Response to Substantive Comments

The Draft Environmental Impact Statement (DEIS) for the Juncrock Timber Sale was made available for public comment on September 12, 2003. Letters, postcards and emails were received during the 45-day comment period, which ended on October 27, 2003.

This appendix responds to the substantive comments received during the comment period. Many letters, e-mails and post cards contained identical comments, which will be combined for the purpose of response. Substantive comments are comments that are within the scope of the proposed action, are specific to the proposed action, have a direct relationship to the proposed action, and include supporting reasons for the Responsible Official to consider (36 CFR 215.2)

Sixty-nine letters, seven e-mails, and approximately 135 post cards were received. Many stated a preference for the No Action Alternative, or Alternative IV, the large tree retention alternative. Others expressed opinions that logging is not appropriate on public lands. Many comments were not substantive. There was one letter in support of the Proposed action, Alternative II, with modifications that more trees are left to provide future snags, down wood, and forest substrate.

The full text of letters, e-mails and post cards are in the analysis file; the following is a summary. The agency responses are highlighted. In the highlighted responses, page numbers refer to the Juncrock Final Environmental Assessment (FEIS) unless otherwise specified.

A letter containing the following comments was received from BARK. (Joining in these comments are Sierra Club Columbia Group, and Siskiyou Regional Education Project.)

Comment 1: The proposed action will increase animal harassment through building new roads; further increase sedimentation in creeks, thereby degrading the watershed; and liquidate key old growth habitat, which will lead the northern spotted owl and other old growth and late successional dependant species further down the road of decline. *Response 1*: *Temporary roads, new system roads, and an additional 10.2 miles of road, would be closed after use, reducing animal harassment and decreasing sedimentation. Impacts to late successional species are addressed (DEIS p. 53-55)*

Comment 2: The Juncrock timber sale economic analysis is inadequate. The DEIS is incomplete because it does not provide an adequate economic analysis of the proposed project. No economic resources were used to develop this DEIS. The only "Analysis" that was provided was the basic chart in Appendix I, which appears to be a mere exercise in subtraction. There was no economist nor sociologist on the interdisciplinary team. **Response 2:** *Additional economic analysis has been included in the FEIS. The economics section has been clarified. (FEIS p. 102 - 104) James Rice, a graduate from*

Humboldt State University and a certified Silviculturist with 25 yeas experience with the Forest Service, assisted in the preparation.

Comment 3: The DEIS states that you have a goal to provide commercial wood products for a regulated timber supply by harvesting the predicted loss of timber caused by over crowding, insects and disease. (DEIS, 6) What science are these predictions based on?

Response 3: Providing commercial wood products, which contribute, to the Probable Sale Quantity (PSQ) of the Northwest Forest Plan is not the only objective of the project. Trees to be harvested include trees other than just those that are crowded, or affected by insects or disease. A Region 6 certified silviculturist has developed the prescriptions. The objectives have been clarified in the FEIS.

Comment 4: There is no analysis showing that the sale meets social and economic needs of the local and regional economy.

Response 4: One of the objectives of the Northwest Forest Plan is to "maintain a sustainable supply of timber and other forest products that will help maintain the stability of local and regional economies on a predictable and long term basis."(USDA, USDI 1994b, p.A-1) The Juncrock project contributes timber and forest products consistent with that goal. The Northwest Forest Plan anticipated that some older forest stands would need to be harvested to meet the Probable Sale Quantity.

Comment 5: The price of timber has dropped dramatically. In spite of the increased demand due to home building, there is a glut of timber on the market; a number of timber sales that have been auctioned by the Mt. Hood National Forest are selling below estimated valuation.

Response 5: The FEIS contains a discussion of timber markets. Twenty two recent timber sales on the Mt. Hood National Forest were bid above the advertised minimum bid rates. (FEIS p. 104)

Comment 6: In making the site-specific decision to implement the Juncrock Timber Sale, the Forest Service failed to incorporate information about the economic value of unlogged forests. These include the economic benefits associated with recreation and other values.

Response 6: The FEIS tiers to the Mt. Hood Forest plan and Northwest Forest Plan Final Environmental Impact Statements, which have analyses of recreation and other values (USDA 1990a,pl IV-122) (USDA < USDI 1994a,p.3 & 4-278-317).

