November 28, 2001

Decision Record

Environmental Assessment (EA) Number: OR 054-01-115
Title: Timber Basin Wildfire Rehabilitation and Timber Salvage
Serial Number or Project Number:
Bureau of Land Management (BLM) Office: Prineville District, 3050 NE 3rd St., Prineville, OR 97754
Resource Area: Central Oregon

DECISION: The purpose of this project is to address restoration and rehabilitation of the area burned in the August, 2001 wildfire in Timber Basin. The purpose and need of this project is to address the following objectives:

Recover the economic value of the burned timber
Reduce soil erosion due to wildfire and suppression disturbance
Maximize the re-establishment of a healthy forest ecosystem
Accelerate the recovery of wildlife habitat.

As a result of my review of the Environmental Assessment, John Day Resource Management Plan, comments received from the public and consultation with staff, it is my decision to implement Alternative B as described in the EA with three modifications. The modifications are to bring two elements from Alternative C (200 foot buffers around springs, and to allow harvest of downed logs with a requirement to leave at least 300 feet of downed logs/acre in the non-intensely burned areas and green tree thinning areas) and one element from Alternative D (green tree thinning).

The following detailed descriptions of the decisions are divided into actions related to rehabilitation and actions related to harvest.

Rehabilitation: (See EA, pages 11-12, section 2.2.1 and pages 16-18, section 2.5.1 for complete details)

Decision: Newly created roads and dozer lines in the area as a result of fire suppression activities would be reclaimed, and returned to a natural condition through ripping, re-contouring (slope and drainage), grass planting, weed treatments and wood refuse or live tree placement. This would minimize soil loss and erosion due to motorized use in these areas.

Decision: Pre-existing trails that were used for fire suppression activities and roads created for harvest activities will be closed and rehabilitated through ripping, re-contouring (slope and drainage), grass planting, weed treatments and wood refuse or live tree placement. This includes the road along the upper end of Franks Creek from the northeast corner of Section 25, T. 11 S.,

R. 26 E. to the junction of uppermost private land access route in the northwest corner of section 29, T. 11 S., R. 27 E.

Decision: Improve upper Dick Creek road where dozed by shaping and smoothing, adding turnouts, and then surface with rock.

Decision: The following pre-existing roads would be left open. In NW1/4, of Section 20, T. 11 S., R. 27 E, the road the that accesses along the rim to the east and in NE1/4, of Section 19, T. 11 S., R. 27 E, the road that accesses along the rim to the west. In SE1/4, SE1/4, of Section 30, T. 11 S., R. 27 E, the road that accesses the gravel pit. In SW1/4, SE1/4, of Section 30, T. 11 S., R. 27 E, the road that accesses private land. This last road would be improved to include water bars and rolling dips in order to limit erosion from this source. Drain dips and a rocked dip where the road crosses the drainage will also be installed. These actions would curtail erosion from this road entering the drainage. The main public access roads known as Franks Creek and Dick Creek roads would also be left open.

Decision: Reconstruct ephemeral drainage crossings across roads and dozer lines, use straw mats, sedimats or hydro-seeding to curtail erosion in these areas. Hydro-seed/hydro-mulch with native species in site-specific areas associated with road and dozer lines with potential for excessive erosion. Soil disturbance associated with rehabilitated dozer lines would be hydro-seeded. Disturbance areas associated with culvert installation would also be hydro-seeded. Any future sites with erosive problems associated with the burn and rehabilitation activities may be hydro seeded if that is deemed the cheapest, most ecologically sound option.

Decision: Rehabilitate disturbed springs with straw mats, hand re-seeding of native riparian vegetation, spring along Franks Creek road lower end -- re-seed, install a trough and fence to protect spring from livestock disturbance, and return this spring to a functioning condition.

Decision: Contour fall in steep slope within the intensely burned areas to limit overland erosion, using small diameter trees in specific spacing.

Decision: Aerial seed intensely burned areas to promote soil retention and limit erosion. Aerial seed winter wheat in the fall of 2001, replant/reforest in spring 2002 with desirable tree species in percentages that are consistent with the potential natural community, and in the fall of 2002 seed desirable perennial native and non-native grasses if natural regeneration is not occurring (i.e. significant areas of soil and ash without evidence of regeneration occurring)

Decision: Replant aspen, other desirable hardwoods and desirable shrubs (elderberry, chokecherry, huckleberry, mock orange, etc.) in specific areas such as springs or seeps or within the drainages.

Decision: Close entire burn area to off-road motorized access for a period of 5 years. This closure would address concerns for soil erosion and establishment of grass cover, reforestation concerns for establishment of tree seedlings, and concern for wildlife habitat and disturbance.

Compliance with closure and potential impacts would be re-evaluated at the end of 5 years to determine if additional closure time is needed to address concerns.

Decision: Rest pastures containing portions of the burn area from livestock grazing for a minimum of 3 years to promote the re-establishment of grasses and minimize soil and erosion concerns. Replace 6 miles of fence destroyed or damaged during the fire. The portions of these pastures that were not burned may be grazed in compliance with existing leases if controls are put in place that keep cattle out of the burned areas.

Decision: Plant approximately 20 acres of shrubs preferred by wildlife and Native Americans to provide for cultural concerns identified in coordination.

Decision: Close entire area to firewood cutting for ten years in project boundary to protect snag retention in the area. Designated firewood cutting areas may be identified to meet management objectives.

In accordance with existing decision of the District Noxious Weed Management EA No. OR-054-04. (USDA-BLM 1994), we will treat weeds if they occur within the project area.

Harvest: (See EA, pages 12-13, section 2.2.2 and 2.3.2; page 16, section 2.4.3; and pages 19-20, section 2.5.2 for complete details).

Decision: Within the intensely burned areas snag numbers would equal 150 percent of the high end natural variability as defined by the Ochoco National Forest historic range of variability (HRV). In non-intensely burned areas snags numbers would equal 100 percent of the high-end natural variability. All downed logs in intensely burned areas would be left and a minimum of 300 linear feet/acre of downed logs would be left in non-intensely burned areas, 40 percent of which would be in the >=20 inches size class, with a minimum of 12 inches diameter at the small end, to provide for species which use downed wood such as amphibians. Snags would be left in a combination of pockets and scattered spacing. When snags are felled for safety concerns alternate snags would be retained.

Decision: All intensely burned areas (approximately 450 acres) would be commercially harvested removing all commercially viable trees except for those left as snags.

Decision: Within the non-intensely burned areas, commercially harvest the approximately 40 percent of dead trees that were killed by the wildfire (approximately 200 acres), except for those left as snags. All burned areas smaller that one acre would remain un-harvested to limit ground disturbance. A dead tree is defined as one having <=30 percent live crown remaining. Approximately 3 mile of new roads and landings would be created and subsequently obliterated upon completion of harvest.

Decision: All intermittent and ephemeral streams would have a 100-foot no harvest activity buffer (on each side) to limit disturbances near drainages and protect water quality. This is

consistent with direction regarding key watersheds contained in PACFISH and subsequent consultation.

Decision: All springs will have a 100-foot no harvest activity buffer. Additionally green harvest activities will not occur within 200 feet of a spring.

Decision: Pre-commercial and commercial thinning would occur in even aged forest stands with dense seedling/sapling under story and >=40 percent canopy closure (approximately 100 acres). All multi-layered canopy areas of mixed conifers and 5 percent of all unburned thicket areas would remain undisturbed. All live trees >=21 inches DBH would remain unharvested.

Decision: Harvest activities would occur between December 1 and March 31, and meet either of the following conditions: 1) occur over 4-6 inches of frozen ground and a minimum of 10 inches of snow; or, 2) if a No Effect determination for cultural resources is made in this area, ground disturbance would be limited to 20 percent of the areas entered for timber harvest. These actions would limit ground disturbance from harvest activities.

Decision: All trees with identified raptor nests would be retained and a wildlife biologist will be consulted regarding possible mitigation measures.

Decision: Where possible utilize existing roads and trails for decking/landing areas to limit disturbance in the area.

Decision: Existing log decks are included in harvest and would be removed.

