



United States  
Department of  
Agriculture

Forest  
Service

Region 1

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**File Code:** 1570 (215)

**Date:** July 26, 2000

**Route To:**

**Subject:** Boyer Fire Salvage and Rehabilitation DN, Appeal #00-01-00-0099, Lolo NF

**To:** Appeal Deciding Officer

This is my recommendation on disposition of the appeal filed by Jeff Juel on behalf of The Ecology Center, Inc. and The Alliance for the Wild Rockies protesting the Boyer Fire Salvage and Rehabilitation Decision Notice (DN) signed by the Lolo National Forest Supervisor.

The Forest Supervisor's decision implements Alternative 6, as described in the Boyer Fire Salvage and Rehabilitation Environmental Assessment. This alternative proposes to salvage fire-killed trees and stressed Douglas-fir trees susceptible to Douglas-fir bark beetle infestation on approximately 546 acres. On approximately 144 of those acres, some live trees, along with the dead, would be harvested. The proposal also involves spraying of noxious weeds along approximately 33 miles of roadway; construction of approximately 0.8 miles (4,300 feet) of temporary road that will be fully recontoured following salvage operations; reconstruction of an estimated 20.5 miles of existing road with Best Management Practices (BMPs); installation of a gate on Road #17382 and decommissioning approximately 16.6 miles of road. An estimated 45 acres of prescribed burning would occur following harvest.

My review was conducted pursuant to, and in accordance with, 36 CFR 215.19 to ensure the analysis and decision are in compliance with applicable laws, regulations, policy, and orders. The appeal record, including the Appellants' objections and recommended changes, has been thoroughly reviewed. Although I may not have listed each specific issue, I have considered all the issues raised in the appeal and believe they are adequately addressed below.

The Appellants allege violations of the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA), and the Endangered Species Act (ESA). The Appellants request a remand of the DN. An informal meeting was held with no resolution of issues.

## ISSUE REVIEW

### ISSUE 1. ALTERNATIVES

**Contention 1: The Forest Service rejected an alternative without full and fair analysis.**

**Response:** As identified in the DN (p. 6), the Forest Supervisor considered the changes recommended by the Appellant as part of the appeal resolution on the previous Boyer Fire Salvage and Rehabilitation decision. These changes were not considered in detail because they do not meet the purpose and need to: reduce the risk of Douglas-fir beetle population buildup, improve the vigor and species composition



of timber stands, and improve big game winter range conditions. This is also addressed in Appendix D (EA Comments, pp. 7-8), which shows that there is no measurable difference in effects with respect to sediment production, water yield, road density, and residual black-back woodpecker habitat between your proposal and Alternative 6. However, Alternative 6 would result in benefits to winter range, reduction in the risk of Douglas-fir beetle infestation (EA, p. 64), and improvement of the vigor and species composition of timber stands (EA, p. 9).

**Contention 2: The Boyer Fire Salvage and Rehabilitation was not proposed because there was really a need to ‘reduce risk of Douglas-fir beetle population buildup, improve the vigor and species composition of timber stands, and improve big game winter range conditions.’ It was proposed subsequent to the Boyer wildfire because the Lolo NF perceived the opportunity to ‘salvage’ timber.**

**Response:** The Purpose and Need (EA, p. 1) states that the purpose and need for the *salvage* activities is to support the economic structure of local communities and provide for Regional and National needs of forest products before the condition of the dead trees deteriorate. This is in agreement with the Forest-wide management direction goal #1 (Lolo National Forest Plan, p. II-1).

The purposes of *harvesting live trees* are to: remove fire-stressed Douglas-fir trees to reduce the risk of Douglas-fir beetle population buildup that could potentially affect trees outside the fire perimeter; selectively remove smaller trees to improve the vigor and species composition of the remaining stand; improve big game winter range conditions on land allocated to big game winter range under the Lolo National Forest Plan; and remove trees infected with dwarf mistletoe to reduce the risk of future infection in trees planted to regenerate burned areas (EA, p. 1; DN, p. 2).

**Contention 3: The EA simply does not adequately substantiate that there was a need to reduce risk of Douglas-fir beetle population buildup, improve the vigor and species composition of timber stands, and improve big game winter range conditions.**

**Response:** Pages 28-30 of the EA discuss the susceptibility of fire-weakened trees to Douglas-fir beetle infestation and diseases, and the potential for spread into green trees outside the fire area. Stands at risk to Douglas-fir bark beetle infestation were identified. Supporting information, including the Regional entomologist’s reports and stand data, is located in the Project File (doc. 68-74). Page 64 of the EA identifies that “Removal of these trees would reduce risk of infesting the adjacent 626 acres of susceptible stands by bark beetles produced in the fire weakened trees.”