Comment 7: The DEIS fails to mention here or elsewhere the NWFP takes precedence over any less restrictive management directives, and that the NWFP's Matrix designation is more restrictive than the MHMP's C-1 designation. C-1 is no longer an appropriate management designation. The NWFP's Matrix designation does allow commercial timber harvest, but as acknowledged in the MHMP, it also requires that actions in the Matrix also "perform an important role in maintaining biodiversity.

Response 7: In the DEIS, the objectives of matrix and timber emphasis allocations are discussed (p. 1). The Northwest Forest plan standards and guidelines apply where they

are more restrictive than the Mt. Hood Forest Plan. Matrix does not supplant the C-1 Timber Emphasis allocation; it adds certain standards and guidelines. The C-1 Timber Emphasis contains standards and guidelines that are more restrictive than matrix standards and guideline such as those for snag retention. The project is consistent with the standards and guidelines for land in the matrix. These standards have been followed.

The NWFP on page B6 states: "Stands in the matrix can be managed for timber and other commodity production, and to perform an important role in maintaining biodiversity." The following sentence then describes how that role is to be achieved. "Silvicultural treatment of forest stands in the matrix can provide for retention of old – growth ecosystem components such as large green trees, snags and down logs, and depending on site and forest type, can provide for a diversity of species. Retention of green trees following timber harvest in the matrix provides a legacy that bridges past and future forests." The silvicultural treatments in the Juncrock alternatives follow all of these guidelines and therefore would perform the role of maintaining biodiversity that was envisioned by the NWFP for stands in the matrix.

Comment 8: Most of the proposed units of the Juncrock timber sale appear to have fairly normal levels of stand density, where as stands with much higher levels of density in the planning area such as on plantations adjacent to units, are not included in the action alternatives.

Response 8: Stand conditions and reasons for stand selection for treatment are discussed in the DEIS. (DEIS p. 3)

Comment 9: There are no proven hazards with trees leaning towards Highway 216. Within the past five years, no collisions occur on Or-216 due to snow, rain or falling down trees, as shown by a letter BARK received from ODOT regarding collision history on 216.

Response 9: The Forest Service and ODOT have worked closely together through the local maintenance division to identify and remove leaning trees that could become a safety problem. This practice has been in place over 20 years in this corridor, and has proven very effective in preventing accidents. Trees proposed for harvest along State Highway 216 have been coordinated with ODOT. The FEIS discusses the relationship between ODOT and the Forest Service (FEIS p. 83).

Comment 10: "There is no scientific evidence that logging will help prevent spreading of diseases such as mistletoe and Indian pint fungus to understory trees species. *Response 10*: *Much research has described dwarf mistletoe biology and developed management strategies that utilize silvicultural methods, including those described in the Juncrock EA (see Chapter 13, "Control," in the book, <u>Dwarf Mistletoes: Biology, Pathology, and Systematics</u> by F. G. Hawksworth and D. Weins. 1996. Agricultural Handbook 709, USDA Forest Service, Washington, D.C. 410 pp).*

Comment 11: Studies show that logging can contribute to the growth and spread of diseases such as mistletoe and Indian Paint fungus.

Response 11: The Forest Service proposes to use appropriate Silviculture techniques to reduce the incidence and severity of dwarf mistletoe and Indian Paint Fungus in these stands. The proposed harvest includes removal of the most heavily infected trees. Where leave trees are infected, non-host species may be planted in their vicinity. The Forest Service is not proposing dwarf mistletoe or Indian paint fungus eradication. The FEIS discusses the positive effects of conditions created by diseases, i.e. habitat for cavity dwellers, (FEIS p. 68).

Comment 12: In the case of Indian Paint Fungus and brown cubical rot, logging has also been shown to exacerbate infection levels. In the case of mistletoe, studies show that logging can contribute to its growth and spread

Response 12: Silvicultural treatments that do not take adequate account of wounding and stem decays can result in increased decay. Treatments proposed in the Juncrock DEIS include marking guides, and harvesting and slash disposal strategies, that are designed to minimize wounding and subsequent decay.

