in plantations. Treatments would favor removal of susceptible species to the adelgid, root rot, and other less fire-resistant species to create stands that would help moderate the outbreaks. Also, with healthier, more vigorous trees, mortality would be more endemic to small-scale disturbances. With lower SDI, most stands would be moved into the targeted lower-management zone which slow the stands from reaching the upper-management and overstocked zone. The delay in the stands moving into the overstocked zone would lower the risk of density-related mortality, and insect and disease activity. This is described in detail in the Silviculture Report effects analysis of the Proposed Action, and in Section 3.1.3 of the EA.
155	American Forest Resource Council	Given the need for management and fire control especially close to the WUI, travel corridors and major powerlines, AFRC strongly believes the Forest should be treating more acres.	In order to restore resilience and reduce the risk of uncharacteristic wildfire within the planning area, the Proposed Action would include thinning unmanaged stands and plantations of varying ages on approximately 12,069 acres. This is described throughout the EA, and specifically in Section 1.5 Summary of Proposed Action. See also the discussion on Other Alternatives Considered, Section 2.5 of the EA.
156	Mia Pisano	The so-called “Fuels Reduction Treatment” proposes to remove from the forest the largest, oldest, and most fire-resilient trees, an approach that is contradicted by everything that is known about fire ecology.	In variable density thinning, selected trees of all sizes down to saplings (i.e., 3-inches or less in diameter) would be removed. The focus would be on leaving the most vigorous, healthiest trees and favoring shade-intolerant species. As described in Section 3.1.3, Vegetation resources Effects Analysis of the Proposed Action, and in Section 2.2.1 as a description of the vegetation treatments under the Proposed Action, thinning from below would focus removal of the smallest trees first, but must retain some young trees of desired species if stands are to retain a healthy age structure. (Perry et al. 2004). Overall, the average stand diameters would be maintained or increased (Lindh and Muir 2004).

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#	Commenter	Comment	Response
157	Rachel Freifelder	As I mentioned, many units that I surveyed showed old growth characteristics: large trees (40 DBH or greater) widely spaced, deep soils, large downed logs supporting abundant growth of mosses and vegetation. In some cases, such as unit 210, these were described in Appendix A of the EA as sapling plantations.	The above mention stand is proposed under the sapling thinning Proposed Action. The proposed sapling thinning stands are relatively new plantations that were planted at a high density to ensure tree survival. These areas typically have an overabundance of trees that are small diameter and in very close proximity to each other. Treatments would mechanically thin small trees leaving approximately 80 to 150 trees per acre in the dry forest type and 150 to 250 trees per acre in the wet forest type to promote and develop more resilient stand conditions. Refer to Appendix 1 of the EA.
158	Art Carroll	It would help to define variable density thinning	In variable density thinning, selected trees of all sizes down to saplings (i.e., 3-inches or less in diameter) would be removed. The focus would be on leaving the most vigorous, healthiest trees and favoring shade-intolerant species. As described in Section 3.1.3, Vegetation resources Effects Analysis of the Proposed Action, and in Section 2.2.1 as a description of the vegetation treatments under the Proposed Action, thinning from below would focus removal of the smallest trees first, but must retain some young trees of desired species if stands are to retain a healthy age structure. (Perry et al. 2004). Overall, the average stand diameters would be maintained or increased (Lindh and Muir 2004). Variable density thinning is defined and described throughout the EA in sections 1.5, 2.2, and 2.2.1 to name a few.
159	Bark, Amy Pagel	Mature trees are important for wildlife habitat, carbon storage, and wildfire resiliency, and are common in units of this timber sale. Analyze an alternative that would implement an 18 inch diameter no-cut limit for this project to protect these values.	The desired future conditions for the stands would be to move them toward a more properly functioning plant community as defined by White River Watershed Analysis, forest plant association guides, and White River Late-Successional Assessment. By moving stands toward the desired future condition, they would become, or maintain multi-storied, uneven-aged stands in the moist mixed-conifer communities. The dry mixed-conifer stands would be moved toward more open, two-storied stands. Achieving this desired future condition would enable meeting the overall goals of the land allocations within the planning area. Desired future condition is described throughout the EA, specifically in Sections 1.3, Desired Conditions and 3.1.3 Effects Analysis of the Proposed Action for Vegetation Resources. Alternatives considered are described in Section 2.5.