Decision: Retain 100-foot buffer on 75 percent of undisturbed, unburned rock outcroppings. A rock outcrop is an area of exposed rock with a very steep to vertical slope that is >=10 feet high.

Decision: Green trees would be yarded whole and the slash piled at landings to be burned upon completion of harvest to minimize slash loads in the harvest areas.

Decision: No replanting of tree species in unburned areas.

Decision: All skid trails would be at least 100 feet apart.

Decision: Harvest method types are designated based on topography and slope. Based on soil compaction and erosion concerns due to topography (i.e. slope) the entire analysis area has been designated for particular harvest methods B aerial yarding or ground-based yarding (i.e. helicopter vs. tractor). A 35 percent slope cut-off was used to divide these areas. Harvest entry with ground based methods would be subject to the following criteria: either 1) 4-6 inches of frozen ground and 10 inches of snow; or 2) without snow and frozen ground a maximum of 20 percent mechanical disturbance to harvested area limit is imposed. There would be no skidding through untreated tree stands.

Decision: Haul activities would be restricted to July 1 to March 31 on the Franks Creek road to prevent dust transfer from the road into the stream. This will protect steelhead eggs that may still be in the gravel and not yet hatched.

Decision: The Franks Creek Road will have surface rock added in spots as needed on the lower section below mile 9.35. The upper portion between mile 9.35 and 14.1 will have new surface rock applied. Two culverts would be installed to address capacity and erosion concerns.

Decision: A calcium chloride dust abatement treatment will be applied to both Dick Creek and Franks Creek Roads during restoration and harvest activities where necessary to minimize fine sediment entering the stream.

Alternatives Considered:

Alternative A - No Action - This alternative does not include any further management actions beyond suppression activities. The conditions as a result of the fire in Timber Basin would remain. Natural processes would be the sole driving force in the recovery process. No salvage harvest would occur. No timber harvest in green areas. Separate from this analysis all dozer lines created as a result of fire suppression activities have had some rehabilitation such as installing water bars to drain water and to stabilize soils. The dozer lines would not be effectively closed to motorized traffic. The four allotment management pastures that were included within the burn boundary would be rested from grazing for a period of two years. This alternative addresses recovery of wildlife habitats, soil erosion and productivity at a rate of natural recovery. It does not address recovery of any economic value, nor does it address management actions to promote forest health concerns.

Alternative B - Rehabilitation and Salvage - This alternative describes active rehabilitation of the analysis area (i.e. the burn boundary and associated access roads to area) and salvage harvest of dead timber. This alternative seeks to address the objectives through promoting a return to a desirable condition based on potential natural vegetation, forestry, wildlife, soils and hydrology values, and recovering the value of the burned timber. Active rehabilitation efforts are proposed to minimize soil loss and mitigate for soil impacts from suppression activities and several pre-existing roads in the area. Harvest activities would recover the economic value of he burned timber and lower the probability for insect infestations which could impact green trees in the area.

Alternative C - Rehabilitation, Salvage and Green Tree Thinning 1 - This alternative describes active rehabilitation of the analysis area (i.e. the burn boundary and associated access roads to area), salvage harvest of dead timber and green tree commercial and pre-commercial thinning in areas with >=70 percent canopy closure. This alternative seeks to address the objectives through promoting a return to a desirable condition based on potential natural vegetation, forestry, wildlife, soils and hydrology values, recovering the value of the burned timber, and treating specific areas with overstocked conditions. Active rehabilitation efforts are proposed to minimize soil loss and mitigate for soil impacts from suppression activities and

several pre-existing roads in the area. Harvest activities would recover the economic value of the burned timber and treat green tree areas that are overstocked and exhibit marginal forest health. Harvest activities would be limited to areas greater than 1-acre in size and would use the existing roads and dozer lines wherever possible. Green tree thinning areas would total approximately 145 acres and would harvest evenly within all age classes to enhance forest health within these areas and maximize the time-frame before re-entry for management purposes is necessary.

Alternative D - Rehabilitation, Salvage and Green Tree Thinning 2 - This alternative describes active rehabilitation of the analysis area (i.e. the burn boundary and associated access roads to area), salvage harvest of dead timber and green tree commercial and pre-commercial thinning in areas with even aged stands and >=40 percent canopy closure. This alternative seeks to address the objectives through promoting a return to a desirable condition based on potential natural vegetation, forestry, wildlife, soils and hydrology values, recovering the value of the burned timber, and treating specific areas with even aged and overstocked conditions. Active rehabilitation efforts are proposed to minimize soil loss and mitigate for soil impacts from suppression activities and several pre-existing roads in the area. Harvest activities would recover the economic value of the burned timber and treat green tree areas that are overstocked and exhibit an even aged, stagnated structure. Harvest activities would be limited to areas greater than 1-acre in size and would utilize the existing roads and dozer lines; no new road would be created. Green tree thinning areas would total approximately 100 acres and would not harvest trees >=21 inches DBH to promote retention of the large structure.

Rationale for Decision: The decision to select Alternative B with modifications was based on the following factors. The Timber Basin area is managed under direction given by the John Day Resource Management Plan (RMP) and associated Record of Decision (USDI BLM, 1985a & b). The RMP designates this area as part of the BLM commercial timber base managed for timber production. All actions in this decision are consistent with the RMP or are consistent with guidance and direction that supercedes the 1985 RMP such as the Environmental Assessment for the interim strategies for managing anadromous fish producing watersheds in eastern Oregon and Washington, Idaho and portions of California (PACFISH) and best available science.

The economic value of timber was impacted by the wildfire and can only be realized by a salvage timber sale. This value significantly diminishes with the amount of time that passes until it is harvested. Recovering the economic value of the burned timber would be a benefit to the local economy. The decision ensures an economic return to the public from the burned timber.

The wildfire and associated suppression activities greatly increased the potential for soil erosion, A decrease in soil productivity due to displacement of topsoil and surface compaction can be expected from natural processes as well as from ground based harvest activities. Protecting soils from displacement or compaction during and after harvesting activities is important for soil retention and productivity. The decision includes rehabilitation efforts, area closures, and other measures to reduce soil erosion due to the wildfire and suppression disturbance.

Based on the environmental analysis, the decision will silviculturally manipulate green stands with the objective of increasing growth rates while providing a timber resource. This decision promotes the retention and development of the large tree component, reduces the risk of further structure loss from insect attack, minimizes additional loss of cover values, maintains multi structure stands, and provides a diversity of vegetative and habitat conditions. Forest Health conditions prior to the fire were marginal and declining in some places. Several areas remain that exhibit effects of years of fire suppression such as high stocking densities or stagnated growth. A commercial harvest of the green trees coinciding with salvage harvest eliminates the need to re-enter this area for 20-50 years. The types of harvest methods used and mitigation actions stipulated accommodate resource concerns. The decision therefore includes green tree harvesting to aid in the re-establishment of a healthy forest ecosystem.

There are no designated critical habitats in the project area. The decision contains mitigation measures for special status and locally important species. Effects analysis determined there would be no significant effects to special status species. The decision protects existing cover values and reduces the time frame to re-establish cover values in the burned areas. Decisions specifically leave a variety of habitats including refugia areas at springs, multi-structural stands, large structure components and snag levels needed for sensitive species. Rehabilitation and revegetation actions will accelerate the recovery of wildlife habitats.

The decision will provide adequate public road access to the public lands within the burn area, and will best balance the need for public access with the need for natural resource protection. Public road access will be available to within one half mile of nearly all public acres within the burn area, providing appropriate access to recreation opportunities for a variety of uses. Closing the burn area to off-road vehicle travel for five years during the rehabilitation period will minimize soil erosion, protect grass and seedlings from trampling, limit the introduction of weed seeds in newly disturbed soils, and reduce disturbance to wildlife and habitat until vegetation cover becomes re-established.

In summary, the EA and other information available indicates that within the project area there are no resident threatened or endangered species, no flowing perennial water, no other critical resources, and that the area is already roaded. Mitigations have been integrated within the decisions to address local effects. The decision is a combination of Alternative B as described in the EA with three modifications. The modifications do not change the effects analysis that is already presented in the EA. The direct, indirect and cumulative effects are not significant. A decision that is consistent with the RMP direction for commercial forestland is appropriate. The decision is consistent with the objectives stated in the purpose and need, which are to: recover the economic value of the burned timber, reduce soil erosion due to wildfire and suppression disturbance, maximize the re-establishment of a healthy forest ecosystem, and to accelerate the recovery of wildlife habitat.