Silvicultural treatments that do not take proper account of dwarf mistletoe when it is present in a stand, can result in increased dwarf mistletoe. The treatments proposed in the Juncrock DEIS are appropriate for reducing the incidence and intensity of dwarf mistletoe in the stands.

Comment 13: The DEIS says that 10.2 miles of road will be closed. Will these roads be closed in 10 years? Twenty years? How effective will the closures be? What funding methods will be used?

Response 13: Roads used by a timber purchaser would be closed by the timber sale contract. Normally this would be in three to five years after the sale is sold. Roads not covered by a timber sale would be closed when funding became available, normally within three to five years of the Record of Decision. In the past the district has used gates, guardrails, and earth berms to close roads. Examples of all three types of road closures have been used in this area. Gates and guardrails have proven to be ineffective as road closure devices. Earth berm closures have been the most effective. In the FEIS, (Appendix M, p. 2A & 3A) a more detailed explanation of the individual road closure treatments is given.

Comment 14: The owl connectivity corridor will not be maintained. *Response 14*: *The DEIS discusses maintaining the Owl connectivity corridor, (DEIS p. 53, 54, Table 3-12).*

Comment 15: The DEIS fails to adequately consider the cumulative environmental impacts of the proposed project and past, present and future Forest Service and private activities.

Response 15: In the DEIS, cumulative effects are addressed for each resource and the analysis does consider all of the applicable activities (DEIS p. 45-91)

Comment 16: Aggregate Recovery Model (ARP) used to determine cumulative effects is faulty and does not provide complete information.

Response 16: The ARP model is only one of the methods used to assess cumulative effects. The ARP analysis has been tailored to site-specific conditions including the stability of local geological landforms, sensitivity of local fish habitats, local growth rates of trees, presence of permanent openings, actual age of stands, local fire regimes, and existing and foreseeable future projects.

Comment 17: On Barks website is a copy of a letter drafted by Dave Perry and other scientists to the Regional Interagency Executive Committee backing the protection of all late-seral and old growth forests.

Response 17: The letter contains no new information about the Juncrock proposal. The FEIS contains a discussion of this letter (FEIS p. 111)

Comment 18: The Juncrock DEIS omits the known benefits of old growth forest fragments, and thereby omits adequate analysis of environmental impact of eliminating these valuable forest fragments on late successional species. The DEIS neglects to adequately discuss the effects of forest fragmentation on dispersal of late successional species

Response 18: The effects to older forests and associated wildlife species are discussed, (DEIS p. 43-66).

Comment 19: The DEIS must consider and disclose adequately the cumulative impacts of grazing.

Response 19: Grazing and cumulative effects are discussed in the DEIS, (DEIS p. 90 & 91).

Comment 20: The impacts from other past and present logging activities will significantly impact numerous resources including water Quality, soil health, fish and wildlife. The DEIS notes that there are other activities planned in the Juncrock planning area and its watersheds, and that other activities have occurred there in the past. Consequently, there are multiple site-specific significant cumulative impacts of these activities that were not considered in the Juncrock DEIS or the Mt. Hood Forest Plan. *Response 20:* All units and all connected projects are included, as well as all past, present and foreseeable future projects. The DEIS describes the cumulative effects for each resource, (DEIS p. 45-91).

Response 21: The Mt. Hood National Forest has failed to adequately survey for sensitive and listed species and therefore lacks the necessary information to support the action alternatives in the Juncrock Timber Sale.

Response 21: All required surveys have been conducted (DEIS p. 46, 47 & 48.) Surveys for the purpose of determining species ranges and making population estimates are conducted by other agencies including U.S. Fish and Wildlife Service, Oregon Department of Fish and Wildlife, and Regional Ecosystem Office.

Comment 22: The DEIS does not outline specific plans for mitigation or monitoring impacts. The DEIS must include a detailed monitoring and mitigation plan.

Response 22: The action alternatives incorporate design features as part of the proposal. The alternatives were designed with Best Management Practices (BMP) and Standards and Guidelines for the Forest Plan, as amended, which are designed to reduce or minimize effects to resources. Additional discussion of BMP's and their effectiveness are addressed in the FEIS, (FEIS p. 31 - 33). The DEIS addresses Design Features common to all alternatives, (DEIS p. 28-30). A monitoring section has been added, (FEIS p. 33 - 34).