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#	Commenter	Comment	Response
160	Bark	CCTS proposes to log in 100s of acres of mature forest stands. Remove all logging in stands already displaying or naturally on their way towards meeting the agency's "desired future conditions" of large diameter trees, well developed understory, snags and down woody debris, including 9, 9L, 104, 375, 447, 470, 471, 472, 473, 474, 475, 478, 479, 504, 505, 507, 508, 509, and 510, 3, 7, 8, 15, 33, 34, 38, 47, 52, 54, 70, 109, 144, 210, 219, 223, 331, 332, 383, 386, 390, 429, 445, 451, 456, 458, 33, 452, 122, 370, 422, 8L, 56, 110, 108, 1, 53, 379, 468, 301, 452, 104, 125, 35, 40, the northeast portion of 466, and 82.	The desired future conditions for the stands would be to move them toward a more properly functioning plant community as defined by White River Watershed Analysis, forest plant association guides, and White River Late-Successional Assessment. By moving stands toward the desired future condition, they would become, or maintain multi-storied, uneven-aged stands in the moist mixed-conifer communities. The dry mixed-conifer stands would be moved toward more open, two-storied stands. Achieving this desired future condition would enable meeting the overall goals of the land allocations within the planning area. Desired future condition is described throughout the EA, specifically in Sections 1.3, Desired Conditions and 3.1.3 Effects Analysis of the Proposed Action for Vegetation Resources. Alternatives considered are described in Section 2.5.
161	Bark, Jeremiah Jenkins	The CCTS proposes to log mature, high quality habitat in Late Successional Reserves (LSRs), a land allocation which under the NWFP directs the FS to protect and promote old growth forest characteristics. Remove logging proposed in units within LSRs that already include large trees and other habitat needed by species dependent on old growth forests, including Units 3, 5, 7, 8L, 9L, and 458.	After treatment, the planning area would become more resilient to perturbations such as insect attack and large-scale fire occurrence. In the dry mixed-conifer stands, a stand structure that allows the efficient reintroduction of natural fire is desired and that in the long term, natural fire starts can resume their normal processes and be easily managed. In variable density thinning, selected trees of all sizes down to saplings (i.e., 3-inches or less in diameter) would be removed. The focus would be on leaving the most vigorous, healthiest trees and favoring shade intolerant species. As described in Section 3.1.3, Vegetation Resources effects analysis of the Proposed Action, and in Section 2.2.1 as a description of the vegetation treatments under the Proposed Action, thinning from below would focus removal of the smallest trees first, but must retain some young trees of desired species if stands are to retain a healthy age structure. (Perry et al. 2004). Overall, the average stand diameters would be maintained or increased (Lindh and Muir 2004). Desired future condition is described throughout the EA, specifically in Section 1.3, Desired Conditions
162	American Forest Resource Council	Survey stands in the Special Old Growth, Pileated Woodpecker/Pine Marten designated areas to assess if thinning or other forest treatments would be appropriate for fire proofing the stands, improving forest health or creating more habitat.	The B5 (Pileated Woodpecker/Pine Marten) and A7 (Special Old Growth) areas were initially surveyed but based off of surrounding proposed treatments, A7 areas did not need treatment. Areas in B5 that needed treatment to meet the proposed P&N remained in the Proposed Action. Approximately 1% of the planning area is within the B5 land use allocation as described in Section 1.6.