Thirty-two comments on the EA were received from a variety of individuals and organizations. A summary of the comments and response to those comments is attached. Major topics addressed by the comments were: concern about reducing vehicle access to the area, NEPA

adequacy including adequacy of cumulative effects analysis, the number of snags to be left and method used for determining snag numbers, and the potential economic impact of a timber sale on the local economy.

Compliance and Monitoring: A complete monitoring plan is described on page 25 and 26 of the EA. In addition to the monitoring described in the EA, we will also monitor the effectiveness of the 5-year area closure to determine if additional closure time is needed.

Terms / Conditions / Stipulations: All terms, conditions, stipulations or mitigations are included as part of the decisions described above.

Protest/Appeals: Please take note that the Rehabilitation and Harvest decisions are made under different authorities that require different procedures for protests and or appeals.

The "Rehabilitation" portions of this decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4 and the enclosed Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error. If you want to file a petition (request) (pursuant to regulation 43 CFR 4.21 [58 FR 4939, January 19, 1993]) for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted. Except as otherwise provided by law or other pertinent regulation, a petition for stay of a decision pending appeal shall show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied,
(2) The likelihood of the appellant's success on the merits,
(3) The likelihood of immediate and irreparable harm if the stay is not granted, and
(4) Whether the public interest favors granting the stay.

For the "Harvest" portion of this decision, the timber sale notice, that is scheduled to be published on November 29, 2001, in The Central Oregonian, constitutes the decision document for purposes of protests, under 43 CFR subpart 5003 - Administrative remedies. Protests of any sale listed in that notice must be filed within 15 days after first publication of that notice, to be the Contracting Officer at the above address.

Sincerely,

Christina M. Welch,
Field Manager, Central Oregon Resource Area

Attachments: Finding of No Significant Impact, Timber Basin Wildfire Rehabilitation and Timber Salvage, EA No. OR 054-01-115
Response to Comments, Timber Basin Wildfire Rehabilitation and Timber Salvage, EA No. OR 054-01-115

Finding of No Significant Impact

Timber Basin Wildfire Rehabilitation and Timber Salvage
Environmental Assessment (EA) No. OR 054-01-115
Prineville District Bureau of Land Management, Central Oregon Resource Area

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Summary of Proposed Action and Alternatives

An interdisciplinary team of resource specialists at the Prineville District BLM has analyzed a proposal to address restoration and rehabilitation of the burned area from the August, 2001 wildfire in Timber Basin. The primary focus and aim of this project is to address the following objectives: Recover the economic value of the burned timber; Reduce soil erosion due to wildfire and suppression disturbance; Maximize the re-establishment of a healthy forest ecosystem and Accelerate the recovery of wildlife habitat. The detailed description of the decision and rationale are in the Decision Record for this proposal. A no-action alternative was also considered.

FONSI Determination

Based on the information contained in the EA, and other available information, it is my determination that the preferred alternative would not constitute a major federal action significantly affecting the quality of the human environment. My reasons for this determination are:

- There would be no significant, adverse impacts to air quality, water quality or stream channel morphology.
- There were no identified impacts or issues related to public health or safety or related ot Environmental Justice (E.O. 12898).
- Cultural resources would not be expected to be impacted.
- There would be no significant impact on Threatened, Endangered or Sensitive plants or animals within the affected area.
- Wetlands and floodplains do not exist in the area, and would therefore not be impacted.
- The proposed action is not part of any other action having potential for cumulatively significant impacts to the important or relevant resource values for the area involved.
- The area is not within an Area of Critical Environmental Concern, Wild and Scenic River boundary or Wilderness Study Area, so no impacts to those resources would occur.

An Environmental Impact Statement is therefore unnecessary and will not be prepared. The proposed action and alternatives are consistent with the John Day Resource Management Plan (RMP) and associated Record of Decision (USDI BLM, 1985a & b).

Approved: _____ _____

Christina M. Welch — Date
Field Manager, Central Oregon Resource Area

Response To Comments
Timber Basin Wildfire Rehabilitation and Timber Salvage
EA No. OR-054-01-115

The Timber Basin EA No. OR 054-01-115 was released on November 1 for a 15-day public comment period. During this period 32 comments were received by the BLM. Each letter was assigned a number (i.e. – TB-14, denotes Timber Basin letter #14), and then subsequently reviewed. Comments were extracted from these letters, compiled and grouped into lists of similar concerns. The BLM summarized these concerns into one statement and responded to the concerns. The following report includes summarized concerns, specific comments and BLM responses and actions with regard to these concerns and comments. Each concern is labeled and followed by a list of letters received that include comments regarding the same concern. At the end of this report is a list of the letters and authors so it is possible to track comments made in a specific letter to the BLM response. This document is divided into sections:

I. NEPA Adequacy:

1. Comment: The EA violates the National Environmental Policy Act because:

1. The public comment period was less than 30 days;
2. Scoping with interested public was not done;
3. The purpose and need was defined too narrowly;
4. The EA did not present a full range of alternatives;
5. Existing conditions were not disclosed, in particular special status plants and fish;
6. Status of old growth forests were not disclosed;
7. Science regarding insects in forests and their interactions with other species was not disclosed;
8. The EA does not address or disclose specific concerns regarding: wolverine, black-backed woodpeckers or Neotropical migrant bird species;
9. The EA does not disclose the effects of salvage harvest activities as described in the Beschta Report;
10. The EA does not disclose consultation with other state and federal agencies;
11. The EA violates the National Forest Management Act, Clean Water Act, Administrative Procedures Act, Endangered Species Act, PACFISH and Oregon State Law.

12. The EA does not accurately disclose the draft status of the Ochoco Viable Ecosystems Management Guide.
13. The Ochoco Viable Ecosystems Management Guide for snag retention levels is not consistent with the John Day RMP.
14. The EA proposes reseeding the forest area with native and non-native grasses.
15. The EA does not adequately disclose cumulative effects.

(Included in letters TB-01, TB-02, TB-04, TB-05, TB-06, TB-07, TB-08, TB-09, TB-10, TB-11, TB-12, TB-13, TB-16, TB-17, TB-19, TB-20, TB-22, TB-24, TB-26, TB-27, TB-28)

Response:

Scoping/Public Comment - The BLM did not violate NEPA guidelines regarding public comment periods or scoping with respect to the Timber Basin EA. The National Environmental Policy Act does not address EA/FONSI comment or scoping periods. The Council of Environmental Quality (CEQ) guidelines state that the federal agency must notify the public of the availability of the EA/FONSI, but these guidelines do not require a comment period except in certain limited circumstances (where an EIS is normally required, or where the action is without precedent). The BLM NEPA Handbook states that public review of an EA/FONSI is optional, at the discretion of the authorized manager (page IV-6). State Office IM No. OR-92-243 reiterated the above guidance, and also included a reminder that some programs have specific EA/FONSI comment period or Decision Record protest period requirements. Upon completion of the EA a copy was sent to all interested public interests that have requested to be on the BLM mailing list for project and planning activities. A 15-day public comment period was provided with notice of the availability of the EA. During this period numerous substantive comments were received, in specific instances where an interested public expressed concern over the short comment period a field tour with BLM personnel was arranged to capture comments and concerns.

Purpose and Need & Range of Alternatives - The Purpose and Need for the Timber Basin EA was defined with regard to post-fire conditions such as dead timber and soil disturbance caused by fire and suppression activities. The Purpose and Need is also consistent with the land use allocation and John Day RMP which guides management within the Timber Basin Area (see EA page 8 &9). As directed by FLPMA, the BLM is required to manage timber resources under principles of multiple use and sustained yield, obtain fair market value for the timber removed, and to improve forest stand health. Within this context and based on the objectives described on page 6 of the EA, a full range of alternatives was considered within the EA. An objective of improving and maintaining the Timber Basin area is to limit the probability of a catastrophic – stand replacement fire occurring again. Fire suppression has created forest stands that are outside of historical ranges of variability. Fires have become less frequent but more intense leading to stand-replacement conditions (Everett 1995). “Unless dead material is removed and stands are subsequently managed for historical tree densities, future fuel loadings will be outside the historical range of variability for both live trees and dead and

down, creating the potential for intense reburn situations" (Everett 1995). The BLM therefore considered any alternative, which did not address removal of heavy fuels as an unreasonable option and would not meet the purpose and need or management direction in this situation.