Comment 23: The DEIS and supporting documents indicate that the planning area is experiencing sedimentation from anthropogenic sources. Frog Creek is already exceeding MHMP standards for fine sediment. The three alternatives of the Juncrock project will cause sediment levels to further exceed parameters.

Response 23: The potential that measurable amounts of fine sediment would increase as a direct result of logging activity is negligible. Impacts and risks are discussed in the DEIS, (DEIS p.64, 65, 68, 70, 71, Table 3-15, Appendix D, p. 17, 18, Table 11, 19, 24, 2).

Comment 24: The DEIS calls for building .55 miles of road construction and 1.2 miles of road reconstruction, in addition to 10.2 miles of road closures. The impacts of roads include increased sediment input, fragmentation of habitat, stream crossings, introduction of exotics, increased peak flow, extension of drainage density, increased interaction between humans and wildlife, soil productivity loss, to name a few. While action alternatives would also close roads after use, the Mt. Hood National Forest has a poor record of successfully closing roads and restoring them to a hydrological stable condition. Road closures in the past have often been ineffective. Despite the use of the term, "temporary" to describe the roads proposed, these roads are not "temporary". These roads contribute to cumulative impacts, and impact the area from the time they are built until well after they are decommissioned, assuming it is done adequately.

Response 24: The term "temporary road" is used by the Forest Service to describe roads that are built by a timber purchaser, used only for logging operations and are closed to further use when the sale is complete. This is to distinguish them from permanent system roads retained as a long-term part of the Forest's transportation network. The FEIS describes the effects of constructing temporary roads. (FEIS p. 85)

Comment 25: Roads should not exceed 2.5 miles within inventoried elk summer range, which is the classification of the Juncrock Planning area. The current road densities are well above the threshold across the project area. The road density should include all motorized tails and roads.

Response 25: Decreasing open road densities are discussed in the DEIS for all action alternatives, (DEIS p. 19, 23, 26, & 60)

Comment 26: It does not indicate whether any mitigation are required in the timber project contract, describe how it intends to ensure compliance with the measures if they are in fact required, or analyze whether these measures will be effective. *Response 26:* See response to Comment 20 above.

Comment 27: Clear Creek is currently a 303(d) water quality limited stream (DEIS, App D, pp.20). Does the proposed project violate Forest Plan standards? If it does, then the project will also violate NFMA's requirement that site–specific projects remain consistent with area forest plans.

Response 27: The proposal does not violate Forest Plan standards. Discussion of 303d listed streams is included in the DEIS, (DEIS p. 68).

Comment 28: The DEIS does not state whether water quality impacts will be monitored to ensure that water quality standards are met, when this evaluation will occur, or what the USFS intends to do if the effects aquatic systems are other than anticipated. *Response 28: Monitoring is on going. The FEIS address aquatic monitoring. (FEIS p.* 77 - 78)

Comment 29: Currently, both White River and Clear Creek are listed as "water Quality limited" for temperatures under 303(d) of the Clean Water Act. 33 U.S.C. 1303. The Forest Service must describe how the alternatives for the Juncrock Project comply with Oregon's water quality standards and LRMP water quality standards *Response29: The DEIS addresses the 303d listed Clear Creek and White River, (DEIS p. 68, Appendix D, p. 20).*

Comment 30: Appendix D does not mention placing buffers alongside stream banks. The watersheds in the Juncrock planning area have been heavily managed and have suffered the consequences with loss of suitable fish habitat and water temperature increase. It is crucial that at a minimum, there be a 300 foot buffers around Clear and Frog Creeks, plus their tributaries.

Response 30: Riparian reserves are in place. Additional information is included in the FEIS, (FEIS p. 73).

Comment 31: The proposed action map indicates that Unit 11 also overlaps the A9 Key site Riparian area, which should be off limits to management.

Response 31: The Key Site Riparian Area lies to the east of Forest Road 2130, while Unit 11 is west of that road.

Comment 32: There appears to be inconsistent and in some cases inadequate buffers given to nonperennial and intermittent steams.

Response 32: Other than the 14 acres of riparian area listed for treatment, there is no timber harvest proposed closer than 100' to intermittent streams and 300' to fish bearing streams.