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#	Commenter	Comment	Response
163	Oregon Wild	We are not convinced that grapple piling of activity fuels really adequately protects soils.	Soil erosion risk is described in the effects analysis of the Proposed Action for soils resources in Section 3.5.3. It describes that “Soil erosion risk would increase with the Proposed Action because bare soil would be exposed during implementation. As the amount of bare, bare/compacted soil increases, so does the risk of soil movement. Actual resource damage (erosion and/or sedimentation) is dependent on weather events that provide the energy to move soil material from one location to another.” And concludes that, “by maintaining proper amounts of protective groundcover along with BMP and PDC, the risk of erosion and subsequent sediment delivery caused by the Proposed Action is extremely small.” Project design criteria (PDC) can be found in Section 2.3 of the EA. Additionally, the discussions on detrimental soil condition can be found in more detail in the Soil Report.
164	Bark	The manipulation of these stands through commercial logging will be apparent on the landscape and visible from the Highway, the impacts to these viewpoints will be more long term than suggested in the EA, and require a Forest Plan Amendment or Exception in order to pursue	Section 2.3 of the EA lists out the project design criteria for the Proposed Action. Section 2.3.11 and 2.3.12 specifically address recreation and visuals. Additionally the design criteria specifically address stands visible from the Highway and the mitigations necessary to ensure that the retention visual quality objective is maintained (2.3.12).
165	Cascadia Wildlands	The Forest Service fails to take a hard look at the visual impacts of the project.	The Scenery Analysis takes into account a variety of impacts to the visual resources within the proposed project area both positive and negative including potential impacts to scenic viewshed. Effects to Visuals are discussed in Section 13 of Chapter 3 of the EA, and further addressed in the Scenery Analysis that is incorporated by reference.
166	American Forest Resource Council	Scenic Viewsheds which occupy 39% of the planning area and in the Deer and Elk Winter Range which encompasses 14% of the planning area. Since so much of the forest has been overgrown with encroaching timber and brush, creating openings and scenic vistas using thinnings would be appropriate to achieve these goals.	Thinning and the creation of openings could improve scenic integrity throughout the project area as increasing the diversity of species, and diversity of age and size classes and creating openings would contribute to scenic resources, as is described in Section 3.13.3 of the EA.
167	Bark	Did the FS consult with the Regional Ecosystem Office in preparing this project?	The Forest followed all law, regulation, and policy in regard to proposed treatments within the White River LSR Assessment as described in Section 3.1.4 of the Silviculture Report, and in the Management Direction section of the EA (1.6).

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#	Commenter	Comment	Response
168	Bark	The CCTS EA does not show how removing existing high quality owl habitat will meet the purpose of the LSR nor does it provide any information establishing the clear need for logging in all the proposed LSR units (which are quite varied in age and stand composition).	The White River Watershed Assessment provided recommendations in its Chapter 6. These recommendations include a suite of desired conditions for multiple resource objectives. The areas where the purpose and need for the planning area and the recommendations aligned include items such as: size, quantity and potential for downed wood after treatments; protect old growth in the Crest Zone from a stand-replacing wildfire; manage for ponderosa pine/Douglas-fir dominating in the Transition zone (dry mixed-conifer) areas of the White River Late Successional Reserve; and, a regular program of underburning should occur in Transition zones. Water quality improvement projects identified in the White River Watershed Analysis are listed in Section 3.6.2., Water Quality Effects Analysis. The White River Watershed analysis is also discussed under the Vegetation Resources section of the EA (3.1).
169	Bark	Why the FS seeks to exempt itself from snag density standards and an answer to the question: In a landscape that is already denuded of snags, what would be the impact on snag dependent species during the time lag when there are even fewer snags in the forest than there are now?	An analysis of the impacts to snags and snag-dependent species was conducted for White-headed Woodpeckers, fringed-myotis, and Pileated Woodpeckers, which can be found in Section 3.9.3 of the EA and the Wildlife Report.
170	Bark	According to the FS, the LRMP Standards and Guidelines would be followed within the B5 land allocation, logging in the unmanaged stands in the western portion of the project area would impact marten habitat by reducing canopy cover below 50 percent. Please explain this discrepancy in the next planning document	Treatments within designated American Marten B5 habitat is in areas currently not considered suitable habitat for this species. "Sapling and plantation stands do not provide habitat for this species, therefore there would be no direct impacts from treatments in these units. In the long-term, habitat for marten would be improved in these stands because larger trees would be recruited onto the landscape more quickly in thinned stands" (Section 3.9.3 of the EA).
