

May 23, 2014

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Transmitted this date via email to: objections-intermtn-regional-office@fs.fed.us

To the Reviewing Officer:

This letter is an objection, pursuant to 36 CFR §218, to the Lost Creek-Boulder Creek Landscape Restoration project, on behalf of the Alliance for the Wild Rockies and Native Ecosystems Council (collectively, "AWR"). The Responsible Official is Payette National Forest Supervisor Keith Lannom. The Lost Creek-Boulder Creek Landscape Restoration project is planned for the New Meadows Ranger District of the Payette National Forest (PNF).

NOTICE IS HEREBY GIVEN that AWR objects pursuant to 36 CFR §218 to the Responsible Official's adoption of Alternative B- modified ("further referred to as the Selected Alternative" – draft ROD at 3).

The Selected Alternative would involve a variety of management activities, summarized at Table ROD-1 (reproduced here).

Table ROD-1. Summary of Activities to be Implemented Under this Decision.

Vegetation Management	
Commercial Thin/Free Thin (CT-FT)	12,200 acres
Commercial Thin/Mature Plantations (CT-MP)	8,100 acres
Free Thin/Patch Cut (FT-PC)	1,800 acres
Total Commercial Vegetation Treatments	22,100 acres
<i>Commercial Vegetation Treatments within RCAs*</i>	1,530 acres
Total Non-commercial Thinning Treatments	17,700 acres
Prescribed fire treatments	45,000 acres
Recreation Management and Travel Management	
Vault toilet installation	5
Pit toilet decommissioning	6
Kiosks installed	3
Minimum Road System (MRS)	401 miles
Change in miles of roads accessible by passenger vehicles	- 10 miles
Change in miles of motorized access	+2.0 miles
Change in miles of motorized trails open to the public**	+15 miles
Change in miles of non-motorized trails***	+6 miles
Change in number of improved dispersed campsites	+ 68
Closure and restoration of undesired dispersed campsites	-12
Trailhead construction and parking expansion	2
Trailhead decommission	1
Trail maintenance	35

Road Management, Watershed Restoration, Fisheries Habitat Improvements	
Road graveling	34 miles
Roads converted to long term closure status	61 miles
System road decommissioning	68 miles
Unauthorized route treatment	117 miles
Road re-routes	0.6 miles
Road relocation	1 miles
Improve and open roads currently closed to public	0.7 miles
Planned temporary roads	25 miles
New construction and obliterate	10 miles
Use existing roadbed and obliterate	15 miles
Gravel pits utilized	18
Existing	11
Potential	7
Roads added to the system for gravel pit access****	0.8 miles
Fish passage improvements (Total)	36
Improvement through culvert removal	6
Improvement through culvert replacement	30

AWR is objecting to this project on the grounds that implementation of the Selected Alternative would not be fully in accordance with the laws governing management of the national forests, and will result in additional degradation in already degraded watersheds and mountain slopes, further upsetting the wildlife habitat, ecosystem and human communities. Our objections are detailed below.

OBJECTION STATEMENT: The EA is not in compliance with 36 CFR § 212 subpart A.

AWR's comments on the Draft EIS (DEIS) included statements on point with this issue, including:

The DEIS states, "System roads identified to remain on the landscape as part of the reduced MRS would be maintained and improved (see Figures 2-3 and 2-4)." Does this mean that Alternative B maps show THE Minimum Road System (MRS)? It makes no sense for the MRS to vary, depending upon Alternative chosen, since the MRS should be independent of any given project need. Development of the MRS should not take a back seat to logging. Will the Forest Service be changing the MRS every time a project is proposed for this project area in the future?

The DEIS does not disclose if the MRS selected will receive proper annual maintenance and therefore be affordable with expected funding levels. This means the environmental and economic costs of the MRS go without analysis and disclosure in the DEIS. Since "This project level NEPA analysis is the final step required to identify the Minimum Road System within the project area" (16) then a full analysis of the environmental and economic impacts of the MRS should have been disclosed in the DEIS.

The DEIS states, "System roads currently in long-term closure may also be reconstructed and used for implementation of the project. Use of these roads may involve the installation of stream crossings that were removed as part of the long-term closure treatment." (36). This illustrates the fallacy of expecting stored roads to contribute to long-term watershed health. The plan is to

eventually tear them open again, causing the same kind of impacts as new road construction. Either this would violate CFLRA mandates against new road construction, or reveals the CFLRA's failure to avoid road impacts. How many miles of roads currently in long-term closure would be "reconstructed" under each alternative?

Similarly, the DEIS proposes "30 miles of planned temporary roads" and unspecified miles of "Incidental temporary roads ...needed to complete vegetative treatments (not) yet ...identified¹ due to the level of site-specificity necessary." (Id.) What commitment exists for restoring these temporary road sites and leaving them to natural processes instead of reconstructing them for the next round of logging?

¹ This lack of field data again reveals the premature nature of this DEIS. Also, "Actual harvest system in each unit would be determined upon field verification..." (Id.)

"Roads that are recommended to remain on the landscape as part of the Minimum Road System (MRS) would be maintained and improved to reduce sediment production (guided by recommendations from site-specific sediment modeling)." (38) Will every stretch of such roads be "maintained and improved" even if they are not used for project activities? (Roads labeled as "Existing Level 1" on maps such as Figure 2-3 stand in contrast to those labeled as "maintain" or "improve.")

"The exact locations of the unauthorized route treatments have not been determined at this time, but will be defined in the FEIS and Record of Decision." (39) This again illustrates the premature nature of this DEIS.

Of the at least 77 miles of unauthorized roads not to be physically decommissioned (Table 2-1), how will the Forest Service determine that they won't have significant long-term hydrological impacts?

"Perform road to OHV trail conversion on 13 miles of closed roads and open seasonal roads. Identify an additional 7 miles of road to OHV trail conversion between draft and final EIS." (42) Again, the DEIS does not demonstrate a genuine need to increase the accommodation of OHV riders in this project area.

"The OHV trails would be open to vehicles 72 inches – 84 inches in width and designed to meet Trail Class 2 standards ...(which) have a design tread width of 72 inches – 84 inches, are on native material with limited grading, with structures minimum width being 96 inches." (42) Such "trails" would effectively be—roads.

"Users are riding on existing open roads, but have also created unauthorized routes that have been pioneered in by over-enthusiastic OHV users." (366) Does the Forest Service assume that project activities will curb "over-enthusiastic" (we call it lawless) behavior on the part of motorized recreators? If so, what is the basis for that assumption?

The PNF did not change its analysis in response to these comments, and in fact completely ignored substantial portions of our comments, in violation of NEPA.

The FEIS did not identify the Minimum Road System (MRS) needed to manage the landscape, an analysis that would factor in economic and ecological considerations. Forest Service leadership issued a directive memorandum to the field in November of 2010 requiring every forest to identify its MRS and roads for decommissioning by 2015, and fully comply with 36 CFR 212 subpart A. The memorandum directed units to begin implementing the MRS immediately following approval by the Regional Forester. Ideally, the PNF would have already completed travel analysis and identified its MRS. This order of events was envisioned by the Forest Service when it promulgated 36 CFR 212 subpart A (also known as the Roads Rule). However, at a minimum, the PNF must ensure that the requirements in the directive memorandum and 36 CFR 212 subpart A are being met.

At the bottom of page 1 in the Directive Memorandum, it states: “By completing the applicable sections of Subpart A, the Agency expects to identify and maintain **an appropriately sized and environmentally sustainable road system** that is responsive to ecological, economic, and social concerns.” (Emphasis added.) In order to do this, the PNF must bring its road system to a size and design commensurate with foreseeable available funding. Current annual funding is not close to that needed to maintain the present road system on the Forest.

The regulations state at 36 CFR § 212.5, under Road system management:

(b) Road system—(1) *Identification of road system.* For each national forest, national grassland, experimental forest, and any other units of the National Forest System (§ 212.1), the responsible official must identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands. In determining the minimum road system, the responsible official must incorporate a science-based roads analysis at the appropriate scale and, to the degree practicable, involve a broad spectrum of interested and affected citizens, other state and federal agencies, and tribal governments. The minimum system is the road system determined to be needed to meet resource and other management objectives adopted in the relevant land and resource management plan (36 CFR part 219), to meet applicable statutory and regulatory requirements, to reflect long-term funding expectations, to ensure that the identified system minimizes adverse environmental impacts associated with road construction, reconstruction, decommissioning, and maintenance.

Our DEIS comments stated, “The DEIS does not disclose total post-project road density, but on page 233 discloses that each subwatershed would remain above scientifically recommended levels.” The PNF has not identified the minimum road system incorporating “a science-based roads analysis” nor has it involved “a broad spectrum of interested and affected citizens, other state and federal agencies, and tribal governments.” The FEIS did not explain how the Project Area’s selected system roads were “determined to be needed to meet resource and other management objectives adopted in the relevant land and resource management plan, how the road system “reflects long-term funding expectations” nor does the FEIS “ensure that the identified system minimizes adverse environmental impacts associated with road construction, reconstruction, decommissioning, and maintenance.”

Also at 36 CFR § 212.5, the regulations state:

(b) Road system—(2) *Identification of unneeded road.* Responsible officials must review the road system on each National Forest and Grassland and identify the roads on lands under Forest Service jurisdiction that are no longer needed to meet forest resource management objectives and that, therefore, should be decommissioned or considered for other uses...

Because the PNF has not identified its MRS, it is unable to identify all of the unneeded roads in the project area that might be decommissioned. Under the Selected Action 68 miles of road would be decommissioned. However since the FEIS does not represent the MRS based upon full compliance with 36 CFR § 212.5, it is not known what other roads in the project area ought to be identified and prioritized for decommissioning or otherwise taken off the road system. It is also unknown if the long-term costs of maintaining the FEIS's "minimum road system" are within budget expectations and therefore affordable, or alternatively if an expected budget shortfall for road maintenance (the status quo) will result in cumulative impacts not disclosed in the FEIS. And proper public involvement was also not undertaken.