Comment 33: The DEIS calls for a minimum of three standing dead trees or live wildlife trees/acre. No analysis as to why this number will be adequate to preserve viable populations of species that make use of the these types of trees.

Response 33: Additional analysis and discussion for meeting the needs of snag dependant species can be found in the FEIS, (FEIS p. 68 - 70). Research information on snags and down wood (i.e. Bull, 1997, GTR-319 and the Decaid Advisor), was used to increase the numbers of wildlife trees left to 4/ acre.

Comment 34: Lack of assessment of impacts to and protection of Critical Habitat Unit OR-2 precludes implementation of the Juncrock Timber Sale.

Response 34: Consultation with the U.S. Fish and Wildlife Service has been completed and they concur that the project would not jeopardize the continued existence of the spotted owl or result in the destruction or adverse modification of spotted owl critical habitat. The DEIS addresses impacts to designated critical habitat, (DEIS p. 98)

Comment 35: The DEIS did not assess how spotted owls would be impacted by interspecies completion.

Response 35: The barred owls' increasing expansion may impose a risk to the spotted owls. Corridors and riparian reserves are designed to promote spotted owl dispersal. Interspecies competition is addressed during the consultation process with US Fish and wildlife Service.

Comment 36: What is the effect of this habitat loss for fishers on denning habitat? *Response 36*: *The Fisher is addressed in the DEIS, (DEIS p. 57).)*

Comment 37: The DEIS does not adequately assess the impacts to big game (deer, elk, wildcats, bears) management indicator species in the area, or even acknowledge they exist.

Response 37: The DEIS discusses the impacts to big game management indicator species (deer and elk), (DEIS p. 58 & 59). Wild cats and bears are not management indicators species on the Mt. Hood NF.

Comment 38: The Juncrock Timber Sale will not be able to maintain sufficient canopy closure for the Oregon slender salamander in close to 100 acres of the planned sale units. *Response 38*. *The effects to the Oregon slender salamander are addressed in the DEIS, p.55-56 and the Wildlife BE, Appendix C*

Comment 39: There is no evidence the Forest Service surveyed for pine marten and Pileated woodpecker populations within the planning area. The DEIS fails to disclose where pine marten area #2151 is located and whether it will be affected by the proposed project.

Response 39: Pine Marten and Pileated woodpeckers do not require surveys. Management areas are maintained for these species. A map of management areas is included in the appendix, Map 17.

Comment 40: The USFS should have addressed the cumulative impact on fish as a result of the myriad of projects ongoing in the watershed. Because the proposed project will not contribute to the recovery of this watershed, and because the USFS is perpetuating the degradation of the area through the Juncrock project, the agency is contributing to an ongoing violation of the Clean Water Act.

Response 40: The DEIS addresses cumulative effects on fish. (DEIS p. 71). The Aquatic Biological Evaluation concludes either a "no impact" or a "no effect" determination, (DEIS, Appendix D, p. 25-29)

Comment 41: The Juncrock timber sale will certainly reduce habitat for migratory birds; however, this issue was not addressed in the DEIS.

Response 41: Migratory birds were addressed in the DEIS, (DEIS p. 52, 61-63).

Comment 42: BARK is concerned that inadequate surveys for plants, lichens and fungi were conducted. It does not say that surveys were conducted to protocol or even which species were sought.

Response 42: The DEIS discusses plants, lichen and fungi. (DEIS p.45-47and Plant BE in the appendix). Surveys were conducted to protocol. The FEIS has additional discussion on survey protocol. (FEIS p52 - 53).

Comment 43: We notice on Table 1 in the Biological Evaluation Sensitive Plant Species that surveys were performed for Lycopodium complanatum. Yet in the Document there is no mention of the outcome of these surveys, if any habitat was found, of where these surveys were conducted.

Response 43: The results of Sensitive plant species survey are discussed in the DEIS (DEIS p45-472) and in the Botany Biological Evaluation (Appendix E). No species or habitat was found for this species.

Comment 44: We are concerned that the Forest Service has not analyzed impacts to soil resources sufficiently in relation to soil's ecological importance nor in relation to the standards proscribed by law.