171	Bark, Ashley Baldwin	Knowing what the science is beginning to tell us about marten habitat, and that high quality habitat exists within B5 areas, commercial logging in areas designated for management of pine marten should be dropped from this proposal.	Treatments within designated American Marten B5 habitat are in areas currently not considered suitable habitat for this species. "Sapling and plantation stands do not provide habitat for this species, therefore, there would be no direct impacts from treatments in these units. In the long term, habitat for marten would be improved in these stands because larger trees would be recruited onto the landscape more quickly in thinned stands." EA at 3.9.3.
172	Bark	There was no response to Bark's comments regarding beaver populations in the White River watershed.	This comment is outside the scope of the analysis.

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#	Commenter	Comment	Response
173	Bark, American Bird Conservancy	Bark requests that the FS align their Proposed Action with Recovery Actions 10 and 32 by removing units from consideration that include high-quality, suitable habitat. Remove the following units surveyed by Bark: 9, 9L, 104, 375, 447, 470, 471, 472, 473, 474, 475, 478, 479, 504, 505, 507, 508, 509, and 510. because they have "large diameter trees, high amounts of canopy cover, and decadence components such as broken-topped live trees, mistletoe, cavities, large snags, and fallen trees."	A summary of the Proposed Action is described in Section 1.5 of the EA. "In the draft EA provided to the public for a 30-day comment period, the Proposed Action stated that approximately 12,725 acres would be treated. This number has been updated to approximately 12,070 acres due to two factors: 1) Roughly 50 acres were removed from treatment because they were burned in the Rim Fire in September 2017; and 2) About 605 acres were removed from treatment because they were identified as containing habitat conditions described in Recovery Action 32 in the <i>Revised Recovery Plan of Northern Spotted Owl</i> (USFWS 2011), which is further discussed in Section 1.8 and 2.5."
174	Bark, American Bird Conservancy	Unit 473 (Fig. 13) is a notable example of characteristics within the proposed units which, if removed, would put this project in direct conflict with Recovery Action 32.	A summary of the Proposed Action is described in Section 1.5 of the EA. "In the draft EA provided to the public for a 30-day comment period, the Proposed Action stated that approximately 12,725 acres would be treated. This number has been updated to approximately 12,070 acres due to two factors: 1) Roughly 50 acres were removed from treatment because they were burned in the Rim Fire in September 2017; and 2) About 605 acres were removed from treatment because they were identified as containing habitat conditions described in Recovery Action 32 in the <i>Revised Recovery Plan of Northern Spotted Owl</i> (USFWS 2011), which is further discussed in Section 1.8 and 2.5."
175	Bark, American Bird Conservancy	In Bark's scoping comments, we cite a peer-reviewed scientific article which concluded that Northern spotted owls create an avoidance buffer of an average of 1,312 feet (437 yards) from forest roads. No scientific support provided for the proposition that owls only need a 65-yard buffer from roads	A 65-yard buffer is the distance at which the USFWS has determined that chainsaws and heavy equipment use may either disrupt or disturb Northern Spotted Owls, depending on the time of year.

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#	Commenter	Comment	Response
176	Bark, American Bird Conservancy	To this end the Watershed Analysis recommended maintaining existing NSO suitable and dispersal habitat in the Eastside Zone until increases in such habitat have been achieved in the Transition and Crest Zones. ⁴⁷ The draft EA did not address the impact of the removal of habitat on either the north-south travel of the owl, or consistency with the White River Watershed Analysis recommendations.	The White River Watershed Assessment provided recommendations in its Chapter 6. These recommendations include a suite of desired conditions for multiple resource objectives. The areas where the purpose and need for the planning area and the recommendations aligned include items such as: size, quantity and potential for downed wood after treatments; protect old growth in the Crest Zone from a stand-replacing wildfire; manage for ponderosa pine/Douglas-fir dominated in the Transition zone (dry mixed conifer) areas of the White River Late Successional Reserve; and, a regular program of underburning should occur in transition zones. Water quality improvement projects identified in the White River Watershed Analysis are listed within Section 3.6 of the EA and an analysis of the impacts to spotted owl dispersal is discussed in Section 3.9.3 of the EA as well as the Wildlife Report.