Existing Conditions - The EA did disclose the existing conditions within the project area. A succinct project area description was included in Chapter 3 of the EA (page 27-28). Further descriptions of existing conditions can be found in the EA – Chapter 4 – Alternative A, under all resources described, and Appendix C for specific wildlife conditions. Several pertinent conditions within the area were discussed and included within specialist reports for preparation of the EA, these include special status plants and fish.

Prior to release of the EA a special status plant botanical survey was conducted in the Timber Basin Area. Surveys in the Timber Basin and the surrounding areas have not discovered any special status plants. Considering the habitat and the results of these inventories it is highly unlikely that there are special status plants within the Timber Basin Area. However, several species could conceivably, though unlikely, be found within the riparian areas. These species include: *Carex hystericha, Carex interior, Juncus torreyi and Thelypodium eucosmum.* It is also possible that *Achnatherum hendersonii* could occur on the 'scab' flat areas within the project area.

The Timber Basin Area is located within a watershed, which provides habitat to listed mid-Columbia River steelhead. The lower portion of Franks Creek, approximately 3 miles, is accessible and utilized by steelhead on a periodic basis when stream flows allow. Approximately 3 miles upstream of the mouth Franks Creek flows over an impassable fish barrier created by a bedrock falls. There is no anadromous fish passage above this point. The Timber Basin Area is approximately 7 miles upstream of this barrier and does not provide habitat for resident or anadromous fish.

Old Growth Status/Insect Interactions - The status and conditions of old growth forest habitats within the basin were disclosed and are discussed in the EA – Appendix C page 3. There are varying definitions of old growth, the EA uses a designation of "Large Structure" to describe this resource and addresses Large Structure conditions on page 43 and in Appendix C pages 5, 13, 14, and 15. The effects of insects and their interactions within the forest habitat were described within the EA – Chapter 4 under Silvicultural Resources (page 36-41). Numerous references were incorporated into the analysis including Miller and Keen 1960, Scott 1999, Everett 1995a, and Scott et al. 1996.

Specific Wildlife Concerns - Wildlife species considered likely to utilize the Timber Basin Area were addressed and concerns disclosed in the EA, including the black-backed woodpecker and neotropical migrant species (see EA – Appendix C). California wolverine (*Gulo gulo*) are not considered a BLM sensitive species, and thus were not addressed. Although analysis is not required the following information is provided: The analysis area is a relatively small piece of marginal reproductive habitat surrounded by

larger areas with minimal foraging and dispersal potential. The road density and reduced canopy cover from the fire have removed potential for any possible wolverine reproduction within the analysis area. Thus this area only has the potential to function as foraging or travel habitat. Project activities have the potential to disturb local use for a short period of time; however, there are sufficient areas for wolverine to travel through and habitats will remain as foraging habitat after all project activities are completed. Alternative C and to a lesser extent D would reduce the cover values that would provide security during foraging activities but would not significantly alter habitat values.

Disclosure of Beschta Report - Numerous references and scientific literature were available and utilized by the team that prepared the EA. Included among these sources are the Beschta et al. (Beschta 1995) report and the Everett (Everett 1995) review of this report. Both of these documents were considered within the context of Timber Basin when formulating and analyzing the alternatives. Beschta et al. offers specific guidance for a management philosophy regarding post-fire salvage harvest. Many of these suggestions were incorporated into one or more alternatives. Alternative A, the No Action alternative portrays the general guidance of the Beschta et al. report; to allow ecosystems to recover naturally, that 'with respect to the need for management treatments after fires, there is generally no need for urgency, nor is there a universal, ecologically-based need to act at all' (Beschta et al. 1995). The BLM concurs with the opinion of Beschta et al. that 'soils are particularly vulnerable in a burned landscape', and that there is a higher erosion potential in the Timber Basin Area as a result of the fire. Alternatives that propose ground disturbance within the EA either for rehabilitation or timber salvage provide measures within their design that would minimize impacts to soils and promote retention and stabilization of the soils (See EA – Chapter 2 page 19, Chapter 4 – Soils page 29-31). Optimal timeframes for implementation would provide grass seed to unstable soil areas in fall/winter 2001, harvest activities would occur in winter 2001-2002 with completion on March 31, 2002. Reforestation efforts would occur in April 2002 followed by obliteration and reclamation of dozer line and roads. In the fall of 2002 if natural grasses do not recover as expected an additional seeding of native and desirable-nonnative grasses would be applied. If this timeline were achievable actions described within the EA would maximize the potential for an economic benefit from removal of dead trees and maximize the potential to retain and stabilize soils on the burned areas. Delay in this timeframe would delay implementation of rehabilitation efforts, salvage harvest, and recovery of the ecosystem until management actions are entirely finished.

Consultation and Coordination - As stated in the EA page 57 the BLM coordinated and consulted with several agencies. In Appendix C the EA describes the coordination with the Level 1 team regarding consultation for Canada Lynx, the only listed terrestrial species with potential habitat within the area. In addition ODF&W provided input and concerns to the project that were available to the team during design and analysis of the project. The Timber Basin area lies within a watershed that provides habitat to listed steelhead. Listed steelhead utilize habitat within Franks Creek, below an anadromous barrier that is approximately 7 miles downstream of Timber Basin. Another barrier – a pond on private lands just below Timber Basin further limits fish presence in Timber

Basin and reduces water quality concerns such as sedimentation downstream. Other actions such as haul route seasonal restrictions and dust abatement treatment on the Franks Creek road eliminate the concerns for listed fish as a result of this project. For these reasons a 'No Effect' determination has been made for steelhead in regard to implementation of this project.

Violations of Laws and other Planning Documents - Based upon guidelines used in design and analysis and subsequent review of the EA at the district level the EA is in conformance and meets the requirements of FLPMA, NEPA, ESA, CWA and other applicable laws. The EA also conforms and complies with all management planning direction including the John Day RMP, PACFISH and other applicable management documents such as Biological Opinions. Specific PACFISH buffers of 100-feet for all streams and springs within the area protect and maintain riparian management objectives (RMO's) as described in PACFISH. Beyond compliance and conformance with these Federal laws and management documents it is difficult to respond to violations of these and other laws without specific reference to what legal requirements are not being met by the EA.

Viable Ecosystems Management Guide - The EA does not claim that the Ochoco Viable Ecosystems Management Guide was formally peer reviewed or finalized. However, as stated in the EA in Appendix C – Addendum to Wildlife Report, numerous scientists (Governor Kitzhaber's Science team and scientists associated with ICBEMP) have reviewed completed analysis processes that have utilized the rationale contained in the Viable Ecosystems document.

Appendix C of the EA "Addendum to Wildlife Report" addresses the rational for the use of the Ochoco Viable Ecosystem snag numbers and details how this decision is consistent with existing RMP direction.

The Prineville BLM has reviewed snag allocation methods and levels used in several other local sales. There are many different variables associated with each of these sales; however, each of these sales had similar approaches to determining appropriate level and distribution of snags. The approach used in this EA is consistent with that used in these sales and current literature. The numbers prescribed in all of the alternatives meet those specified in the latest scientific reviews that determine habitat parameters necessary for cavity dependant species, while recognizing the unique habitat conditions created by intense fires.