Response 44: The DEIS describes the effects to soils (DEIS p. 87 & 88). The FEIS is tiered to the northwest Forest Plan FSEIS, which contain a discussion of soils (p. 3&4-108) and standards for soil protection, woody debris detention and green tree retention.

Comment 45: The DEIS did not recognize the importance of mycorrizal fungi on forest growth and productivity, and failed to discuss how Mycorrhizae will be impacted by the timber project. In fact, this resource's important function in forest ecology was completely overlooked.

Response 45: The FEIS describes effects to soils and mycorrizal fungi, (FEIS p. 97). The FEIS is tiered to the Northwest Forest Plan FSEIS, which contains a discussion of soils (p. 3 & 4-108). Standards for soil protection, woody debris retention, and green tree retention are designed to provide for the needs of mycorrizal fungi and other soil organisms.

Comment 46: Bark applauds the mitigation method used for dealing with noxious weeds that involves an actual inspection of logging equipment by an authorized and qualified Forest Official. However, is there any evidence that this proposed mitigation have proved to be successful? If so, what is the success rate of this and other mitigation measures? Do you have any data? What are the risks of these measures failing? How

will building more roads and bringing in heavy machinery and other vehicles that carry noxious weed seeds assist with prevention?

Response 46: The DEIS includes a discussion of invasive plant species, (DEIS p. 88-90). The requirement to minimize spread of invasive plants is one of several nation-wide design criteria developed after years of investigation to find ways to contain the spread of certain weeds.

Comment 47: Bark cannot support the use of herbicides as a mitigation technique, given the known adverse affects of pesticides to wildlife and humans. *Response 47*: *The project is not proposing the use of herbicide*.

Comment 48: The DEIS refers to "the new scenic management system" (DEIS, 83) in its approach to meeting visual quality objectives. However Bark is not aware the MHMP has been amended.

Response 48: The management system has not been changed. The landscape handbook from 1974, which the Forest Plan used, is called the "Visual Management System." In 1995 the handbook was revised and is now called "Landscape Aesthetics." The DEIS discusses the new terminology, (DEIS p. 83).

Comment 49: The DEIS says it retains groups of regeneration in Unit 19 for multistory visual diversity and screening" (DEIS. 29). Does this mean retaining clearcuts? **Response 49**: The prescription for Unit 19, for all action alternatives is Individual Tree Selection with 10% regeneration. The prescription calls for protecting existing groups of young, established trees. The FEIS reflects this wording, (FEIS p. 32).

Comment 50: The DEIS makes no mention in this section of Trail 487A, which is a Sensitivity Level II trail, and therefore subject to scenic protection requirements (MHMP, 4-115).

Response 50: Trail #487A was not discussed in the Scenic Resources section of the DEIS. Discussion has been included in the FEIS concerning Trail #487A, (FEIS p. 90 - 92).

Comment 51: The cumulative impacts assessment surprisingly omits the Bear Knoll planning area, which is being administered by the same planning team as Juncrock. "Past present and foreseeable future activities include timber harvest, road closures and fuel treatment in the Clear, Camas, Hilynx, Diablo and Juncrock Planning areas (DEIS,78). Please explain this omission.

Response 51: Bear Knoll has been included where appropriate in the FEIS. Bear Knoll is located in fire zone IIIC, (100-200 years, mixed severity), while Clear, Camas, Hilynx, Diablo and Juncrock Planning areas are located in IIIB;(50-100 year, mixed severity) fire zone. Forest Development Road 4300 is the approximate dividing line between these two types of fire zones

Comment: 52: Road construction and harvesting in the area near Trail #487A would replace parts of the trail with a road. This is considered an unresolved issue in the DEIS. *Response 52*: *In the DEIS, Alternative IV was developed to address this issue, (DEIS p. 15, 25).*

Comment 53: The DEIS inadequately analyzes impacts to Air Quality. *Response 53*: Impacts to air quality, including cumulative impacts, are discussed in the DEIS, (DEIS p. 79 & 80).

A letter containing the following comments was received from Oregon Natural Resources Council (ONRC).

Comment 54: Developing scientifically justifiable recommendations in Watershed Analysis and then following them is one of the critical components of the Aquatic Conservation Strategy. The USFS has not followed many of the recommendations of the White River Water Shed analysis. (WRWA).