177	Bark, NSO has a broader range	The EA suggests that in the southern portion of NSO range, NSO has a broader range of habitat use than the Barred Owl so timber harvest may not have the same impact. EA at 219. While this may be true, the project area is not in the southern range of NSO habitat, and thus this argument is not applicable.	The EA includes a discussion of competition between barred owls and spotted owls in Section 3.9.3. It is not suggested that the Proposed Action is within the southern portion of the spotted owl's range. "While a suggestion has been made that timber harvest activities may favor barred owls, an alternative hypothesis is that barred owls have a wider range of habitat use in the northern part of the spotted owl's range, and the spotted owl has a narrower one. But in the more southerly part of the spotted owl's range, the spotted owl seems to have a broader range of habitat use than does the barred owl (Courtney et al 2004). Therefore, timber harvest may have the effect of leading to a competitive advantage for barred owls in some areas, but not in others (Courtney et al 2004, Dugger et al. 2011)", as described in the Wildlife Report.

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#	Commenter	Comment	Response
178	Bark, favored by Barred Owls,	The EA also suggests that prey species increased by are not selectively favored by Barred Owls, and concludes that “the treatments would not be expected to create habitat favored by barred owls over spotted owls.” Eat at 219. However, as noted throughout our comments, there are several studies that show prey favored by NSO decreases after thinning and habitat favored by NSO decreases after thinning – this conclusion does not take either of these factors into account.	An analysis of the barred owl is described in Section 3.9.3 of the EA and in the Wildlife Report. "Because barred owls can prey on a wider range of species than spotted owls, there has been speculation that thinning may increase prey favored by barred owls. The Young Stand Study on the Willamette National Forest found that commercial thinning of mid-seral stands will significantly increase the abundance of deer mice and Townsend’s chipmunks (McComb et al 2013). Wiens (2012) found that these two species comprised about 5% of the prey biomass for spotted owls compared to 3% for barred owls in an area of western Oregon. Therefore, the small mammal species that have been found to increase most after thinning are not ones that are selectively favored by barred owls more than spotted owls."
179	Bark, American Bird Conservancy	Increases in barred owls could also result in a decline in tree squirrel abundance, which could indirectly lead to reduced recruitment and growth of these forests that rely on spore dispersal. A potential decrease in soil processing may also occur with the expansion of barred owls, since reduced numbers of burrowing small mammals would lead to subsequent declines in the rates of decomposition of organic matter and litter, and mixing of forest soil. We asked that these impacts be included in the CCTS EA, and they were not. We repeat this request for the final NEPA analysis.	An analysis of the Proposed Action and barred owls was conducted using the best available science. The discussion on barred owls can be found in Section 3.9.3 of the EA and in more detail in the Wildlife Report.
180	Bark, American Bird Conservancy	Unfortunately, FWS’s assumption that management actions will be consistent with the overall purposes of the CHU does not hold true in the CCTS. As discussed throughout, the FS has proposed to log in thousands of acres that currently provide suitable habitat and dispersal habitat, in areas that are within their natural range of variability, and degrade the existing habitat functions with little to no ongoing benefits to the spotted owls.	An analysis of the impacts to critical habitat and the impacts to the CHU as a whole is discussed in the Wildlife Report under the Spotted Owl Critical Habitat section.

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#	Commenter	Comment	Response
181	Bark, Reed Wilson, Lisa Billings, American Bird Conservancy	The adverse impacts of logging and road building in critical habitat are much greater than the future benefits of possibly reducing the severity of a potential fire, and thus this project does not comply with the ESA, the NSO Recovery Plan, and the MHNH's LRMP.	The impacts of the Proposed Action to critical habitat were analyzed and discussed in the EA in Section 3.9.3 under the Proposed Action effects analysis for Northern Spotted Owl & Critical Habitat. "Because PBF 4 would be removed on 895 acres, and PBFs 2 and 3 would be downgraded on 1,414 acres, these treatment units would no longer provide or would reduce the quality of PBFs for reproduction and survival of the spotted owl, therefore the Proposed Action may affect, and is likely to adversely affect spotted owl critical habitat."