REMEDY: Prepare a Supplemental Environmental Impact Statement following NEPA procedures to result in full compliance with 36 CFR § 212.

OBJECTION STATEMENT: The Selected Action is not based upon completion of the Wildlife Conservation Strategy (WCS) Forest Plan Amendment process.

AWR's comments on the DEIS included:

The DEIS makes numerous references to the Payette National Forest's Wildlife Conservation Strategy (WCS), which exists in draft form and on which AWR commented in a 43-page letter dated April 19, 2011. AWR's letter expressed many concerns about the draft WCS but have yet to receive a response from the Payette National Forest (PNF).

Now, references to the WCS in the present DEIS indicate that the PNF plans to be implement the WCS with the Lost Creek-Boulder Creek Landscape Restoration Project:

The purpose of the Lost Creek-Boulder Creek Restoration Project is to:

1) Move vegetation toward the desired conditions defined in the Forest Plan and consistent with the science in the Forest's draft Wildlife Conservation Strategy (WCS)...

(DEIS at 10.) Also, "Although a ROD for the WCS is not expected until 2014, the Lost Creek-Boulder Creek Project analysis relied upon the best science available, including the draft WCS analysis..." (DEIS at 260.) Well, AWR challenged some of that "best science," and without having PNF response to our comments on the draft WCS, our ability to comment on this DEIS is severely hampered. And whereas the DEIS states that the PNF expects the WCS to be finalized in 2014, the PNF website currently states that the WCS is "on hold." Since the PNF is planning on implementing this project under the final PNF, the Forest Service has prematurely issued this DEIS. AWR's April 19, 2011 comments on the WCS DEIS quite appropriately apply to the Lost Creek-Boulder Creek DEIS and are therefore being transmitted as Appendix 1 to these comments. The agency must complete the WCS NEPA and NFMA processes, including responding to objections/appeals on the

WCS ROD, and then prepare a Supplemental Draft EIS on the Lost Creek-Boulder Creek Project prior to proceeding.

The Revised Forest Plan (RFP) and draft WCS were prepared in response to litigation. The court in *ISC v. Madrid* stated that the Forest Service must consider the limited amount of old-growth habitat on the Payette National Forest, and institute a program of population trend monitoring of key wildlife species. We note that nothing in the draft WCS, the RFP, or this project DEIS provides a specific response to Judge Winmill's order.

In response to AWR's comments, the PNF did no further analysis or public process on the WCS. The FEIS states:

The draft WCS was prepared in response to direction in the 2003 Forest Plan in WIOB03 that called for development of a strategy to prioritize wildlife habitat maintenance and restoration (USDA Forest Service 2003, p. III-26). The DEIS for Forest Plan Amendments Proposed to Facilitate Implementation of the 2011 Plan-Scale Wildlife Conservation Strategy, Phase 1: Forested Biological Community" (also known as the DEIS for the WCS) provided the format for summarizing the results of the WCS analysis and proposed Forest Plan amendments to integrate the recommendations of the WCS.

Due to numerous other Forest priorities, we now expect to complete the FEIS for the WCS and the ROD in 2015.

Because the FEIS and ROD for the proposed amendments have not been completed, we cannot refer to the WCS recommendations as Forest Plan direction. The FS is not using the WCS "to override any prior binding standards", instead the project is designed to be consistent with current FP direction while focusing on restoration of habitats for wildlife species of greatest concern.

The Forest used the best available science in the Lost Creek-Boulder Creek project analysis.

Still, the FEIS's Responses to Comments cites the WCS as "best available science":

The Lost Creek-Boulder Creek project is a landscape level project that is based on the best available science as used in the development of the Payette National Forest's draft Wildlife Conservation Strategy. Appendices – 32.

The best available science used in the development of the draft WCS encourages the Payette National Forest to restore habitats back toward historical condition. This approach in management creates habitat for white-headed woodpeckers and other Family 1 species that the WCS analysis found is lacking. Appendices – 35.

The DEIS for the WCS assessed effects to species of concern (particularly species associated with large tree and old forest habitats) at the forest-wide scale. Because population viability analyses are difficult at any scale, the analysis focused on effects to sustainability of wildlife species of concern (including the northern goshawk, flammulated owl, pileated woodpecker, fisher, Canada lynx, and wolverine). The 2011 DEIS for the WCS summarizes the habitat amounts, distribution, connectivity, and natural processes important to the persistence of ESA-listed, sensitive, MIS, and other focal species that occupy the planning unit. Appendices – 72

Additional supporting information is located in Volume 1 (Chapter 3) of the draft WCS DEIS. Appendices – 96.

As part of the WCS DEIS amendment process, habitat definitions specific to the Payette National Forest were developed for all ESA listed, sensitive, MIS, and identified midscale focal species. These definitions were developed using the best available science at the time. The draft amendments for the Forest Plan Appendix A and Appendix E provide in measurable terms habitat amounts, distribution, and connectivity and the natural processes that achieve desired habitat parameters important to contributing to sustainability of habitat for wildlife species known to occupy the planning unit. Appendices – 100.

The DEIS and FEIS, including Responses to Comments, contain numerous references to “focal species”—a term that is not found in the current Forest Plan. That concept is derived entirely from the analyses for the as yet incomplete WCS Amendment process.

Specific to the litigation part of our comment, the PNF responded:

The court in *ISC vs. Madrid* (2005) did call for the Payette National Forest to “conduct a study of the population of the flammulated owl, great gray owl, northern goshawk, and pileated woodpecker This study shall be governed by standards set in the 2003 Plan, and will apply those standards (1) to render an opinion on the viability of those species, and (2) to set forth restorative measures, if any, deemed necessary to ensure viability.”

The results of that study were summarized in a document published in 2009 (Status of the flammulated owl, great gray owl, northern goshawk, and pileated woodpecker on the Payette National Forest). The WCS analysis was instigated in part to help provide the information needed to make a viability opinion in the 2009 document. Recommendations made in the 2009 document helped inform proposed Forest Plan amendments analyzed in the DEIS for the WCS.

(Emphasis added.) It is clear that analysis using the best available science for viability assurance remains outside the public process, despite the District Court’s instructions.

REMEDY: Complete the WCS NEPA and NFMA processes, including responding to objections/appeals on the WCS ROD, and then prepare a Supplemental Draft EIS on the Lost Creek-Boulder Creek Project.

OBJECTION STATEMENT: The DEIS was based upon grossly incomplete data, and it is not clear how the FEIS remedied those deficiencies, in violation of NEPA.

AWR’s comments stated:

A reading of the DEIS reveals several other ways its issuance is premature. These include:

- Lack of on-the-ground surveys for vegetative conditions in many proposed treatment areas
- Lack of field surveys of riparian areas
- Lack of field surveys of soil conditions

- Failure to analyze the 2013 Geomorphic Roads Analysis and Inventory Package (GRAIP) survey results within the DEIS
- Lack of field surveys of dead trees and down wood
- Incomplete surveys to determine fish-bearing streams
- Incomplete determination of which roads would be haul routes under action alternatives
- Incomplete indicators for determining effects of proposed vegetation treatments inside RCAs
- Lack of field surveys for landslide prone areas in proposed treatment units and proposed new road locations
- Deficiencies of inventory of unauthorized roads and trails, and their restoration needs
- The need to consider of the imminent revision of the threatened North Idaho Ground Squirrel Recovery Plan

Given the above noted deficiencies in the DEIS, the public cannot be adequately informed for full participation in the NEPA process before the PNF prepares a Supplemental Draft EIS for public comment.

In response, the FEIS stated, “See FEIS, Chapter 3 introduction.” That Introduction states, in full:

3.0 Introduction

Chapter 3 describes the physical, biological, and human resources of the environment that may be affected by the alternatives presented in Chapter 2, and the environmental effects that the alternatives may have on those resources. Affected Environment and Environmental Effects have been combined into one chapter to give the reader a more concise and connected depiction of what resources exist in the project area and what the effects to those resources would be. The environmental effects analysis forms the scientific and analytic basis for the comparison of alternatives shown at the end of Chapter 2.

AWR’s DEIS comments referred to admitted lack of data missing from the DEIS and therefore inadequate analysis. Based upon the FEIS’s response, we cannot see any improvement.

REMEDY: Prepare a Supplemental Draft EIS on the Lost Creek-Boulder Creek Project when adequate data is available, so the public may comment at the appropriate point of the NEPA process.

OBJECTION STATEMENT: The FEIS fails to adequately analyze the roadless/unroaded lands issue.