Response 54: The Juncrock Timber Sale DEIS considered recommendations identified in the WRWA (DEIS page 2), and analyzed effects on riparian reserve widths, water temperature and sediment levels. The recommendations in the WRWA for riparian reserve widths have been followed for the Juncrock proposal

Comment 55: The Forest Service calls for leaving additional trees for girdling in Unit 14R. This Unit is adjacent to Clear Creek Ditch, where LWM is undesirable due to high maintenance costs and damage.

Response 55: Units 13R, 15R, 16R, and 21R are adjacent to Clear Creek Ditch. Unit 14R is not adjacent to Clear Creek Ditch. It is located next to Unit 2, along FDR 2130000, in the northwestern portion of the planning area, approximately 1¹/₄ miles northwest of Unit 21. Unit 14 borders an unnamed tributary to Frog Creek.

Comment 56: There does not need to be a choice between snags and safety. The agency can just buffer snags from activities that involve workers, then all ecologically important snags can be protected. The agency must consider this as an alternative.

Response 56: There is no way of knowing in advance how many snags may have to be felled for safety reasons. An alternative that buffered all snags hazardous to workers would be similar to the No Action alternative.

Comment 57: An even larger problem is road density. The McCubbins gulch motorized trail area has 8.38 mils of road per square mile of trail. The remainder of the planning area has 4.45 mils of road per square mile of forest. This project will exceed the summer open road density standard.

Response 57: The DEIS discusses road densities, (DEIS p. 59). The DEIS recognizes that the McCubbins Gulch area would never meet Forest Plan standards for the OHV area. Road density is reduced in the area outside the OHV area and is moving towards the standard for summer range.

Comment 58: In actuality, mistletoe is not a problem for a forest. Mistletoe does not typically kill tress. That would not be a good strategy for an obligate parasite like mistletoe. It does reduce the growth rate of the host trees.

Response 58: Dwarf mistletoe spreads to additional host trees and intensifies within the hosts over time. As the proportion of infected branches increases, main tree growth steadily declines. When growth ceases, death follows. Heavy infections of dwarf mistletoe can indeed cause mortality of the host tree directly and also indirectly by increasing the host's susceptibility to secondary agents such as bark beetles. (Chapter 9, "Host-Parasite Physiology" in the book, Dwarf Mistletoes: Biology, Pathology, and Systematics by F. G. Hawksworth and D. Weins. 1996 Agricultural Handbook 709, USDA Forest Service, Washington D. C. 410 pp).

Comment 59: Indian Pint Fungi is a natural disturbance agent that creates habitat and is very difficult to eliminate or control with uneven age management. *Response 59: The FEIS recognizes that this disease has beneficial attributes (FEIS p. 68). The Forest Service is not proposing Indian Paint eradication.*

Comments 60: Forest insects and diseases help regulate a healthy forest. The DEIS failed to consider the beneficial effects of insects.

Response 60: Additional discussion on the beneficial effects of insects and diseases is in the FEIS (FEIS p. 68).

Responses to letter from United States Department of the Interior.

Comment 61: We encourage the Forest Service to work closely with the US Fish and wildlife Service to identify areas where additional Northern spotted owl habitat in the proposed project area can remain intact in an effort to meet the 50% total dispersal habitat goal and to maintain the effectiveness of the dispersal corridor *Response 61:* A desired goal is to maintain 50% of an area in dispersal habitat. In the Cumulative effects area, dispersal habitat is sufficient (over 50 %). (DEIS p. 54 & 55)

Comment 62: We recommend that the EIS include the water quality analysis that demonstrates that the frequency, duration and magnitude of the increases in water temperature and sedimentation in the Clear Creek watershed would be negligible. *Response 62*: *The Aquatic Biological Evaluation, Appendix D, p.9, Tables 11 & 12, displays values for the percent fines and the stream temperature summary for Clear and Frog Creeks.*

A letter containing comments was received from the Northwest Environmental Defense Center.

Some comments were similar to the ones responded to above.

Comment 63: The DEIS does not indicate the extent of impairment of water quality and fails to disclose the direct and cumulative impacts of the project.

Response 63: The DEIS discusses water quality. (DEIS p. 68) Cumulative effects are discussed. (DEIS p. 71).