182	Bark. American Bird Conservancy	Dalles II, North Fork Mill Creek, and Polallie Cooper were not discussed in the cumulative impacts analysis for NSO and critical habitat.	Cumulative impacts were analyzed based in the analysis area and do not include the projects mentioned in the comment: Dalles II, North Fork Mill Creek, and Polallie Cooper. "The analysis area for spotted owl includes the Crystal Clear Restoration project boundary and a 1.2 mile buffer to include any territories that may overlap" (Wildlife Report, page 25).
183	Bark, Gradey Proctor, American Bird Conservancy	With no action, quality of existing suitable and dispersal habitat would improve, and non-habitat stands would become dispersal and eventually suitable or nesting habitat in 60-150 years. EA at 213. Conversely, the Proposed Action "may affect, is likely to adversely affect, northern spotted owls" as well as their critical habitat because suitable and dispersal habitat would be negatively impacted through commercial logging activities for 75-100 years. With all this in mind, Bark advocates that there be no new road building or logging in suitable and dispersal habitat for the northern spotted owl.	The effects of the No Action and Proposed Action alternatives to wildlife resources were analyzed and discussed in Section 3.9.3 of the EA.
184	Bark, Melanie Honele, Lindsay Ruoff	The CCTS proposes to log in 12,725 acres of Critical Habitat for northern spotted owls, and would remove 2,551 acres of high-quality owl habitat. Analyze an alternative that would remove all proposed logging from areas within suitable or dispersal habitat for threatened owls.	Refer to Section 2.5 of the EA, alternatives considered but dropped from further analysis. In addition, the Proposed Action would thin approximately 12,069 acres as described in Section 1.5 of the EA.
185	Bark	The CCTS units include species protected under the NWFP's Survey and Manage program. Engage with information collected by Bark, and buffer all sensitive species on the Survey and Manage list from destructive logging.	All Survey and Manage wildlife species found during surveys would be buffered from harvest activity. Section 1.6 outlines that this project is consistent with all law, regulation and policy regarding the continuation of species and habitat viability. Wildlife PDC can be found in Section 2.3.7 of the EA.

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#	Commenter	Comment	Response
186	Bark	The CCTS would severely degrade 233 acres of forest designated by the MHNFLRMP for conservation of the American marten. Remove proposed logging from forest designated as Pine Marten Reserves.	An analysis of the impacts to American Marten was conducted: "At least 160 acres of mature or old growth forest within each 320-acre management unit would be maintained and treatments in 233 acres within B5 would maintain a canopy cover of 50 percent within 10 years after treatments." (Section 3.9.3 of the EA, and the Wildlife Report).
187	Wild Earth Guardians	We encourage the Forest Service to be transparent about any consultation process and affirmatively post all consultation documents, including any Forest Service Biological Evaluations or Assessments, any letters seeking concurrence, and any responses or Biological Opinions from FWS.	All consultation will be completed prior to signing a final decision and information will be included in the project record.
188	American Bird Conservancy	ABC recommends that the Northern Spotted Owl be uplisted to Endangered and that the California Spotted Owl also be listed as Endangered.	Thank you for your comment. This comment is outside the scope of the Proposed Action.
189	American Bird Conservancy	Given the evidence the Plan is working, any proposed changes (to the NWFP) should have a high degree of scientific consensus and certainty of success. Stay the course with the Northwest Forest Plan, complete the science synthesis, and then conduct bioregional assessments addressing regional and endangered species issues.	Thank you for your comment. This comment is outside the scope of the Proposed Action.
190	American Bird Conservancy	The Northern Spotted Owl Critical Habitat Rule continue to raise concern because of active management in owl critical habitat that is not supported by the best available science.	Thank you for your comment. This comment is outside the scope of the Proposed Action.