AWR’s DEIS comments stated:

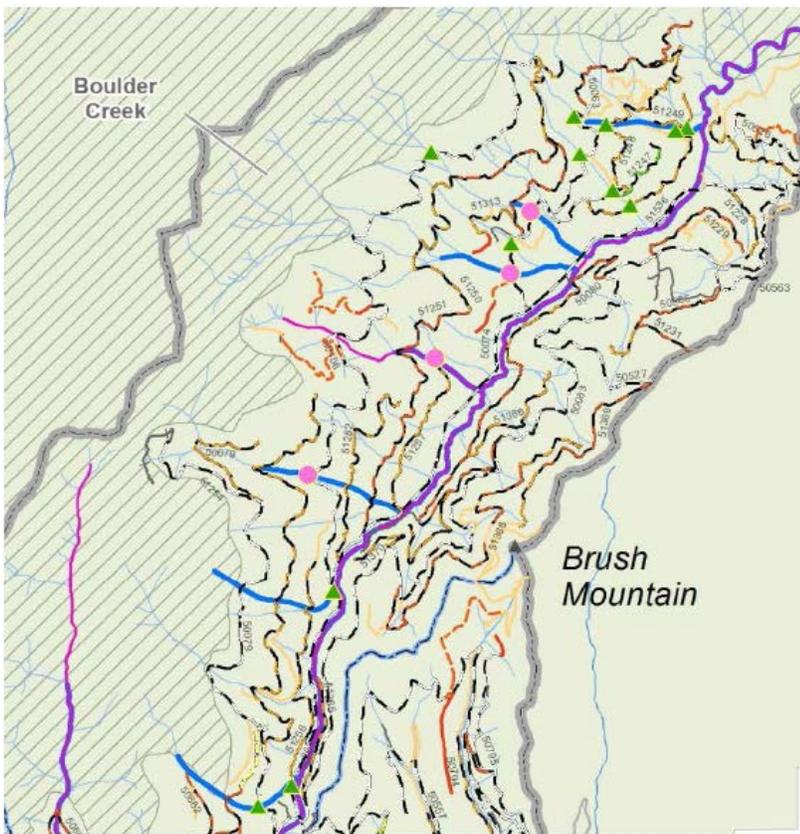
The project area includes a portion of the Rapid River Inventoried Roadless Area (IRA). Our groups support Wilderness designation for the Rapid River IRA, as proposed in the Northern Rockies Ecosystem Protection Act, which has been introduced into Congress. Yet the DEIS contains no map of this IRA, and despite the fact that “activities are proposed immediately adjacent to the Rapid River IRA and its boundary” (Appendices – 54) none of the maps in the map packet delineate the IRA boundary. Some of the wildlife maps show the Rapid River IRA, but don’t show proposed project activities. Extrapolating from those maps, however, shows a high likelihood of project activities

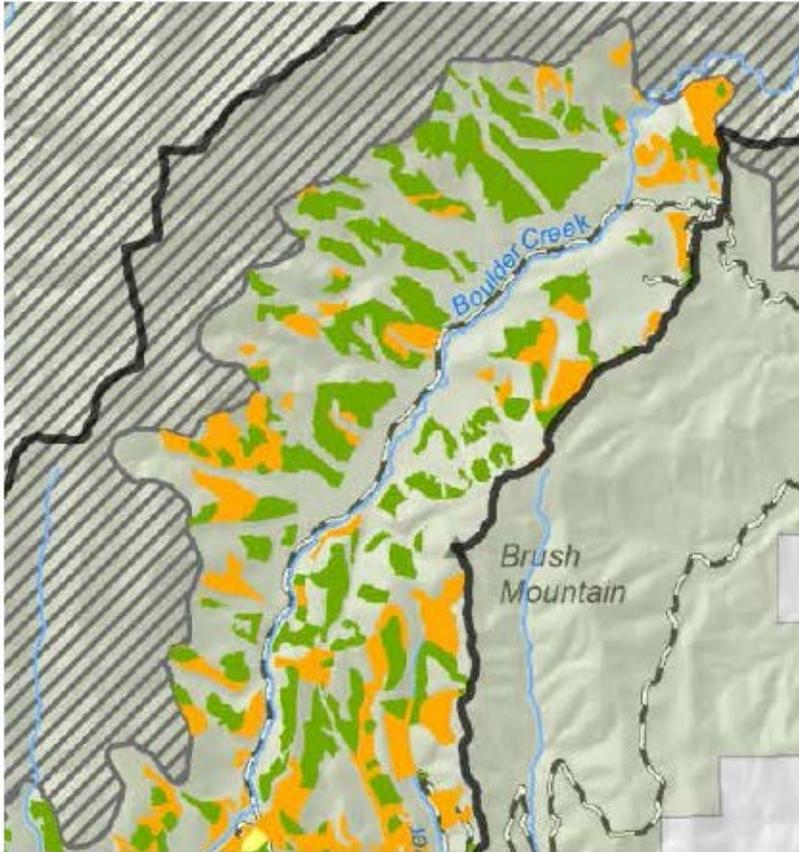
directly affecting uninventoried roadless areas adjacent to the IRA boundary. The Forest Service has a legal obligation to analyze and disclose impacts on such unroaded areas.

In response, the FEIS Response to Comments states:

See FEIS section 1.13.6. A “Roadless Area Analysis and Analysis of Unroaded Lands Contiguous to Roadless Areas”, specific to the IRAs within the project area, was completed as is contained within the project record. The Rapid River IRA and boundary was added to the alternative maps for each resource in the FEIS.

(Appendices – 83, emphasis added.) We don’t find a section in the FEIS entitled “Roadless Area Analysis and Analysis of Unroaded Lands Contiguous to Roadless Areas.” Instead, FEIS section 1.13.6. is entitled simply “Inventoried Roadless Areas.” Clearly the FEIS completely ignored AWR’s comment specific to unroaded areas adjacent to the IRA, and in regards to impacts on roadless areas generally. Since the FEIS presents no analysis whatsoever on this issue, the figure below and on the following page help to display our concerns.





In comparing the above two figures (portions of maps found in the FEIS map packet), we're assume that the first one shows all system roads. The second shows logging units colored green and yellow. Both show Inventoried Roadless Areas in diagonal lines. It is not difficult to see that areas immediately adjacent to the IRA—not separated from it by any road or other discernable management feature—would be logged. There is plenty of federal court precedent supporting AWR in the type of analysis our DEIS comments requested. As it stands, the PNF is proposing an irretrievable commitment of unroaded lands preventing them from being considered for Wilderness designation, without any analysis and disclosure required by NEPA.

REMEDY: Prepare a Supplemental Draft EIS analyzing and disclosing the impacts on unroaded areas and on the integrated IRA/unroaded as a whole, also considering the best scientific information on the importance of roadless areas for ecological integrity.

OBJECTION STATEMENT: The FEIS violates NFMA's diversity provisions in regards to old growth, Management Indicator Species (MIS), Sensitive species, Threatened species, Endangered species, and those "Warranted" for listing under the ESA (Candidate species). The FEIS's analyses do not insure that viable populations of terrestrial wildlife are being maintained, despite admitted adverse impacts to many species.

This would not be an issue at all, if the PNF were to properly complete its WCS Forest Plan amendment process prior to proposing more actions, such as Lost Creek-Boulder Creek, that impact wildlife. So our DEIS comments are still germane:

“The WCS includes several key terms, including source habitat, habitat family, and focal species. Definitions for terms used in this analysis can be found in the “Glossary” section of the DEIS.” (260) The definition of the terms “habitat family” and “focal species” do not appear anywhere in the project DEIS, despite the fact that much of the wildlife analysis implements those terms. Since different focal species are used to represent various habitat families, it appears that focal species is a management indicator species (MIS) for those habitat families.

The DEIS does not disclose the **amount and distribution** of source habitat needed to insure population viability of wildlife. The analyses for focal species by habitat families do not provide this information. The DEIS does not explain how source habitat is modeled for each of the various species of wildlife it analyzes. And source habitat is basically only described in terms of acres, not spatially.

The DEIS does not include any “Measurements” for improved MIS wildlife habitat, despite Objective 4. (DEIS at 12, 13.)

“Restoring NIDGS habitat in Family 12 sites is a goal in the Recovery Plan for the Northern Idaho Ground Squirrel (USDI FWS 2003).” (296) The DEIS does not provide a definitive pathway for achieving that goal for the project area.

Why are the new skid trails and roads through or alongside occupied North Idaho ground squirrel habitat not considered a “taking” under the Endangered Species Act? It appears that livestock grazing in North Idaho ground squirrel habitat is likely also a “taking.”

The DEIS’s wildlife analyses fail to disclose that impacts of noxious weed infestations include reduced forage for North Idaho ground squirrel habitat and other wildlife species.

Given the effects of the project, the DEIS’s determination that the project would “not likely adversely affect” the North Idaho ground squirrel is illogical.

“The project area contains no Forest Plan MIS transects for white headed . . . woodpeckers” (255). Since a major objective of the project is to “improve” such habitat, we wonder how a species that the Forest Service does not survey for in the project area, and for which there are very few observed individuals, can be utilized as an MIS by the project analyses.

Wildlife Guideline WIGU05 requires that “Habitat should be determined for MIS or Sensitive wildlife species within or near the Project Area. Surveys to determine presence should be conducted for those species with suitable habitat.” Since the term “focal species” doesn’t occur in the forest plan, does the PNF interpret WIGU05 to include the DEIS’s focal species?

Forest plan Standards WIST02, WIST03, WIST04, among others, imply that the Forest Service will be thoroughly surveying for species' presence in the project area. Guideline WIGU12 contains a similar implication for the presence of big game calving/fawning areas. Do we interpret those forest plan elements correctly?

The DEIS states that “No old forest has been identified in the Project Area.” (301) It appears that based upon other disclosures in the DEIS, adequate surveys for forest stand conditions have not been completed. Please disclose the results of final surveys for old forest.

If there are no old-forest habitat conditions within the project area, it is likely the project area does not provide habitat conditions that assure viability of many wildlife species. The PNF did not monitor population trends of old-growth MIS under the original forest plan, and still has insufficient monitoring data to assure that viable populations are being sustained. The forest plan does not disclose the amount, distribution, and quality of habitat needed to assure viability, and since old growth is deficient in the project area, the forest habitat that soonest will mature into old growth cannot be spared. The DEIS does not cite the results of monitoring or scientific studies that validate its assumptions that restoration treatments would promote conditions that would help wildlife that prefer old-forest habitat.

Since there may be no habitat in the project area that meets the criteria of “old forest” and there have been no transects for white-headed and pileated woodpeckers, how can the analyses for these MIS demonstrate anything about insuring viable populations?

The DEIS analysis for Old-Forest Habitat states that “Over time, restoration treatments are expected to enhance stand conditions and allow medium trees to faster achieve, and large trees to maintain, large tree size class than if left untreated.” (301) Please identify the best science that supports utilization of the proposed treatments for each of the MIS, Sensitive, Threatened, and focal wildlife species. The DEIS does not cite the results of any post-project monitoring that verifies habitat improvement—and therefore population increase—assumptions.