Grass Seedings - Most desirable non-native grass species have root systems similar to native species found within the Timber Basin Area. When both native and non-native grass species are planted on sites that are disturbed or have experienced a reduction in perennial vegetation, or are dominated by annual grasses or noxious weeds, an increase in watershed functioning is expected. These functions include: increasing infiltration of moisture, reduction in overland flow in response to precipitation, increasing the time and amount of water temporarily stored in the ground and a reduction in soil erosion via

overland flow (John Day River Proposed Management Plan FEIS 2001). Soil retention and erosion minimization is a primary objective of the EA, as described in Everett (1995) seeding of desirable non-native species in management situations is preferred over soil loss. The EA proposes fall/winter 2001 seeding of desirable non-native grass species - specifically winter wheat, which is a sterile, non-persistent species that is commonly used in fire rehabilitation areas such as Timber Basin. This action would promote soil retention during spring runoff periods in 2002. Additional seeding of perennial native and desirable non-native grasses could occur in fall 2002 if natural recovery process are not functioning to restore the grass component which functions to reduce erosion.

Cumulative Effects – The EA discloses cumulative effects for actions proposed with the Timber Basin Area- see EA – Chapter 4 – Cumulative Effects sections under each resource discussed and Appendix C – the wildlife report for cumulative effects analysis with regard to wildlife. In addition the following discussion is provided to further augment and clarify the cumulative effects analysis as described in the EA for the specific decision described in the Decision Record.

A. Soils/Hydrology

On a watershed scale, when the fire removed coniferous vegetation at the Timber Basin Burn it reduced the transpiration component of the water balance equation. Although few of the springs burned, the increase in water yield may express itself in increased flow from the springs. Natural recovery of forest vegetation within the fire area would continue at a slow pace, so evapo-transpiration and precipitation interception would be far below pre-fire levels. The reduced canopy cover would allow more solar radiation and higher air temperatures to ripen the snow pack more quickly. As a result, peak discharge may occur earlier in the spring. (EA page 27)

Forested and heavily vegetated drainage basins usually produce floods of smaller peaks and longer durations than comparable bare basins. Until the adequate regeneration of forest vegetation, more water will be available for runoff. This may have the effect of increasing peak flows. These effects are expected to be minimal in the Dick Creek and Ferris Creek watersheds. However, the burned portions of the more dendritic Frank Creek Watershed are steep exposed slopes that funnel down into a pour point near the project boundary. Peak flows are generally more attenuated in round watersheds than in long narrow ones like Ferris Creek. Therefore Franks Creek may experience an increase in peak flows. (EA page 31)

Water temperature is the limiting parameter in most streams in the Upper John Day Sub Basin. However, stream temperature is not a critical issue in this project area because of the nature of the streams. All of the streams are intermittent or ephemeral; so they are dry in July and August when 303d listed streams in Eastern Oregon exceed the state standards for water temperature.

An increased sediment load downstream from Franks Creek could widen the channel

downstream of the project area during spring runoff, thereby increasing water temperatures. This is unlikely because the reservoir on private land downstream is expected to capture this sediment.

Fire suppression activities significantly increased the road densities of the Franks Creek, Dick Creek, and Ferris Creek Watersheds (see road density and stream density charts below). Road densities increase the drainage network. This increase in the drainage network results in higher sediment supplied to the stream. Increases in the drainage network and sediment yield may result in increases in stream channel widths and excessive deposition. (Duncan and others, 1987) (Dose and Roper, 1994) (Harr et al. 1975) (Harr et al. 1979).

BLM's decision does not return road densities in the affected watersheds to the levels prior to the fire because new cat lines on private lands have not been rehabilitated. Nonetheless, the decision leaves open enough roads to allow adequate access and still moves the road densities toward pre-fire suppression activity levels. Private land owners in the Franks, Ferris, and Dick Creek Watersheds are currently harvesting timber, and it is likely that harvest activities on private lands will continue to contribute to the elevated road densities in these watersheds.

The following table provides a landscape scale view of stream densities, which can be compared to road densities and illustrates the context of the project area analysis with respect to streams.

Watershed	Total Sq. Miles	Miles of Streams	Stream Density (mi/mi^2)
Franks Creek	26.2	97.7	3.7
Ferris Creek	8.6	41.3	4.8
Dicks Creek	9.3	41.8	4.5

The following table provides a watershed and project oriented view of road densities in the affected watersheds. It illustrates the changes in road densities from pre-fire, to post-fire (no action alternative), to post-implementation as described in the Decision Record. The table quantifies the cumulative improvements in watershed health as a result of road densities, in response to implementation of the decision.

Watershed	Road Density prior to fire (mi/mi^2)	Road Density in the No Action Alternative (mi/mi^2)	Road Density after Implementation (mi/mi^2)
Franks Creek	1.65	3.07	2.63
Ferris Creek	0.75	1.85	1.49
Dick Creek	0.92	2.51	2.36
Project Area	2.54	9.00*	2.54

* Reflects existing mechanical fire line. Watershed numbers do not reflect fire lines on public or private lands.

Reducing off-road motorized access will prevent increases in user made trails and subsequently higher road densities throughout the project area. The decision to close the burn area to off-road vehicle use for 5 years will also improve the success of riparian and erosion control planting by eliminating the possibility that vehicle will inadvertently kill newly established vegetation.

Current and future woody debris filters sediment from surrounding disturbed areas, maintains bank-stabilizing characteristics, and maintains natural sediment loads in the channels. (USDI BLM 1998). While the Timber Basin Fire had the positive effect of opening the riparian area to sunlight, it also changed the availability of large wood in the future. The stream channel reaches that were included in the intensely burned areas will experience increased tree mortality. After about seven years, the roots of most dead trees will no longer hold them during windstorms and many will fall across the stream channel. This increase in large woody material will capture bedload, aid floodplain development and dissipate energy. However, the wood and the accumulated bedload sometimes move down stream as debris torrents. At tributary junctions, debris jams form terraces that provide superior growing sites for riparian trees. As the debris moves into the 3rd to 6th order streams it functions to line banks, form ponds, and sort gravels. (USDI, 1998) The reservoir on private land downstream limits this function on Franks Creek. However, the forested headwaters of Ferris Creek lie within the project area, and will supply large wood to the Ferris Creek main channel.

Until the intensely burned areas adjacent to the streams regenerate, the unburned portions of these forested headwaters are the only source of large wood for these watersheds. The decision to maintain 100-ft buffers around these areas will ensure a balanced amount of large wood is available to the affected watersheds in the interim.

Resource Sciences Center, *Riparian Area Management Technical Reference* 1737-15, 1998.

Dose, J.J. and Roper, B.B. "Long-term changes in low-flow channel widths within the South Umpqua watershed, Oregon." Water Resources Bulletin 30, no. 6 (1994): 993-1000.

Duncan, S.H., Bilby, R.E., Ward, J.W., and Heffner, J.T. "Transport of Road Surface Sediment through Ephemeral Stream Channels." Water Resources Bulletin 23, no. 1 (1987): 113-119.

Harr, R.D., R.L. Fredrickson, and J.Rothacher. 1979. Changes in streamflow following timber harvest in southwest Oregon. USDA Forest Service Res. Paper PNW-249. 22pp.

Harr, R.D., W.C. Harper, J.T. Kryhier, and F.S. Hsieh. 1979. Changes in storm hydrographs after roadbuilding and clearcutting in the Oregon Coast Range. Water Resources Res. 11:436-444.

B. Silvicultural Resources

Approximately 1246 acres would be treated within the project area. This is 4 percent of the total commercial forestland (30,962 acres) that BLM manages within Grant County. Over the past 10 years the BLM has treated less than 1000 acres (<3 percent) of this commercial forestland silviculturally. In combination with this decision silvicultural activities would treat approximately 7 percent of the total BLM commercial forest area within Grant County.

The Timber Basin project area totals 1246 acres within three adjacent watersheds (Franks Creek, Ferris Creek and Dick Creek). These watersheds combined, total approximately 28,246 acres. The project area treats approximately 4.4 percent of these combined watersheds. The private lands effected by the fire total approximately 800-1000 acres, which is currently or likely to be salvage harvested in the near future. Combined public and private actions would treat less than 8% of the combined watersheds affected.

A small harvest of approximately 80 acres on the north rim of the area on public lands was completed in the early 1980's. In the past 5 years the adjacent private lands have been moderately pre-commercially and commercially thinned.