Comment 64: The Data provided indicate that native Redband Rainbow Trout populations within the planning area will be adversely effected by the implementation of this project.

Response 64: The DEIS discusses Redband trout and effects to the fish. (DEIS p. 67, 69, 70, 72, and Table 3-14).

Comment 65: The DEIS does not specify the supposed "communities at risk to the uncontrollable wildfires" DEIS 78.

Response 65: Additional discussion on the communities of Pine Grove, The Bear Springs Work Center and the ODOT Work Center are discussed in the FEIS, (FEIS p. 87).

Comment 66: The DEIS does not explain the method of prescribed burn nor does it indicate the size of the units.

Response 66: There is no prescribed burning planned for this project other than the burning of slash piles as discussed in the DEIS (DEIS p. 79-80.)

Comment 67: The DEIS should consider the effects of air pollution from the project on these and other sensitive air sheds. *Response 67*: *The DEIS discusses effects to Air Quality*, (*DEIS p. 79 & 80*).

Comment 68: Road construction and the subsequent use result in increased soil compaction would lead to increased bulk density and decreased porosity. *Response 68*: *System and non-system road compaction levels are included in the 15% threshold analysis, (DEIS p. 87).*

Comment 69: The DEIS fails to specify the method of subsoiling used to mitigate compaction.

Response 69: The DEIS discusses subsoiling, (DEIS p. 87 & 88).

Comment 70: The DEIS states that the Confederated Tribes of Warm Springs have "no known traditional use areas within the project area." Were the Confederated Tribes asked for this information and was this their answer?

Response 70: Information on known traditional use areas came from a report compiled through oral interviews and archival sources, conducted over a period of four years. (Becky we should cite the report here and who prepared it. We should also make sure that the report is listed in our references in the FEIS) The Confederated Tribes of Warm Springs were contacted and no comments were received.

Comment 71: The DEIS failed to analyze effects to identified sites: Clear Creek Irrigation Ditch, a prehistoric isolate, and a historic vehicle. *Response 71*: *The DEIS discusses these sites (DEIS p. 85 & 86). The proposed alternatives would have no effect on these sites.*

Comment 72: The EA also fails to set boundaries in order to consider cumulative effects. Both spatial and temporal boundaries need to be discussed.

Response 72: The spatial area and assumptions for each resource are analyzed for cumulative effects and included in resources reports (DEIS p. 32-97).

Other Comments:

Comment 73: There should be an alternative that does not include the harvest of old growth.

Response 73: Alternative I does not include the harvest of old growth. Alternative IV does not include the harvest of trees larger than 21 inches.

Comment 74: There should be a non commercial restoration alternative. *Response 74*: A *Restoration Only Alternative is discussed in the DEIS*, (*DEIS p.17*).

Comment 75: Habitat for TE & S plants and animals shall be protected and improved. Has all habitat been protected for TE & S species except Spotted Owls? (MHMP, Four 69, FW175)

Response 75: The DEIS discusses the effects to Threatened, Endangered and Sensitive species DEIS(p.45-70). Habitat protection is provided through the standards and guidelines for these species. These standards and guidelines have been followed.

Comment 76: Wildlife Tree prescriptions shall provide for all primary cavity nesting species indigenous to the treated site. "This must include Spotted Owls" (MHFP, Four 74, FW218).

Response 76: Spotted owls do not nest in cavities on the Eastside of the Mt. Hood National Forest. Spotted owls nests are platform nests. The effects to cavity nesting species are discussed in the DEIS (p.51 & 61).

Comment 77: "What are the primary cavity nesting species for the forest zones found within Juncrock? (MHFP, Four 74, FW215)

Response 77: The primary cavity nesting species are Black-backed woodpecker, Blackcapped chickadee, Hairy woodpecker, Lewis's Woodpecker, Northern flicker, Pileated Woodpecker, Three toed Woodpecker, Williamson's Sapsucker.

Comment 78: What steps have been taken to protect B10 and B11 land allocations? (MHFP, Four 276—B10-041, B11-010, B11-024)

Response 78: There is no designated B10 (Deer and Elk Winter Range) or B11 (Deer and Elk Summer Range) areas within the Juncrock Planning Area.