The DEIS states, “this estimate may be slightly inaccurate, because the habitat model cannot account for microsite conditions important to the species or the influence of roads on habitat quality” (273) This illustrates the issue regarding reliability of models. There has been no independent scientific peer review of any of the wildlife models utilized by the DEIS, rendering their use of unknown validity for the DEIS's analyses.

Regarding snag habitat, the DEIS (265) states:

Across the west side of the Forest, where the project area is located, snag numbers are generally within the HRV, but in some areas, snags are lacking due to the influence of roads or previous harvest activities. Snag numbers are often found to be below historical or desired amounts in roaded areas managed for timber products or in areas accessible to firewood cutters.

...Despite these concerns, assuming that the west-side inventory data are applicable to the project area, the anticipated number of snags per acre at current condition is within, or above, the desired range in almost all snag size classes for all PVGs. PVGs 2 and 5 are the exceptions, which is not unexpected, because these forest types have been heavily managed in the past.

We note that PVGs 2 and 5 have been assigned to at least a third of the Project Area, which pretty much blows holes in the claim that snags are within a rational “desired range.”

Furthermore, as the DEIS (129) admit, the Project Area has been heavily logged meaning “snags are lacking”:

The Lost Creek Boulder Creek Project area has been intensively managed for timber production. Available datasets indicate that timber harvest has occurred on approximately 34,700 acres within the project area. This is 54 percent of the forested area within the project area. This number is likely low because the data set utilized only records relatively intense treatments that occurred in the past 40 to 50 years.

Furthermore, the DEIS indicates that of the stands not included in the 54 percent from the datasets, “evidence is present that scattered harvest (typically of the large diameter ponderosa pine, Douglas-fir and western larch) did occur...” (129) The scientific information from ICBEMP implicates such highgrade logging for the deep deficiency of the numbers of large, old trees. With the current absence of data on snag numbers in the project area, it would be much more logical to assume that snag habitat is severely deficient.

Wuerthner, 2009 states: “Scientists are discovering that dead trees and downed wood play an important role in ecosystems by providing wildlife habitat, cycling nutrients, aiding plant regeneration, decreasing erosion and influencing drainage, soil moisture and carbon storage.”

Dead trees are crucial for every living thing in this forest ecosystem. The balance of soil moisture, the biological “engine” made up by soil microbes and invertebrates, all the plants that use the moisture and nutrients made available by soil microbes and invertebrates, every species of wildlife all the way up the food chain—**every living thing.**

The DEIS fails to disclose the best scientific information available that supports its assumptions concerning the quantity and quality of habitat necessary for sustaining the MIS and TES wildlife species. Viability for the Sensitive flammulated owl, white-headed woodpecker, black-backed woodpecker, American three-toed woodpecker, boreal owl, fisher, great gray owl, northern goshawk, pileated woodpecker, Canada lynx, mountain quail, wolverine, gray wolf, Rocky Mountain bighorn sheep, Rocky Mountain elk, spotted bat, Townsend’s big-eared bat, Northern Idaho ground squirrel, bald eagle, and Columbia spotted frog are not assured.

Mills, 1994, states that certain “**population dynamics**” must be considered in making determinations about species viability: “Ecological theory, supported by laboratory

experiments and field observations, has established several factors as critical to the consideration of long-term population persistence. Leading among these factors are three: the growth rate of the population, the size of the population, and the connectivity of the population with surrounding populations of the same species.” The DEIS does not utilize population dynamics in its analyses for wildlife.

The DEIS does not propose to manage consistent with the best science to protect alternate nest stands, post-fledging areas, and home ranges for the northern goshawk.

...“(T)he Forest management strategy for elk is less than desired for the Project Area” (291) and “restoration activities will decrease forest stand densities, creating more open habitat, which may lead to increased elk vulnerability to human hunters” (345). The elk need to get used to it, because the proposed vegetative conditions are “desired” according to the forest plan. “Within the project area, total road densities range from 1.0 in the Lower West Fork Weiser River to 8.5 in the Upper West Fork Weiser River (Table FH-7) with an overall road density of 5.2 miles per square mile across the entire project area.” (222) The DEIS does not disclose total post-project road density, but on page 233 discloses that each subwatershed would remain above scientifically recommended levels. The analysis doesn’t really explain why reducing road densities from extremely high to very high tips the project’s balance in favor of elk. The DEIS also discloses that the agency is unable to effectively prevent illegal motorized access in the project area. That fairly well sums up future prospects for the big-game populations that would use the project area.

“Unauthorized use of ATV/UTV use on non-system, closed roads will likely remain an issue for elk security. Reduction in funding for access management (e.g. gate maintenance) and law enforcement continue to exacerbate this ongoing problem.” (354) Those cumulative effects are not analyzed for wildlife other than elk.

The FEIS’s Response to Comments is a good indicator of the PNF’s responses to our comments. On the left side—lengthy comment, citing scientific references. On the right side—very little, mostly referring to the FEIS—with its analyses still mostly inadequate. As stated above, our DEIS comments remain germane regarding these wildlife species and their habitats.

AWR also raised Canada lynx in their DEIS comments:

The DEIS does not demonstrate consistency with applicable Lynx Conservation Assessment and Strategy (LCAS) Standards and Guidelines. The DEIS fails to provide adequate maps of LAUs and habitat components along with areas of human activity as the LCAS requires, making it impossible for the public and decision maker to understand the impacts of motorized travel, as well as to understand impacts on habitat and connectivity of habitat. The DEIS lacks a genuine analysis of the full range of cumulative impacts of other activities, including the cumulative effects of livestock grazing and motorized recreation in the project area.

We also question the adequacy of habitat standards and other direction set by the LCAS itself. The Forest Service would be hard-pressed to find many Lynx Analysis Unit in the Northern Rockies—heavily logged or otherwise—that fall below LCAS habitat

percentages. Management direction must go beyond validating the management status quo—the very situation that led to the listing of the lynx under the ESA.

The DEIS says “No current or historical records indicate lynx use the project area.” (285) Does this mean there never was a resident population? “Track surveys have not been conducted in existing Source habitat due to the inability of access during the winter. This portion of the Forest is not considered part of core lynx population, due to the lack of observations and the isolated, disjunct nature of the habitat.” (285) Please undertake an updated scientifically sound survey for lynx.

The Northern Rockies Lynx Management Direction (NRLMD) identifies the project area as a linkage zone. The NRLMD may also identify the project area as “secondary” habitat for which Terms and Conditions of the NRLMD Biological Opinion apply. The PNF also must manage consistently with the Amended Lynx Conservation Agreement between the Forest Service and the U.S. Fish & Wildlife Service.

The DEIS is not following the best available science for lynx. Squires et al. (2010) with additional research identified that older, multi-storied forests are essential as winter lynx habitat, and thus essential for the viability of lynx. The reduction of any of this key winter habitat may cause a risk to lynx viability, since lynx are already at a threshold level of survival in regards to winter hare populations; even minor reductions may result in winter starvations for lynx (Id.). It is currently recognized that there is a threshold of forest thinning and logging below which lynx may not persist (Squires et al. 2010; Squires 2010). The DEIS does not address the connection between the historic loss of lynx winter habitat and the population decline of lynx in the Northern Rockies. The proposed management of winter hare habitat will not ensure viability of the lynx.

Lynx winter habitat is clearly limited in the LAUs that will be impacted by this project. The Forest Service believes that because no lynx have been found in the project area (even though no surveys for lynx were conducted because of “inability to access during winter” (285) that it is somehow justifies reductions of lynx winter habitat.

...The BA notes that the LCAS identifies the following risk factors to lynx in this geographic area:

- Timber harvest and precommercial thinning that reduce denning or foraging habitat or converts habitat to less desirable tree species;
- Fire exclusion that changes the vegetation mosaic maintained by natural disturbance processes;
- Grazing by domestic livestock that reduces forage for lynx prey;
- Roads and winter recreation trails that facilitate access to historical lynx habitat by competitors;
- Legal and incidental trapping and shooting;
- Being hit by vehicles;
- Obstructions to lynx movements such as highways and private land development;

It is clear, then, that the FS must do more than follow its Forest Plans to protect lynx. Nonetheless, and in spite of the inadequate analysis population viability following adverse modification of habitat perpetuated by the Project, the North Butte Salvage Project BA concludes that the implementation of the proposed action would result in a determination of “may affect but not likely to adversely affect.”

...The EA fails to provide adequate maps of LAUs and habitat components along with areas of human activity as the LCAS requires, making it impossible for the public and decision maker to understand the impacts of motorized travel, as well as to understand impacts on habitat and connectivity of habitat. The BA lacks a genuine analysis of the full range of cumulative impacts of other activities. The EA and BA also fail to disclose the cumulative effects of livestock grazing on the grazing allotments in the project area.

The FEIS’s responses were basically, the PNF incorporated the LCAS and conforms to its standards, and please see an as-yet-to-be complete Biological Opinion by the U.S. Fish & Wildlife Service. Again, our comments were not addressed. It is impossible to tell if final consultation will result in our comments being addressed, because we are required to Object prior to the public release of the Biological Opinion.

AWR also raised wolverine in DEIS comments:

The wolverine was recently determined to be “Warranted” for listing under the ESA. [75 Fed. Reg.78030 (Dec. 14, 2010).] It is currently a Candidate species, waiting for work to be completed on other species before it is officially listed. The U.S. Fish & Wildlife Service found that “Sources of human disturbance to wolverines include . . . road corridors, and extractive industry such as logging . . .” .The DEIS admits that the wolverine and/or its habitat are present within the project area but contains no analysis of impacts. The Forest Service must conduct ESA consultation for the wolverine for this project.

Again, it is impossible to tell if final consultation will result in our comments being addressed, because we are required to Object prior to the public release of the Biological Opinion.