C. Wildlife

See the EA – Chapter 4 and Appendix C for cumulative effects regarding wildlife. The previous analysis for cumulative effects with regard to wildlife apply to the decisions described in the Decision Record.

D. Roads

The Rudio Mountain area has traditionally contained a high level of road densities and the Timber Basin area is no exception. Some roads traditionally used to access public land have been gated and locked by private landowners where they cross private property. As a result road use has become more concentrated on public access roads. As a result of fire suppression activities several miles of dozer line were created across the Timber Basin area. These areas effect water flow and soil movement similar to actual roads. The Decision Record describes closing these dozer lines after timber harvest. In addition previously existing road mileage (1.2 miles) would be obliterated. The actions proposed would decrease road densities on public lands however, due to the increase in dozer lines on adjacent private lands the roads densities in the watershed will remain higher than pre-fire conditions – see EA and response to comments # 1 – cumulative effects. Harvest of timber on private lands would likely increase road densities in the area; however these roads would most likely not be available to public land users as access routes.

E. Social and Economic Resources

The local communities in Grant County that would likely benefit from timber harvest in the Timber Basin area are traditionally resource based (timber, grazing and mining). Over the last 10 years a major mainstay of the economy – the timber production and associated mills have experienced a significant decline in timber material produced on public lands – approximately 90 percent reduction (Barney and Worth, Inc. 2001). As a result of decreased timber volume the local residents have experienced a depressed economy and subsequently this project has received a high degree of attention from the local interests. This project would amount to approximately 5.8 million board feet of timber, which represents approximately 3 percent of the federal timber harvest in 1999 in Grant County (Barney and Worth, Inc. 2001). The amount of timber that would be harvested in Timber Basin is relatively small in comparison to historic timber cut; however this project becomes of higher importance in an area that is already suffering the effects of drastic reductions in federal timber harvest. This project is expected to provide employment for approximately 170 employees for around 38 working days. Grant County population is approximately 8000 of which nearly 2000 jobs currently exist. An average employee typically works 260 days in a calendar year. This project would provide for approximately 1.3 percent of the total annual employment for Grant County for one year.

Barney and Worth, Inc. 2001. Inland Northwest Economic Adjustment Strategy. Portland, OR. July 2001.

II. Riparian Buffer Areas

2. Comment: There is no reason to increase stream or spring buffers beyond PACFISH guidelines in the Timber Basin Area.

(Included in letters TB-01, TB-20, TB-21)

Response:

Streams - Riparian Habitat Conservation Areas (RHCAs) (riparian buffer areas) must include, for Key Watersheds, the area from the edges of the stream channel, wetland, landslide, or landslide-prone area to a distance equal to the height of one site-potential tree, or 100 feet slope distance, whichever is greatest. The biological opinion on the Interim Strategies for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California clarified PACFISH interim direction on Key Watersheds as follows:

> During the period PACFISH interim guidance is in place, and until final key watersheds are designated in the Record of Decision based on the EISs for ecosystem management, the FS and BLM should treat as interim key watersheds those watersheds that contain salmonids proposed for listing or proposed critical habitat.

The Ferris and Franks Creek 5th field HUC (1707020106) watershed contain anadromous fish habitat, and would therefore be considered as a Key Watershed with 100ft RHCAs.

The decision as described in the Decision Record designates 100-foot stream riparian buffers in accordance with PACFISH and the associated Biological Opinion. The John Day RMP has been amended by both of these documents; therefore all management direction and guidance as described in PACFISH or the subsequent Biological Opinion are part of the John Day RMP. It is proper to reference the source documents in specific cases where guidance for management actions originates from these source documents.

Springs – The EA indicates that the larger buffers are to protect hiding cover values around the springs that are being used for wallows by elk. As the EA states the site is locally significant to many hunters because of the cover values that tend to hold elk better than surrounding private lands. The EA also specifies in Appendix C that wallows are a critical habitat component for elk, and goes on to identify the definition of hiding cover, Appendix C page 17 of 21.

3. Comment: PACFISH should not be used to restrict cut within RHCA's, the agency should consider active management within these areas as long as RMO's are not compromised.

(Included in letter TB-01)

> **Response:** PACFISH does not preclude active management within RHCA's, and in fact allows for management in these areas especially when catastrophic events such as floods or wildfire have impacted these areas. However, PACFISH is also very clear that entry into these areas can be done only after a watershed analysis has been completed and effects of management in the area have been assessed. In this specific situation a watershed analysis has not been initiated or completed for the Franks Creek watershed, therefore until that process is complete active management within the RHCA's is precluded in the Timber Basin area.

III. Motorized Access

4. Comment: Motorized access within the Timber Basin area should not be limited by this project.

(Included in letters TB-02, TB-04, TB-05, TB-06, TB-07, TB-08, TB-09, TB-10, TB-11, TB-13, TB-16, TB-17, TB-23)

> **Response:** The BLM believes that the road decisions described in the Decision Record would provide adequate public road access to the public lands within the burn area, and would best balance the need for public access with the needs of natural resource protection. Public road access would provide access to recreation opportunities for a variety of users and be available to within one half mile of nearly all public land acres within the burn area, except for lands in section 36 of Township 11 south, Range 26 east where no public access currently exists.
>
> To maximize rehabilitation success, it is necessary to close the burn area to off-road vehicle travel for five years during the rehabilitation period to: minimize soil erosion; protect grass and seedlings from trampling; limit the introduction of weed seeds in newly disturbed soils; and reduce disturbance to wildlife and habitat until vegetative cover becomes re-established. After five years, the condition of the soil, grass, seedlings and wildlife habitat will be re-evaluated to determine whether conditions have improved sufficiently to re-open the area to off-road travel.

5. Comment: The upper portion of the Dick Creek road should be improved for safety reasons and future fire protection regardless of timber salvage.

(Included in letters TB-02, TB-04, TB-05, TB-06, TB-07, TB-08, TB-09, TB-10, TB-11, TB-13, TB-16, TB-17)

> **Response:** Improving the upper portion of the Dick Creek road was an action common to all action alternatives within the EA. As described in the Decision Record it has been decided to implement this action – see Decision Record.

6. Comment: The area is good habitat in part because it has few roads. Please evaluate the area for unroaded areas >1000 acres and avoid all timber harvest and roads in such areas.

(Included in letter TB-27)

> **Response:** In compliance with the Federal Land Policy Management Act of 1976 (FLPMA) the Prineville District previously completed an inventory of public lands to identify roadless areas of at least 5,000 acres in size. No roadless areas meeting this size requirement were found to exist in the Rudio Mountain area. A current inventory found no roadless areas greater than 1000 acres. See response to Comment #1 – Cumulative Effects.

7. Comment: Over the past few years private enterprises have blocked access roads to thousands of acres of prime public land on Rudio Mountain.

(Included in letter TB-23)

> **Response:** In the Rudio Mountain area, many public land parcels are surrounded by private property. Unless public access to these parcels is available via a county road or a BLM public easement, the public may not legally cross the private lands without written permission from the landowner. Historically, some private landowners allowed the general public to cross their private lands to access isolated BLM parcels. However as land ownership changes, a new landowner may not wish to continue to allow access to a private parcel, and is not required to do so. If a member or members of the public desire to challenge a landowner's right to deny public access across private property, they must do so in a court of law.
>
> The BLM recognizes the importance of blocking up public lands so that the public has access to as many acres of BLM lands as possible. For this reason, the BLM has worked hard through the land exchange process to exchange inaccessible parcels for desirable lands that are accessible to the public. The Northeast Oregon Assembled Land Exchange is an example of such an exchange currently under way in portions of several counties, including Grant County. A land exchange can only be accomplished with willing sellers, and at this time attempts to negotiate an exchange in the Rudio Mountain area have been unsuccessful. Also, see response to Comment # 1 – Cumulative Effects.