191	American Bird Conservancy	The Forest Service is ignoring the available scientific literature to continue this management direction which is harmful to CSO.	Thank you for your comment. This comment is outside the scope of the Proposed Action.
192	American Bird Conservancy	The conservation planning process should support protecting the remaining owl habitat and buffer areas to regrow the deficient large-tree component in the Sierra Nevada and a moratorium on owl take. Fuels treatments should be focused on adjacent areas of younger forest. Given the large acreage of potential treatment areas, California Spotted Owl habitat does not need to be prioritized as is currently the case.	Thank you for your comment. This comment is outside the scope of the Proposed Action.

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#	Commenter	Comment	Response
193	American Bird Conservancy	Continue to monitor the effectiveness of Barred Owl removal and support extending the owl take moratorium and base it on achieving recovery thresholds.	Thank you for your comment. This comment is outside the scope of the Proposed Action.
194	Oregon Wild	We could not find a map in the PA showing critical habitat in the project area.	A map of spotted owl critical habitat was not included in the EA. Proposed units are within critical habitat. This is further addressed in the Wildlife Report and in Section 3.9 of the EA.
195	Oregon Wild	Significant new information indicates that more snags are needed for a wider variety of life functions and more green trees must be retained to ensure recruitment of those extra snags throughout the life of the stand.	A snag analysis was conducted for the Proposed Action. No snags are proposed to be cut as part of the Proposed Action and large snags that need to be cut would remain nearby. (Snags would be cut if they pose a safety risk to workers). Under the Proposed Action, the current conditions would remain unchanged. While some snags may be more prone to falling after thinning activities, the amount of snags lost would not be measurable at the watershed scale. Skips and streamside protection buffers would provide short and mid-term recruitment of snags similar to the level described under the No Action Alternative." An analysis of the effects to snag dependent species was conducted for the Proposed Action. This is further addressed in the Wildlife Report and in Section 3.9 of the EA.
196	Oregon Wild	Current management at both the plan and project level does not reflect all this new information about the value of abundant snags and down wood. The agency must avoid any reduction of existing or future large snags and logs (including as part of this project) until the applicable management plans are rewritten to update the snag retention standards.	Section 1.6 outlines that this project is consistent with all law, regulation and policy regarding the continuation of species and habitat viability. An analysis of the effects to snag dependent species was conducted for the Proposed Action. This is further addressed in the Wildlife Report and in Section 3.9 of the EA.
197	Oregon Wild	What the FS needs to disclose is that the treatments would degrade habitat while still meeting the minimum standards for nesting, roosting, foraging habitat.	The effects analysis detailed in the Wildlife Report discusses the impacts to spotted owl from habitat modification starting on page 17.

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#	Commenter	Comment	Response
198	Cascadia Wildlands	The Forest Service is required to reserve structural components such as snags and coarse woody debris. The Forest Service’s proposal to remove this ecologically critical structure from the Forest is in violation of its Forest Plan, and the Forest Service failed to take a hard look at this issue in the EA.	No snags or coarse woody debris would be removed as part of the Proposed Action. The following is described in the Wildlife Report (page 73) under the Snags section, "Implementation of this project could result in the loss of some snags cut for safety concerns. However, no snags are proposed to be cut as part of the Proposed Action and large snags that need to be cut would remain nearby. Under the Proposed Action, the current conditions would remain unchanged. While some snags may be more prone to falling after thinning activities, the amount of snags lost would not be measurable at the watershed scale." Further under the Down Wood section, "Large logs (> 20 inches) existing on the forest floor would be retained and few that size are expected to be consumed during underburning activities. Prior to harvest, sale administrators would approve skid trail and skyline locations in areas that would avoid disturbing key concentrations of down logs or large individual down logs when possible. Snags or green trees that fall after thinning and fuels treatments would contribute to down wood."