The Ninth Circuit Court of Appeals ruled that the Forest Service “must both describe the quantity and quality of habitat that is necessary to sustain the viability of the species in question and explain its methodology for measuring this habitat.” (*Lands Council v. McNair*). Assuring viability of most wildlife species is forestwide issue. The cumulative effects of carrying out multiple projects simultaneously across a national forest makes it imperative that population viability be assessed at least at the forestwide scale (Marcot and Murphy, 1992; also see Ruggiero et al., 1994a). The PNF Forest Plan Standards are not based upon scientific research regarding the forestwide amount and distribution of habitat needed to insure viability of old-growth associated wildlife.

Trall et al. 2010 and Reed et al. 2003 are published, peer-reviewed scientific articles addressing determination of a “minimum viable population” and explain that minimum viable population has been drastically underestimated in past. The Forest Service has not identified the best available science that has provided scientifically sound, quantitative minimum viable population determinations for wildlife on the PNF.

The Committee of Scientists (1999) state:

Habitat alone cannot be used to predict wildlife populations...The presence of suitable habitat does not ensure that any particular species will be present or will reproduce. Therefore, populations of species must also be assessed and continually monitored.

On the subject of conservation strategies, the Committee of Scientists (1999) state:

To ensure the development of scientifically credible conservation strategies, the Committee recommends a process that includes (1) scientific involvement in the selection of focal species, in the development of measures of species viability and ecological integrity, and in the definition of key elements of conservation strategies; (2) independent scientific review of proposed conservation strategies before plans are published; (3) scientific involvement in designing monitoring protocols and adaptive management; and (4) a national scientific committee to advise the Chief of the Forest Service on scientific issues in assessment and planning.

The Committee of Scientists (1999) emphasized the importance of inventories. The regulations required that in providing for diversity of plant and animal communities, “inventories shall include quantitative data making possible the evaluation of diversity in terms of its prior and present condition.” (36 C.F.R. Sec 219.26 (1984)) The Committee of Scientists (1999) explained, “No plan is better than the resource inventory data that support it. Each forest plan should be based on sound, detailed inventories of soils, vegetation, water resources, wildlife, and the other resources to be managed.”

REMEDY:

- Base a Supplemental Draft EIS upon a scientifically peer-reviewed minimum amount of old growth on the Forest, which includes a buffer amount above what is considered the minimum to insure viable populations of old-growth associated species, so that natural processes that result in loss of old growth do not result in threats to species’ viability.
- Base a Supplemental Draft EIS upon scientifically peer-reviewed Standards for distribution of old growth.
- Base a Supplemental Draft EIS upon scientifically peer-reviewed minimum size of blocks of **effective** (meeting all criteria) old growth, below which existing block sizes do not contribute to the forestwide minimum Standard or distribution Standard.
- Prepare a Supplemental DEIS that includes scientifically peer-reviewed conservation strategies for attaining those amounts and distribution of habitats.
- To ensure the development of scientifically credible conservation strategies, prepare a Supplemental DEIS that follow the process recommended by the Committee of Scientists, 1999 in the above paragraph.
- Delete treatments in project units that adversely impact the MIS and TES species in a short or medium timeframe.
- Conduct updated scientifically sound survey for the Northern Rockies fisher, Northern goshawk, wolverine, and Canada lynx for this project.
- Require that Project Monitoring includes old-growth habitat monitoring which creates an internet-based map inventory with linked stand data, updated at annually with all

changes fully explained, so the public can make informed judgments as to the accuracy of the inventory.

- Arrange for an independent scientific peer-review of the PNF's old-growth inventory prior to using its results as a valid estimate of old growth on the Forest.
- Provide an analysis that determines and discloses the quantity and quality of habitat necessary to insure viable populations of MIS TES wildlife species.

OBJECTION STATEMENT: The FEIS does not ensure viability for bull trout and other native salmonid species, nor does it demonstrate that project activities will adequately move ESA-listed species toward recovery. AWR's DEIS comments included:

The Watershed Condition Framework (WCF) and Watershed Condition Indicators (WCIs) the forest plan and DEIS rely upon are not well grounded in science and appear to be a linguistic exercise in shifting arbitrarily delineated categories. Improvements in WCIs are assumed to make a significant difference, but ultimately only monitoring could validate their use. As it stands, the DEIS assumes that taking actions that bump up a given WCI from "Functioning at Unacceptable Risk" (current rating of most project area WCIs) to "Functioning at Risk" provides justification for other actions known to cause watershed damage. Road densities, one WCI, are a prime example. For three of four alternatives (B, D, and E), road density in the Boulder Creek watershed would be reduced from 3.1 to 2.0 miles per square mile, "moving" this WCI from "Functioning at Unacceptable Risk" to "Functioning at Risk." This is an example of arbitrary use of language and terminology, since the U.S. Fish and Wildlife Service states that "bull trout are absent when road densities exceed 1.71 mi./sq. mi." (1998 Bull Trout Biological Opinion at p. 67.) With the other action alternative, C, road density would be reduced to 1.1 miles/sq. mi. which the DEIS, forest plan, and WCF say "moves" this WCI to a "Functioning Appropriately" rating. Yet the U.S. Fish and Wildlife Service states that "bull trout are ...depressed when the road density = 1.36 mi./sq. mi. ...and strong when road density equals or is less than .45 mi./sq. mi." (Id.) **And assuming WCI category improvement achieves meaningful restoration, it is revealing that so many Project Area WCIs would remain at "Functioning at Unacceptable Risk" regardless of the alternative chosen.**

The Fisheries analysis also cites very little recent data from measurements of WCIs taken inside the project area. Large woody debris measurements in streams were probably the most ample, but "Temperature data are not available for all streams in the analysis area." (225) The DEIS does not state how surface fines (sediment) were measured. (Table FH-10)

The DEIS does not demonstrate that population numbers and distribution assure viability of native fish in the project area streams.

The PNF proposes 6,100 acres of commercial logging within Riparian Conservation Areas (RCAs) and another 6,500 acres in RCAs that "may need" prescribed fire. Further, the DEIS indicates that instead of utilizing the default INFISH/PACFISH RCA delineations, the Forest Service will be implementing the RFP Aquatic Conservation Strategy (ACS) "Option 2" provision that allow them to shrink RCAs to 240 feet along perennial and fish-bearing streams (down from INFISH/PACFISH 300 feet) and to 120 feet beside ponds, lakes, reservoirs, wetlands, and intermittent streams (down from INFISH/PACFISH 150 feet). But the DEIS does not adequately

consider flood-prone width in its RCA delineation. Also, if there is support for ACS “Option 2” from the years of PACFISH/INFISH monitoring, we ask that the PNF cite those specific monitoring results. Finally, we note that the PNF refrains from RCA logging in the Priority Boulder Creek watershed. We think RCA logging is too risky in the other watersheds.

Proper delineation of RCAs would entail highly detailed field surveys, the costs of which are not justified considering the agency can simply implement INFISH/PACFISH default RCA widths.

Has the PNF successfully implemented RCA logging and burning in the past, with demonstrable “success” based upon measured outcomes consistent with project objectives?

The DEIS utilizes percent natural vegetation (PNV) as a proxy for stream water temperature. Please disclose the scientific research basis for the use of PNV.

Rain-on-snow events and chronically high annual peak flows cause stream channel aggradation, resulting in channel widening (Dose & Roper, 1994) and likely shallower streams which contribute to elevated water temperatures even in the absence of shade loss (Bartholow, 2000). The DEIS’s use of PNV does not consider this science.

The DEIS does not demonstrate that RCA logging or burning would be consistent with the Weiser River TMDL for Temperature. (152) This would require monitoring following similar previous RCA activities. We don’t see data from the measuring of stream temperatures in the DEIS.

“Indicators for determining effects within RCAs from proposed vegetation treatments was not completed for the DEIS. Site-specific data needed to input into the WEPP model was not collected prior to the release of this DEIS and therefore the sediment delivery distances are not calculated in this document. Site-specific data will be collected, and results of the WEPP Analysis are planned for release in the FEIS.” (168) The PNF is proposing 6,100 acres of commercial logging within RCAs, yet the effect analysis is not included in the DEIS. The public cannot be adequately informed for participation in the NEPA process if the federal project proponent isn’t even informed.

Although Burns et al. 2005 was cited in the DEIS, it does not disclose that they evaluated bull trout viability and trend on the Forest and concluded that bull trout viability is low in the Weiser River drainage with a long-term declining trend on the West Zone of the Forest.

“Outside Boulder Creek subwatershed, anadromous species and bull trout are absent in the project area. The Forest Plan recommends developing species specific criteria for other fish species (such as redband/rainbow trout).” (223) “Five patches of habitat capable of supporting bull trout are delineated by the RMRS in the Weiser River subbasin of the project area ... It is believed, however, that bull trout do not exist in those areas...” (211) The Endangered Species Act (ESA) requires federal agencies to recover populations, not maintain them at extreme risk of extinction. Also, how can the DEIS rely on the bull trout as a management indicator species (MIS) when it doesn’t even occur in most project area streams? Even the Sensitive Westslope cutthroat trout are mostly absent.

According to the U.S. Fish & Wildlife Service, four elements are necessary to assess long-term viability (extinction risk) of bull trout populations: 1) the number of local populations, 2) adult abundance, 3) productivity (reproductive rate), and 4) connectivity (presence of migratory life history form). The DEIS fails to address any of those parameters. Nor has the agency provided documentation or discussion of the impacts threshold that the local bull trout population can sustain.

...How can “ground disturbing activities in RCAs ...be avoided” where conducting commercial logging activities?

REMEDY: Prepare a Supplemental Draft EIS with the following:

- Consider flood-prone width in RCA delineation.
- Utilize detailed field surveys for proper delineation of RCAs.
- Disclose monitoring of successful implementation of RCA logging and burning in the past, based upon measured outcomes consistent with project objectives.
- Disclose the scientific research basis for the use of percent natural vegetation (PNV) as a proxy for stream water temperature.
- Disclose the support for ACS “Option 2” from the monitoring or the scientific literature.
- Disclose how “ground disturbing activities... in RCAs can be avoided” where conducting commercial logging activities.
- Refrain from RCA logging with this project.
- Provide an analysis that discloses the quantity and quality of habitat needed to maintain viable populations of native salmonid species.