IV. Forest Management Activities

8. Comment: Determine the origin of the fire; disclose the extent of fire suppression activities.

(Included in letter TB-12)

> **Response:** The Timber Basin Fire started as a result of a lightning strike on August 12, 2001. The original lightning strike was located on BLM land in Township 11 south, Range 27 east, section 30 NE ¼ NW ¼, Willamette Meridian. From there the fire spread NE, SE and SW onto private land. The fire was controlled to the east shortly after burning approximately 300 acres of private land. It was controlled to the west when it ran out of fuel sources (i.e. timber areas). Control to the north and south was attained as steep slopes gave way to more gentle slopes of 0-15%.
>
> Oregon Department of Forestry was responsible for implementation of fire suppression activities on this fire. A combination of dozer fire line creation, hand line creation and retardant drops were used to suppress the fire. On public land fire suppression activities created approximately 11 miles of new dozer fire lines, felled trees to create 3 safety zones, remove hazards to fire crews and clear an important fire line along the north side of the uppermost Franks Creek road (1/2 mile). Trees felled for these actions and safety reasons include a volume of approximately 28 thousand board feet (mbf). During suppression rehabilitation efforts the majority of these felled trees were decked without limbing.

9. Comment: The timber sale boundary includes areas that the fire did not impact or impacted lightly and very little if any tree mortality resulted.

(Included in letters TB-02, TB-04, TB-05, TB-06, TB-07, TB-08, TB-09, TB-10, TB-11, TB-13, TB-16, TB-17)

> **Response:** The initial project boundary was defined by the Oregon Department of Forestry during fire suppression activities. The boundary was later enlarged to include other burned areas and areas affected by fire suppression activities.

10. Comment: The harvest systems designated in the EA do not strictly adhere to a 35% slope criteria, and should allow for more flexibility in yarding systems.

(Included in letters TB-01, TB-21)

> **Response:** The harvest systems selected are based on percent slope, soil conditions and implementation logistics such as proximity to natural and man made breaks. The John Day RMP specifies an aerial yarding system on slopes greater than 35%; however, it does not limit yarding to only those criteria. Since the area was burned, soils have become exposed and are susceptible to further damage from harvesting activities. In order to

minimize these impacts the requirement for ground-based yarding over frozen and snow covered ground, or a maximum of 20% ground impact was established.

11. Comment: The BLM should complete salvage operations and apply proper silvicultural prescriptions to the remaining green tree areas.

(Included in letters TB-01, TB-12, TB-20, TB-21, TB-26, TB-27, TB-28, TB-29, TB-30, TB-31)

Response: Based on the environmental analysis, the actions contained in the Decision Record will silviculturally manipulate stands with the objective of increasing growth rates while providing a timber resource for the future. Recovering the economic value of burned timber and providing timber products to the economy contribute to socio-economic effects. (EA page 54)

The Decision Record prescribes a combination of salvage and green tree thinning. The green tree thinning promotes the large tree component as well as the large snag component. This action benefits certain cavity nesting species that may occur within the area. (EA page 23) Insect impacts would be reduced due to salvage and green tree harvest activities on both private and public lands. (EA page 41) Harvest activities were designed to minimize resource impacts and meet forest health concerns in a manner that addressed the purpose and need. This decision promotes the retention and development of the large tree component, reduces the risk of further structure loss from insect attack, minimizes additional loss of cover values, maintains multi structure stands, and provides a diversity of vegetative and habitat conditions.

12. Comment: Dead tree definitions should be broadened to include other factors, which influence tree mortality.

(Included in letters TB-20, TB-21)

Response: As stated in the EA (pages 37,38 & 40), studies by Miller and Keen (1960) and Scott (1999), western pine beetles are attracted to the heavily stressed trees that have survived the initial impact of the fire. These beetles prefer to concentrate their attacks in large diameter, lightly to moderately injured ponderosa pine. Root and cambium layer damage from fire also contributes to tree mortality. Determinations based on these factors are complex and time-consuming; therefore a visual guideline was selected to expedite tree marking. The 30% green crown guideline is widely accepted in practice and proves to be a reliable measure of actual mortality based on studies. Flanagan (2001) summarized from existing research that crown scorch >75% would result in a moderate to heavy cambium injury and lead to infestation from western pine beetle and eventual mortality.

Flanagan, Paul 2001. Survival of Fire-Injured Conifers in Eastern Washington. USDA Forestry Sciences Lab. Wenatchee, WA. September 2001.

13. Comment: Many of the trees marked did not meet the EA's definition of a dead tree.

(Included in letters TB-02, TB-04, TB-05, TB-06, TB-07, TB-08, TB-09, TB-10, TB-11, TB-13, TB-16, TB-17)

Response: The BLM concurs that a review of the marking should occur and prior to harvest activities the BLM will review the previous marking to verify that it complies with the harvest prescriptions as described within the Decision Record.

14. Comment: What is the rational for the proposed snag numbers and why would snags be left at greater than 100% of High Range of Variability (HRV) under any option?

(Included in letters TB-01, TB-15, TB-20, TB-21, TB-25, TB-26, TB-29, TB-31)

Response: Snag densities were recognized as an important subject associated with salvage and green tree harvest. The EA addresses effects analysis for snags and down logs on page 45 and 46. Appendix C of the EA "Addendum to Wildlife Report" addresses the rational for snag numbers used. Appendix C of the EA pages 6, 15, and 16 also address snag and down log values and effects analysis.

Clarification to how snag numbers will be distributed:
Snag numbers prescribed in the analysis area are based on typical levels associated with specific vegetative communities and disturbance patterns. As prescribed, snags are to be left in patches and scattered throughout the units. Burn areas that are not harvested will act as snag patches and will count toward the snag allocation numbers. Using the average snag density of 150% high HRV per acre provides sufficient snag numbers in the intensely burned area as a whole to provide higher snag densities in patches. The remainder of the intensely burned area will have scattered snags with densities that do not exceed 100% of High HRV.

Patches of higher density snags provide potential nesting habitat and high quality foraging areas for post fire dependant species like black backed woodpecker and western blue bird that require areas of high (40+/ac.) snag densities (See Appendix C "Addendum to the Wildlife Report). These patches skew the per acre snag densities to appear higher than appropriate.

The recommended snag levels were also designated to meet future down log requirements in areas of high fire intensity where pre-burn down wood levels were removed. Rather than falling snags to provide down wood, higher snag levels were allocated to replace levels removed by the fire over time. The ID team decided that it was better to allow the trees to remain standing and provide habitat as long as possible.

The utility of snags and the life of snags can be greatly affected based on the juxtaposition and species of snags left. Pileated woodpeckers typically do not use snags in large burns. Pileated woodpecker will utilize snags on the edge of burns and in areas that weren't intensely burned. Snag patches are usually left adjacent to existing green stands. This

increases the potential for use by pileated woodpeckers and reduces potential conflicts with harvesting methods.

Larger snags and species like ponderosa pine and western larch snags tend to remain standing for longer periods of time. Although most snags will fall prior to stands reaching the Small Log structure classification (10 – 14.9" dbh), large ponderosa pine snags have persisted for more than 80 years. In 80 years planted stands could potentially be 18" dbh and greater than 60 feet tall given the right conditions.

The EA in Appendix C page 6 details the value of snags and down logs beyond primary cavity excavators.

15. Comment: Leaving snags at 150% of high range of variability is a misguided approach focusing on a single species at the expense of many others.

(Included in letter TB-15)

Response: Leaving standing dead wood will benefit the black backed woodpecker but this is not the sole rational for leaving higher snag numbers. Black-backed woodpecker is a BLM Sensitive species. The John Day RMP requires that no action be taken that would impact a species in a way that would lead toward listing under the Endangered Species Act. Black-backed woodpeckers are a species that are dependent on disturbances that create a unique set of environmental conditions such as fires do. The Timber Basin EA alternatives recognize the opportunity to provide habitat. Where snags are left in clumps there will be sufficient numbers to provide habitat; however, the entire planning area was not prescribed to be left as reproductive habitat. Harvest areas outside of the clumps will have sufficient snags to function as foraging habitat.

Pileated woodpeckers are not the only species that utilizes large snags. Black bear, owls, bats, skunks, fisher, and a host of other species utilize big snags. Large snags can substitute for smaller snags for species use, and the larger snags stand for much longer periods than do smaller snags. Larger snags have a higher potential to remain until the subsequent conifer stand becomes established. Down logs also provide nurse sites for shrubs and conifers, cycle nutrients, capture water, and reduce soil loss.