199	Cascadia Wildlands	The violation of the spotted owl recovery plan RA 10 and RA 32 is not well disclosed in the EA and is a violation of RMP standards.	A summary of the Proposed Action is described in Section 1.5 of the EA. "In the draft EA provided to the public for a 30-day comment period, the Proposed Action stated that approximately 12,725 acres would be treated. This number has been updated to approximately 12,070 acres due to two factors: 1) Roughly 50 acres were removed from treatment because they were burned in the Rim Fire in September 2017; and 2) About 605 acres were removed from treatment because they were identified as containing habitat conditions described in Recovery Action 32 in the <i>Revised Recovery Plan of Northern Spotted Owl</i> (USFWS 2011), which is further discussed in Section 1.8 and 2.5."
200	Cascadia Wildlands	The EA contains only a few scant references to barred owls and fails to take a hard look at the harms caused by mature forest logging.	A discussion of barred owls is included in the "Existing Condition" and Effects Analysis" section of Northern Spotted. The impacts to spotted owl from "logging" are disclosed in "Effects from Habitat Modification."

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#	Commenter	Comment	Response
201	American Forest Resource Council	We encourage the Mt. Hood Forest to consider a recently published study conducted by NCASI when assessing treatment areas and their potential affects to owls.	A summary of the Proposed Action is described in Section 1.5 of the EA. “In the draft EA provided to the public for a 30-day comment period, the Proposed Action stated that approximately 12,725 acres would be treated. This number has been updated to approximately 12,070 acres due to two factors: 1) Roughly 50 acres were removed from treatment because they were burned in the Rim Fire in September 2017; and 2) About 605 acres were removed from treatment because they were identified as containing habitat conditions described in Recovery Action 32 in the <i>Revised Recovery Plan of Northern Spotted Owl</i> (USFWS 2011), which is further discussed in Section 1.8 and 2.5.”
202	Lola Goldberg, Devyn Riley	Remove all proposed logging from areas within suitable habitat for threatened owls.	A summary of the Proposed Action is described in Section 1.5 of the EA. “In the draft EA provided to the public for a 30-day comment period, the Proposed Action stated that approximately 12,725 acres would be treated. This number has been updated to approximately 12,070 acres due to two factors: 1) Roughly 50 acres were removed from treatment because they were burned in the Rim Fire in September 2017; and 2) About 605 acres were removed from treatment because they were identified as containing habitat conditions described in Recovery Action 32 in the <i>Revised Recovery Plan of Northern Spotted Owl</i> (USFWS 2011), which is further discussed in Section 1.8 and 2.5.”
203	Lola Goldberg, Devyn Riley	Remove logging proposed in units within LSRs that already include large trees and other habitat needed by species dependent on old growth forests.	The White River Watershed Assessment provided recommendations in its Chapter 6. These recommendations include a suite of desired conditions for multiple resource objectives. The areas where the purpose and need for the planning area and the recommendations aligned include items such as: size, quantity and potential for downed wood after treatments; protect old growth in the Crest Zone from a stand-replacing wildfire; manage for ponderosa pine/Douglas-fir dominating in the Transition zone (dry mixed-conifer) areas of the White River Late Successional Reserve; and, a regular program of underburning should occur in transition zones. Water quality improvement projects identified in the White River Watershed Analysis are listed in Section 3.6.2., Water Quality Effects Analysis. The White River Watershed analysis is also discussed under the Vegetation Resources section of the EA (3.1).

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#	Commenter	Comment	Response
204	Lola Goldberg, Devyn Riley	Remove proposed logging from forest designated as Pine Marten Reserves.	An analysis of the impacts to American marten was conducted: "At least 160 acres of mature or old growth forest within each 320-acre management unit would be maintained, and treatments in 233 acres within B5 would maintain a canopy cover of 50 percent within 10 years after treatments." (Section 3.9.3 of the EA, and the Wildlife Report).
205	Rebecca Lexa	I am against removing snags and older, larger trees as these are morescarce and create crucial wildlife habitat in ways that younger trees and understory cannot.	The removal of snags is not part of the Proposed Action. Refer to the Proposed Action description in Chapter 2 for a description on proposed variable density thinning treatments.