OBJECTION STATEMENT: The PNF and has not properly consulted with the U.S. Fish and Wildlife Service on Critical Habitat.

AWR comments stated, “Since critical habitat for bull trout was designated after the RFP and its ACS were adopted, the Forest Service must reinitiate programmatic consultation for bull trout. The ESA also requires formal consultation for Snake River steelhead, and Snake River spring/summer and fall Chinook salmon.”

In 2010, bull trout Critical Habitat was designated over portions of the PNF. In order to comply with the Endangered Species Act (ESA), the PNF must complete formal consultation regarding Critical Habitat designations before possible adverse effects, such as from the Lost Creek-Boulder Creek Project, occur to Critical Habitat on the Forest. The PNF has not performed formal forest plan-level consultation with the U.S. Fish and Wildlife Service since the forest plan.

REMEDY:

- Prepare a Supplemental Draft EIS that adopts the direction in the 1998 Bull Trout Biological Opinion to create riparian, watershed, and fisheries standards into the Project.

- Prepare a Supplemental Draft EIS following formal consultation on the forest plan in the context of forestwide bull trout Critical Habitat designation.

OBJECTION STATEMENT: The FEIS relies upon scientifically invalid methodologies for estimating past and project-related soil detrimental disturbance (DD). AWR comments stated:

The DEIS’s Soil analysis provides data from exactly zero measurements actually taken inside proposed treatment units or riparian areas by IDT members.

...The PNF’s approach to soils is—damage now, and promise mitigation for later. That is not a sound management strategy for an ecosystem component so fundamentally vital for sustaining every other resource. The DEIS does not cite scientifically validated or monitoring validated methodology for soil damage mitigation for restoring the productivity of soils. And the lack of field surveys of existing detrimental disturbance (DD) and total soil resource commitment (TSRC) is troubling. Costs of mitigation and even feasibility of proposed treatments hinge upon current soil conditions, admittedly impacted to an unacceptable degree following past management actions including logging, burning, livestock grazing, road building, and motorized recreation.

The DEIS doesn’t even disclose what it considers to be scientifically sound methodology for measuring DD whether pre- or post-logging/burning. That the monitoring is only projected to cost \$600 (Appendices – 35) reveals the agency is not serious about demonstrating compliance with soil standards.

...“Those areas where DD soils were produced more than 50 years ago have recovered, for the most part, through natural processes over time...” (198). How was this recovery measured? Do any such assumptions of recovery use a landtype component?

“Presently, the amount of TSRC in the Lost Creek-Boulder Creek Project area (activity area) is estimated to be 4259 acres or 6.8 percent of the project area.” (199) How did the Forest Service measure “roads, landings, primary skid trails and gravel pits” (198) to arrive at this figure?

“This alternative would result in a reduction to 5.9 percent TSRC for the project area due to the decommissioning of roads.” (201). Would those acres be considered DD post-project?

REMEDY:

- Prepare a Supplemental DEIS that discloses the methodology used to measure detrimental soil disturbance in each project activity area.
- Prepare a Supplemental DEIS that provides a table that discloses the current amount of detrimental soil disturbance in each project activity area, and the amount of detrimental soil disturbance after logging and/or burning is completed.

OBJECTION STATEMENT: The FEIS relies upon scientifically invalid methodologies for protecting soil productivity. AWR’s comments included, “What is the correlation between the **amount of DD** in each activity area to the **reductions of soil productivity** in each of those activity areas?”

The FEIS contains the following as a Management Requirement: “Maintain detrimental disturbance levels at 15 percent or less within activity areas following completion of proposed activities (*Forest Plan p. III-21, SWST02, FSH 2509.18*).”

Forest Plan Standard SWST02 states;

Management activities that may affect soil detrimental disturbance (DD) shall meet the following requirements:

- a) In an activity area where existing conditions of DD are below 15 percent of the area, management activities shall leave the area in a condition of 15 percent or less detrimental disturbance following completion of the activities.
- b) In an activity area where existing conditions of DD exceed 15 percent of the area, management activities shall include mitigation and restoration so that DD levels are moved back toward 15 percent or less following completion of the activities.

To estimate soil DD, it is essential that the glossary definitions for activity area, detrimental soil disturbance and total soil resource commitment (TSRC) are clearly understood.

The DEIS does not disclose that the Forest Plan Standard SWST02 and FSH 2509.18 DD 15% threshold is not based upon scientifically or publicly (i.e., NEPA) developed limitations on soil damage. NFMA requires the Forest Service to “ensure that timber will be harvested from National Forest System lands only where—soil, slope, or other watershed conditions will not be irreversibly damaged.” [16 U.S.C. 1604 (g)(3)(E).] The FEIS thus violates NFMA and NEPA.

The PNF’s soil productivity proxy—their determination that management actions may permanently damage the soil covering 15% of an activity area and still meet NMFA and planning regulations—is arbitrary. The FEIS does not cite any scientific basis for adopting its percent numerical limits. Page-Dumroese et al. 2000 emphasize the importance of validating soil quality standards using the results of monitoring.

In response to public comments on the Kootenai NF’s Brush Creek Environmental Assessment, the Forest Service stated:

Forest (“land”) productivity is “the summation of productivities of the individual landscape elements (stands) that comprise the forest and is the integration of soil productivity, species composition and stocking, and stand history (Grgal 2000)”. If soil productivity is adversely affected due to compaction, then this will have an impact on the overall productivity of the forest. Forest productivity is difficult to measure, so oftentimes, soil quality is used to estimate the potential productivity (Little et al., unknown year).

The Forest Service’s utilization of its proxy (amount of detrimental disturbance) results in some level of observable or measurable soil damage to be considered zero, because it falls below a threshold amount—even though it may cumulatively affect the productivity of the soil. That damage will always be disregarded in analyses that rely on the survey protocols based upon Page-Dumroese et al. (2009). We are aware of no scientific information based upon PNF data

that correlates the proxy (areal extent of detrimental soil disturbance in activity areas) to metrics of long-term reductions in soil productivity, in order to validate the use of the proxy as a scientifically meaningful estimate of changes in soil productivity.

USDA Forest Service, 2007c states:

The Regional Soil Quality Standards (R-1 Supplement 2500-99-1) were revised in November 1999 (DEIS, A-11 (EIS Chapter 3). Manual direction recommends maintaining 85% of an activity area's soils at an acceptable productivity potential with respect to detrimental impacts - including the effects of compaction, displacement, rutting, severe burning, surface erosion, loss of surface organic matter, and soil mass movement. This recommendation is based on research indicating that a decline in productivity would have to be at least 15% to be detectable (Powers, 1990).

The R-1 Supplement 2500-99-1 is almost identical to FSH 2509.18. It is important to note the separate and distinct thresholds in discussing 15% **increases in bulk density**, a threshold below which soil compaction is considered to be detectable, and 15% **areal limit for detrimental disturbance**, the Forest Plan and FSH upper limit on detrimental disturbance within "activity areas." With that caveat, what Powers had to say in relation to soil standards is quite revealing as quoted in Nesser, 2002:

...the 15% standard for increases in bulk density originated as the point at which we could reliably measure significant changes, considering natural variability in bulk density... applying the **15% areal limit** for detrimental damage is not correct... that was never the intent of the 15% limit... and **NFMA does not say that we can create up to 15% detrimental conditions**, it says basically that we cannot create significant or permanent impairment, period...

(Emphasis added.) Nesser was a Soil Scientist at the Regional level. To comply with NEPA, an EIS must disclose internal controversies the agency fully recognizes surrounding its use scientific information for something as critical as standards for compliance with NFMA. NFMA requires that the Forest Service must "insure that timber will be harvested from National Forest System lands only where ...soil, slope, or other watershed conditions will not be irreversibly damaged." In effect, the Forest Service's position is that its management may cause long-term or essentially irreversibly damage up to 15% of activity areas in disregard of NFMA—without any scientific basis.

In response to public comment that the 15% areal extent limit had been confused by the Forest Service with the 15% increase in bulk density from soil compaction, the Forest Service responded:

Powers (1990) cites that the rationale bulk density is largely based on collective judgment. The FS estimates that a true productivity decline would need to be as great as 15% to detect change using current monitoring methods. Thus the soil-quality standards are set to detect a decline in potential productivity of at least 15%. This does not mean that the FS tolerates productivity declines of up to 15%, **but merely that it recognizes problems with detection limits**. Also, a 15% increase in bulk density may not be detrimental to productivity; site and soil productivity depends on the soil and ecosystem in which it is found.

(USDA Forest Service 2008a, Emphasis added.) This means the 15% bulk density increase limit is based upon the limitations of the agency’s methodology for detecting changes in bulk density—not concerns over soil productivity. The Forest Service has also stated: The 15% change in aerial extent realizes that timber harvest and other uses of the land result in some impacts and impairment that are unavoidable. **This limit is based largely on what is physically possible**, while achieving other resource management objectives.

(USDA Forest Service 2008b, emphasis added.) This means the 15% DD Standard for activity areas is based on logging operational feasibility—not concerns over soil productivity. If this is the case, this should be clarified so that the debate about what where such a 15% Standard can progress.

AWR comments also pointed out that the DEIS does not disclose the cumulative loss of soil productivity due to noxious weed infestations in the project area. AWR comments stated:

The DEIS states that “Activities proposed under the Project are not anticipated to substantially cause or promote the introduction or spread of invasive species.” (Appendices – 51) This is a misleading statement, given that there is scientific consensus that the cumulative effects of land disturbing and other human actions such as motorized travel greatly exacerbate the conditions for noxious weed spread.