See also Response to Comment # 14.

16. Comment: Leaving snags at 150% of high range of viability will lead to increased insect activity.

(Included in letter TB-21)

> **Response:** All action alternatives propose to harvest in intensely burned and non-intensely burned areas. The number of trees that were damaged by the fire that are to remain after the fire will be drastically reduced on public lands given any alternative. Private lands in the watershed have already been harvested extensively with very few stressed trees remaining. Leaving standing dead trees in all portions of the analysis area will benefit cavity nesting birds and other insectivorous species. As stated in the EA Appendix C Addendum to the wildlife report, "the recognition that birds may play a significant role in regulation of insect populations. Most of the snag-dependent birds and mammals in the Blue Mountains are insectivorous and represent a major portion of the insectivorous forest fauna."
>
> Additionally the size and scale of trees that were damaged but not totally killed in the fire was on less than 300 ac. with only a portion of those trees being damaged in such a way as to attract insects. Local population levels are currently low, and all action alternatives significantly reduce the risk.
>
> See also Response to Comment # 14.

17. Comment: There are no known reproductive pairs of cavity nesters in the area requiring heavy concentrations of snags.

(Included in letter TB-20)

> **Response:** Appendix C of the EA reviews species specific information known to occur within the planning area. It also states that no formal surveys have been conducted. This does not indicate that there are no reproductive pairs of cavity nesters in the area, it is simply disclosing what the BLM currently knows about the analysis area. The BLM is mandated by FLPMA to manage habitats and populations. Wildlife species move throughout the landscape continuously if adequate habitat exists. The EA seeks to provide design elements that are constructed in such a way as to reduce impacts to habitats, and provide for a diverse species complex.

18. Comment: The Viable Ecosystems numbers are not consistent with snag retention practices on the Ochoco or Deschutes National Forests described in the following NEPA documents: Mill Project Timber Sale EIS, Newberry 2 Fire EA, McKay Fire Decision Notice, Crane Prairie Complex fires EA and Bandit EA.

(Included in letter TB-20)

> **Response:** The sales described occurred in different areas with differing surrounding and

local influencing factors. These areas also varied in the plant associations that existed on these sites.

The Prineville BLM has reviewed snag allocation methods and levels used in each of the sales referenced. As specified earlier there are many different variables associated with each of these sales; however, each of these sales had similar approaches to determining appropriate level and distribution of snags given the local environments. The approach used in this EA is consistent with that used in these sales and current literature.

Representations of snag numbers left in these sales described in the comment received is not consistent or only partially displays snag allocation levels contained in these analyses.

19. Comment: Snag allocation numbers violate the RMP fuel loads and create a potential fire hazard.

(Included in letters TB-01, TB-15, TB-21)

Response: The John Day RMP states that after commercial or pre-commercially thinning slash in excess of 15 tons per acre should be disposed of using prescribed fire while maintaining at least 12 tons per acre for nutrient replacement. The statement in the EA that snag levels would occur at levels exceeding RMP levels failed to recognize the distribution of the snags and assumes all standing dead wood would fall to the ground at the same time. See the above clarification regarding how snags will be distributed across the landscape.

Snag levels will be above 100% of high HRV, on average, in intensely burned area; however, the areas where fuel concentrations will exceed RMP slash levels once snags begin to fall will be in the patches that are left unharvested. The RMP requirements pertain to pre-commercial or commercially treated lands. The snag patches will not be harvested and thus they are an existing condition and not subject to RMP slash standards.

In the intensely burned areas all of the down wood has been consumed. These sites are currently deficit of historic down wood levels and thus are likely below the desired level of 12 tons per acre specified in the RMP for nutrient replacement. Snags of varying sizes will fall to the ground at different times due to the varying environmental influences, thus limiting the amount of down wood at any one time. The majority of smaller snags are expected to fall within 10 years; however it's the larger snags that would contribute the most to the tons per acre figure specified in the RMP. As down logs remain on the ground they begin to accumulate moisture and break down, reducing the tons per acre and fire intensity if they burn.

Salvage logging activities on the remaining portions of the analysis area will reduce future fuel loads and drastically reduce the potential for catastrophic wildfire in the future. Fuel loads will be reviewed in the future and levels could be reduced through the use of designated firewood areas or other means.

V. Other Resources

20. Comment: There needs to be a cost share set up for the grazing administration fences that burned.

(Included in letter TB-29)

> **Response:** The Decision Record describes that 6 miles of fences within the burn area would be replaced. The BLM will work with permitees and adjacent landowners to implement these actions on the ground. This cooperative approach will provide a much better forum to express and resolve this concern.

21. Comment: Pastures within the burned area should be rested for a period of 4-5 years to promote riparian recovery.

(Included in letter TB-31)

> **Response:** BLM policy mandates a 2-year rest period for burned areas. Steep slopes, the extent of fire suppression ground disturbing activities and intensity of the burn in many areas increase to potential for soil erosion in the area. The Decision Record specifies a 3-year rest period for these pastures. The additional year over standard BLM policy is to allow extra time for grasses to establish in these disturbed areas. The BLM will continue to work with permitees to implement grazing actions that support recovery and maintenance of desirable resource conditions. Cooperative work with individual permitees would provide a better forum to implement these actions.

22. Comment: The BLM should not treat noxious weeds with 2-4-D.

(Included in letter TB-19)

> **Response:** Treatment of noxious weeds is described in the Prineville District Noxious Weed Management EA No. OR-054-04. All weed treatments would occur in accordance with this previous decision. No new decisions for the treatment of noxious weeds are being made in the Decision Record for the Timber Basin EA. For a copy of the District Noxious Weed Management EA please contact the Prineville BLM.

VI. Social and Economic Concerns

23. Comment: The economic value of the salvageable timber within Timber Basin is very important to the local communities.

(Included in letters TB-01, TB-25, TB-26, TB-32)

> **Response:** Timely salvage as described in the Decision Record supports the purpose and need of the EA as described in Chapter 1, regarding the economic recovery of the damaged timber resource. A total net volume of approximately 5,838 mbf is expected to be recovered. The ground-based yarding operation is expected to recover 2,196 mbf which would provide approximately $350,000 of income to field crews. The aerial operation is expected to recover approximately 3,642 mbf which would provide approximately $1,130,000 of income to field crews. Both figures described do not deduct field crew operating expenses, which provide a source of income for fuel suppliers, maintenance suppliers and other secondary contributors to the harvest operation. Field operations would be expected to extend for approximately 36 working days for a tractor crew and for approximately 45 working days for a helicopter crew. In addition, contract requirements would require additional work crews for approximately 10 working days. This includes preliminary road work, final road work and site rehabilitation. This would amount to approximately $300,000. This project would provide enough volume of timber material to a typical eastern Oregon lumber mill (150 employees -–both mill and support personnel) to maintain operations for approximately 30 working days. Since the project area is located in Grant County, it is anticipated that at least a portion of the economic value would remain within Grant County.

VII. Alternative Preference

24. Comment: Support selection of Alternative A.

(Included in letters TB-02, TB-04, TB-05, TB-06, TB-07, TB-08, TB-09, TB-10, TB-11, TB-13, TB-16, TB-17, TB-19, TB-23)

> **Response:** The BLM appreciates the interest and feedback received from interested individuals and groups. As a result of comments received the proposed actions were adjusted to include various considerations including road closures, snag densities, commercial harvest and wildlife habitat. Please refer to the Decision Record for specific decisions for this project.

25. Comment: Support selection of Alternative C.

(Included in letters TB-01, TB-03, TB-21)

> **Response:** The BLM appreciates the interest and feedback received from interested

individuals and groups. As a result of comments received the proposed actions were adjusted to include various considerations including road closures, snag densities, commercial harvest and wildlife habitat. Please refer to the Decision Record for specific decisions for this project.

26. Comment: Support selection of Alternative D.

(Included in letters TB-14)

Response: The BLM appreciates the interest and feedback received from interested individuals and groups. As a result of comments received the proposed actions were adjusted to include various considerations including road closures, snag densities, commercial harvest and wildlife habitat. Please refer to the Decision Record for specific decisions for this project.

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