Noxious weeds are one of the top threats to biodiversity on national forests. We note that there are no binding legal standards to address noxious weeds in the Forest Plan, leaving it nonresponsive to NFMA requirements for diversity. The DEIS does not disclose the present level of noxious weed infestations in the Project area and the cause of those infestations. The DEIS does not disclose the impacts that noxious weed infestations cause to native plant communities. The DEIS does not disclose the effectiveness of BMPs for preventing new weed infestations following logging and related road operations. The DEIS does not disclose how this project may exacerbate existing noxious weed infestations or cause new infestations.

REMEDY:

- Prepare a Supplemental DEIS that quantifies the project area extent of soils with impairment or experiencing detrimental impacts based upon the presence of noxious weeds.
- Prepare a Supplemental DEIS that includes project standards for noxious weed management which address the cause of the noxious weed problem through prevention.
- Prepare a Supplemental DEIS that discloses scientific data showing correlations of measures of detrimental disturbance on the PNF with measures of changes in soil productivity.
- Disclose the scientific methodology the EIS relies upon for its assumption that past soil damage in the project area has recovered through natural processes.
- Disclose scientifically validated methodology for soil damage mitigation the Forest Service relies upon with this project.

OBJECTION STATEMENT: The FEIS fails to consider the importance of retaining adequate amounts of coarse and fine woody debris in areas proposed for logging and/or burning.

AWR's comments stated, "The important ecological role of almost every kind of organic material is either ignored or downplayed in the DEIS's soil analysis." That comment was ignored.

A Desired Condition in the Forest Plan is, "Soil protective cover, soil organic matter, and coarse woody material are at levels that maintain or restore soil productivity and soil-hydrologic functions where conditions are at risk or degraded." The Forest Plan also states: "Forest Service Manual and Handbook management direction for snags and coarse woody debris is in FSM 5150 – Fuels, FSM 2550 - Soil Management, and FSH 2509.18 - Soil Management Handbook." Yet nowhere in the FEIS is FSM 5150 or FSM 2550 even mentioned, and FSH 2509.18 is only mentioned in the context of detrimental disturbance—not in terms of ensuring compliance with management direction for coarse woody debris so that ecologically sufficient amounts are retained following management activities.

Graham et al. 1994 includes recommendations for managing down logs and other coarse woody debris in the context of such management activities. The Lost Creek-Boulder Creek FEIS fails to address the best scientific information available regarding this forest component. Along with long-term soil productivity, this has critical implications for wildlife habitat.

OBJECTION STATEMENT: The FEIS fails to disclose the cumulative impacts of fire suppression. AWR's comments included:

The analysis of fire effects in the DEIS reflects the Forest Service's continuing struggle to come to grips with this essential natural process. Although the agency admits that a significant cause of departures from "desired" conditions in the project area is fire suppression, there is no explicit plan to get fire back onto the landscape as a naturally functioning process. In fact, the effects of future fires are mostly characterized as something that would be catastrophic, uncharacteristic, or undesired. The DEIS largely downplays or ignores the benefits of mixed severity and high severity fire. Even if all the "treatments" now proposed were to closely mimic the effects of a "characteristic" fire, there is no other plan for these newly "resilient" landscapes other than full on fire suppression where natural ignitions occur. The RFP and DEIS entirely fail to disclose the long-term ecological and economic costs of this management regime.

Our groups would support proper fuel treatments located immediately adjacent to structures along private land/national forest boundaries. Such treatments are supported by the scientific community as the most efficient and effective means to protect the values located on those private lands. However the DEIS's analysis does not support the proposition that the project activities would adequately and significantly reduce the risk of fire within the fire/fuels cumulative effects analysis area, as explained next.

The DEIS's brief analysis discusses fuel conditions only in the areas proposed for treatment, yet wildland fire operates beyond artificial ownership or other boundaries. In regards to the proper cumulative effects analysis area for fire risk, Finney and Cohen (2003) discuss the

concept of a “fireshed involving a wide area around the community (for many miles that include areas that fires can come from).” In other words, for any given entity that would apparently have its risk of fire reduced by the proposed project (or affected cumulatively from past, ongoing, or foreseeable actions on land of all ownerships within this “fireshed”)—just how effective would fuel reduction be? The DEIS fails to include a thorough discussion and detailed disclosure of the current fuel situation within the fireshed within and outside the proposed treatment units, making it impossible to make scientifically supportable and reasonable conclusions about the manner and degree to which most fire behavior would be changed by the project.

The DEIS doesn’t even include analyses on how structures on private lands would be differentially at risk due to fire behavior under the alternatives’ scenarios.

Again, a major premise of the project is that the ecological impacts of fire suppression have been significant. The DEIS does not adequately consider the spatial and temporal ecological cumulative impacts of the PNF’s fire suppression management regime for the area. Nor does the DEIS explore the economic implications of the FS’s fire management.

“Uncharacteristic fire effects threaten desirable plant communities, ecological processes and the ability to protect life, investments, and other valuable resources.” (DEIS at 6.) The DEIS also states:

The Wesley Fire occurred in 2012 and grew to 16,405 acres; of which 5,522 acres are within the project area. The 2004 North Star Butte Fire grew to 1,330 acres, of which 1,030 acres were within the project area. Two other larger fires, the Rock Jack Fire in 1996 (117 acres), and Sale Fire in 1989 (28 acres) also occurred in the project area.

Yet nowhere in the DEIS can one find any assertion that the effects of those recent fires were “uncharacteristic” because the cumulative effects of those fires went without analysis in this DEIS.

“Approximately 86 percent (68,105 acres) of the project area has missed two or more fire return intervals.” (138) Does that include the acres previously logged, which the DEIS implies mimics the effects of wildland fire? And the DEIS does not cite the source of this number, or a statistically sound confidence interval.

Referring to Table FF-4, it fails to identify the percentage of Project Area **forested acres** with “Significant Movement toward Historic Fire Regimes” since it includes grasslands to be burned. It would be less than halfway towards “desired” at most.

The fire analysis lacks any temporal component, considering action alternative effects beyond immediate post-project. This makes no sense given the dynamic nature of forest ecosystems.

The Fire and Fuels Cumulative effects discussion lists projects that have allegedly improved fire regime conditions or restored or improved fire regimes within the project

area. If true, that would be a cumulative effect worth actually analyzing, instead of merely making broad-brush claims about.

The PNF needs to perform a cumulative effects analysis of its fire suppression policies—how those effects play out on the PNF and in the project area. We believe the science is unequivocal—the forest won't be restored without allowing wildland fire in locations not adjacent to private land/structure, and without incorporating some prescribed fire in the latter riskier locations. Without the natural process of fire, the suite of ecological damages associated with the substitution of mechanical treatments will continue long-term adverse impact on the watersheds and terrestrial habitats. This leaves the door open to comprehensive restoration being subservient to timber volume production.

The Sensitive black-backed woodpecker is quite instructive, because its habitat is comprised predominately of insect infested or burned over stands. Insect infestations and recent wildfire provide key nesting and foraging habitats for the black-backed woodpecker and “populations are eruptive in response to these occurrences” (Wisdom et al. 2000). A basic purpose of the Lost Creek-Boulder Creek project is to negate the natural occurrence that the black-backed woodpecker biologically relies on; the emphasis in reducing the risk of stand loss due to stand density coupled with the increased risk of stand replacement fire events. This emphasis is likely a large portion of the PNF. Viability of a species cannot be assured if habitat suppression is to be a forestwide emphasis via the forest plan.

AWR's comments included, “Regarding another Sensitive species, the black-backed woodpecker, Cherry (1997) states:

The black-backed woodpecker appears to fill a niche that describes everything that foresters and fire fighters have attempted to eradicate. For about the last 50 years, disease and fire have been considered enemies of the ‘healthy’ forest and have been combated relatively successfully. We have recently (within the last 0 to 15 years) realized that disease and fire have their place on the landscape, but the landscape is badly out of balance with the fire suppression and insect and disease reduction activities (i.e. salvage logging) of the last 50 years. Therefore, the black-backed woodpecker is likely not to be abundant as it once was, and continued fire suppression and insect eradication is likely to cause further decline.”

Hutto, 1995 who studied forests burned in the supposedly disastrous 1988 season, noted:

Fire is such an important creator of the ecological variety in Rocky Mountain landscapes that the conservation of biological diversity [required by NFMA] is likely to be accomplished only through the conservation of fire as a process...Efforts to meet legal mandates to maintain biodiversity should, therefore, be directed toward maintaining processes like fire, which create the variety of vegetative cover types upon which the great variety of wildlife species depend.

Hutto, 1995 states: “Fires are clearly beneficial to numerous bird species, *and are apparently necessary for some.*” (p. 1052, emphasis added.) Hutto, 1995 also noted:

Contrary to what one might expect to find immediately after a major disturbance event, I detected a large number of species in forests that had undergone stand-replacement fires. Huff et al. (1985) also noted that the density and diversity of bird species in one-

to two-year-old burned forests in the Olympic Mountains, Washington, *were as great as adjacent old-growth forests...*

...Several bird species seem to be relatively *restricted* in distribution to early post-fire conditions... I believe it would be difficult to find a forest-bird species more restricted to a single vegetation cover type in the northern Rockies than the Black-backed Woodpecker is to early [first 6 years] post-fire conditions. (Emphasis added).

USDA Forest Service 2011c states:

Hutto (2008), in a study of bird use of habitats burned in the 2003 fires in northwest Montana, found that within burned forests, there was one variable that exerts an influence that outstrips the influence of any other variable on the distribution of birds, and that is fire severity. Some species, including the black-backed woodpecker, were relatively abundant only in the high-severity patches. Hutto's preliminary results also suggested burned forests that were harvested fairly intensively (seed tree cuts, shelterwood cuts) within a decade or two prior to the fires of 2003 were much less suitable as post-fire forests to the black-backed woodpecker and other fire dependent bird species. Even forests that were harvested more selectively within a decade or two prior to fire were less likely to be occupied by black-backed woodpeckers.

Hutto, 2008 states, "severely burned forest conditions have probably occurred naturally across a broad range of forest types for millennia. These findings highlight the fact that severe fire provides an important ecological backdrop for fire specialists like the Black-backed Woodpecker, and that the presence and importance of severe fire may be much broader than commonly appreciated." The Forest Service continues to manage against severely burned forests.

Hutto, 2006 states:

The profound failure of many decision makers to appreciate the ecological value of burned forests stems from their taking too narrow a view of what forests provide. ...Land managers, politicians, and the public-at-large need to gain a better appreciation of the unique nature of burned forests as ecological communities ...and how important the legacy of standing deadwood is to the natural development of forests (Franklin et al. 2000).

The popular media have caught on to the need to appreciate the value of the natural process that is wildland fire. (*Wildfires can be a boon to fisheries, Out of fire's destruction comes new growth, Birds in the black, One year after fire Black Mountain is springing back to life, What in the blazes, The Washington Post 2002*). The media and others have also viewed opinions on the fiscal and environmental folly of the prevailing fire suppression policies (*As wildfire changes, so should we, Approaching firefighting's limits, Born of Fire, Money to Burn, Burning Money, Hutto, Richard; quoted in the June 22, 2006 issue of the Missoula Independent, Hutto, Richard, 2011. The Beauty of a Burned Forest. Crown of the Continent, Fall 2011 Issue 6, pp. 42-49. University of Montana.*

REMEDY:

- Prepare a Supplemental Draft EIS that fully analyzes an alternative utilizing natural processes as the prime method of vegetative restoration outside a wildland urban interface that is delineated using the NEPA process including the best scientific information available.
- Prepare a Supplemental Draft EIS that discloses the forestwide cumulative impacts of fire suppression.

OBJECTION STATEMENT: The FEIS fails to adequately disclose analyses of cumulative effects, in violation of NEPA. AWR's comments included:

The sections on cumulative effects in the DEIS are mostly just a listing or mentioning of past, ongoing, and reasonably foreseeable actions, and provide inadequate **analysis** of those impacts for just about every resource, in violation of NEPA.

It is important that the results of past monitoring be incorporated into cumulative effects analyses. The Forest Service must include the results of monitoring done in the project area as committed to in the NEPA documents of past projects or as a part of the Forest Plan monitoring and evaluation effort.

Please disclose if the Forest Service has performed all of that monitoring and mitigation required or recommended in any NEPA documents.

Please disclose the PNF's record of compliance with its monitoring requirements as set forth in its Forest Plan.

The DEIS does not provide an adequate analysis and disclosure of the cumulative effects of motorized recreation on vegetation, soils, fish, wildlife and water quality.

More cumulative effects left barely analyzed are past and ongoing ecological damage from livestock grazing. ... The DEIS includes no alternative that adequately deals with the adverse cumulative effects of grazing, in violation of NEPA.

Under "Cumulative Effects" the DEIS states, "Actively grazed range allotments within the cumulative effects area contribute to loss of ground cover in RCAs and conversion of desirable native vegetation to less favorable weedy species. Wetlands are at risk for compaction as well and possible effects to shallow water tables." (188) This discloses that impacts are occurring, but it is not a genuine cumulative effects **analysis**.

The Watershed section concludes with this "Cumulative Effects Summary":

Existing harvest units and roads (especially roads in RCAs), road maintenance, livestock grazing, and recreational activities may affect stream conditions and watershed indicators within the effects area and would be expected to continue to affect water quality parameters such as stream temperature, nutrients, bacteria, and sediment. In combination with the other activities in the cumulative effects area, the proposed project is not expected to have any detectable cumulative effect on watershed resources or water quality in the Little Salmon River, Weiser River, or their tributaries.

Road decommissioning planned within the cumulative effects area is expected to result in a reduction of sediment produced by roads over time.

(189, emphasis added) That second sentence makes no sense in the context of the other two sentences (or the rest of the watershed analysis).

“Unauthorized use of ATV/UTV use on non-system, closed roads will likely remain an issue for elk security. Reduction in funding for access management (e.g. gate maintenance) and law enforcement continue to exacerbate this ongoing problem.” (354) Those cumulative effects are not analyzed for wildlife other than elk.

REMEDY: Prepare a Supplemental Draft EIS that fully analyzes and discloses cumulative effects.

OBJECTION STATEMENT: The FEIS does not demonstrate that more opportunities are needed in the project area for motorized recreation activities, does in disclose cumulative effects, and does not respond to comments on this issue. AWR comments on the DEIS included:

The DEIS does not demonstrate that more opportunities are needed in the project area for motorized recreation activities.

...“The OHV trails would be open to vehicles 72 inches – 84 inches in width and designed to meet Trail Class 2 standards ... (which) have a design tread width of 72 inches – 84 inches, are on native material with limited grading, with structures minimum width being 96 inches.” (42) Such “trails” would effectively be—roads.

“Users are riding on existing open roads, but have also created unauthorized routes that have been pioneered in by over-enthusiastic OHV users.” (366) Does the Forest Service assume that project activities will curb “over-enthusiastic” (we call it lawless) behavior on the part of motorized recreators? If so, what is the basis for that assumption?

The FEIS basically ignored most of these comments.

REMEDY: Prepare a Supplemental Draft EIS that:

- Demonstrates more opportunities for motorized recreational are needed in the project area.
- Discloses cumulative effects.
- Responds to our comments on this issue.

OBJECTION STATEMENT: Vegetation treatments are based upon Desired Conditions which are themselves not supported by science or data on past forest conditions in the project area, rendering the alternatives arbitrary and insufficient for the stated purpose and need. AWR’s comments included:

The DEIS states that “Proposed activities were developed utilizing a combination of data derived from aerial photo interpretation and field reconnaissance. Layout of exact

boundaries and treatment types would be determined based upon additional on-the-ground surveys and vegetative conditions within each stand.” (31) The DEIS doesn’t say how many proposed treatment areas have yet to receive on-the-ground surveys for vegetative conditions, but it’s likely to be quite substantial. So the premise of this project, which is largely that vegetative conditions in the project area vastly depart from desired or reference conditions, is actually not supported by much but speculation. And since wildlife habitat for the DEIS has been modeled based upon these insufficient vegetation condition surveys, the wildlife analysis is also quite suspect. How many acres of proposed treatment stands in the project area had been surveyed for departed vegetative conditions prior to DEIS analysis?

Does the PNF maintain an inventory of forest stands that meet the Forest Plan desired conditions for species composition, spatial patterns, tree size class distribution, canopy closure, and snag numbers?

What is the scientific basis for assuming, as the DEIS does at p. 32, that so much of the project area shows “forest health” concerns because of “basal area density over 120 feet² per acre”, which would justify removing trees ≥ 20 ” dbh? What is the scientific basis for a “non-seral” (e.g. grand fir or Douglas-fir) over 100 years old being a “forest health” concern?

“(D)o not retain (large diameter western larch and ponderosa pine) trees if the basal area would be greater than 120 square feet per acre.” (Id.) Again, what is the “forest health” concern here? Clumpiness is a natural characteristic of these forests, even including open ponderosa pine types.

...In the vegetation analysis, regarding spatial patterns the DEIS states:
Additional information and science is referenced in the draft WCS beyond that which is referenced in the Forest Plan. No quantifiable metrics are identified in either document regarding spatial arrangement, but as recommended in the draft WCS, an analysis of spatial arrangement that quantifies the proportion of different age classes or seral stages across the landscape and over time has been completed and provided in this document.

(102, emphasis added.) The DEIS does not explain how departure from reference conditions can be adequately analyzed for spatial patterns, and as an indicator/measurement if there is no spatial analysis. Numbers alone, including “proportion,” do not provide a spatial analysis. The DEIS thus fails to respond to the science it cites that states “management needs to consider the major disturbance processes, including variability and scale, that determine ecosystem components and their spatial pattern.” (109, emphasis added.)

The DEIS doesn’t even really do its inadequate analysis of spatial pattern “**over time**” only numbers for “Desired” which based upon a non-peer review report prepared for Boise Cascade Corporation², “Existing” based upon largely aerial photography, immediately

after treatment, and 25 years post-project. That hardly describes the naturally fluctuating characteristics of forest pattern.

²“Boise Cascade Corporation provided funding, maps, analysis and inventory data to support this project.” Morgan and Parsons, 2001.

If the statistics on spatial pattern departure are taken seriously (Figures FV-2 and FV-3), then it’s clear that desired spatial patterns are one more “desired condition” that will never be anywhere near achieved in the foreseeable future. Similar can be said of other forest vegetation indicators/measurements utilized by the DEIS—there is no plan to ever “get there.” And since desired vegetative conditions (the Historic Range of Variability, or HRV) are the methodology utilized by the forest plan and draft WCS to assure viability of species, it is easy to see how nothing about the forest plan, the draft WCS, or this project insures viability as required by NFMA.

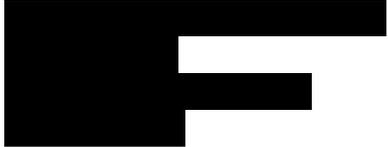
The DEIS does not utilize data from the project area to identify “reference conditions” (and therefore accurately describe departures from said reference conditions) for the Indicators/Measurements listed on page 100. The DEIS further does not disclose statistically sound confidence intervals for any of the “desired” ranges for these parameters.

REMEDY: Prepare a Supplemental Draft EIS that utilizes the best scientific information available and historic data on forest conditions in the project area to define Desired Conditions and reference conditions, especially as pertaining to species composition and landscape pattern.

Submitted sincerely for Objectors,



On behalf of:
Michael Garrity, Lead Objector



and:
Sara Johnson
Native Ecosystems Council



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