In Management Area 18, the Forest is proposing to improve big game winter range conditions, consistent with one of the Lolo National Forest Plan goals to “Optimize forage production and cover for deer, elk, and bighorn sheep on winter range” (Lolo National Forest Plan, p. III-83 and EA, p. 18).

Proposed selective removal of smaller trees to improve the vigor and species composition of the remaining stand, is consistent with Lolo National Forest Plan goal to “Provide for healthy stands of timber and optimize timber growing potential” for areas identified as Management Area 16 by the Lolo National Forest Plan (Lolo National Forest Plan, p. III-70; EA, p. 18).

## **ISSUE 2. PURPOSE AND NEED AND RESPONSE TO COMMENTS**

**Contention 1: The Lolo National Forest failed to address a public comment regarding the Purpose and Need of the project.**

**Response:** The Forest Supervisor clearly responded to your comment as documented in Appendix D (Project File, doc. 5).

## **ISSUE 3. SOILS**

**Contention 1: The Forest Service failed to analyze the cumulative effects on soils.**

**Response:** The Soil and Water Environmental Consequences report (Project File, doc. 91) and the EA (pp. 53-60), disclose cumulative effects information for the soil resource. Past, present and reasonably foreseeable future actions were assessed including grazing, harvesting, fire, roads and natural processes. Required site-specific BMP mitigation was developed to reduce cumulative effects to soils and is outlined in the Environmental Consequences report (Project File, doc. 91) and EA (pp. 11-13).

**Contention 2: The Regional Standards (R1 Supplement 2500-99-1) require, at the very least, estimates of detrimental soil conditions be made based upon visual inspection of each Activity Area. There is no documentation in the project file that shows the Lolo NF even looked.**

**Response:** The Forest hydrologist worked cooperatively with the DNRC hydrologist to assess existing conditions and project effects. They made several visits to various sites within the analysis area and field observation notes are in the Project File (Project File, docs. 92-94, 104 and 109). These field visits were conducted as part of the Fire Rehabilitation Analysis, in cooperation with the DNRC hydrologist for the Watershed Analysis and with Interdisciplinary Team members during alternative development. The Forest hydrologist reviewed Land System Inventory (LSI) maps to determine the presence of sensitive soils (Project File, doc. 106). Where activities are proposed in areas that have concerns about soils, additional site-specific mitigation is required to protect the soil resource (EA, pp. 12-13). Planned management practices have been designed to maintain or improve soil quality and not create detrimental soil conditions as outlined under 2554.03 (R1 Supplement 2500-99-1).

## **ISSUE 4. WATER QUALITY AND FISHERIES**

**Contention 1: The Forest Service failed to analyze the effects of the project on water quality and fisheries.**

**Response:** Results of the watershed analysis are displayed on pages 59-60 of the EA and in the Soil and Water Environmental Consequences report (Project File, doc. 91). Results of the fisheries analysis are displayed on pages 76-78 of the EA. The Forest hydrologist consulted with the Montana Department of Environmental Quality (Project File, doc. 99). Based on a response letter from the Montana Department of Environmental Quality, the restoration plan and effectiveness monitoring is appropriate to protect and start restoring beneficial uses for Henry Creek. With the outlined BMPs and Management/Mitigation

Requirements, all action alternatives would meet Forest Plan Standards for watershed and State Water Quality Standards.

**Contention 2: The EA failed to disclose the present values of Riparian Management Objectives (RMOs) and failed to provide assurance that they would not be retarded by logging and road building activities approved under Alternative 6.**

**Response:** Under the Inland Native Fish Strategy, interim RMOs apply to watersheds occupied by inland native fish. Widths of interim Riparian Habitat Conservation Areas (RHCA) are adequate to protect streams from non-channelized sediment inputs and are sufficient to provide other riparian functions, including delivery of organic matter and woody debris, and stream shading and bank stability (habitat features included in RMOs) (Inland Native Fish Strategy Decision Notice and Finding of No Significant Impact, pp. A-2 through A-5) (Project File, doc. 127).

None of the alternatives in the Boyer Fire Salvage and Rehabilitation project propose activity in Riparian Habitat Conservation Areas (EA, pp. 12, 15, 68 and 76). Due to the fire effects and water quality-limited status of the drainage, some RHCA buffers proposed for the Boyer Fire Salvage and Rehabilitation project are more protective than under a green timber sale proposal to ensure soil, water and fisheries protection and an upward watershed trend (Project File, doc. 104). Therefore, there would be no effects on water temperature, amount of riparian large woody debris (EA, p. 76), pool frequency, bank stability and lower bank angle, and width to depth ratio. The proposed water yield increase for Alternative 6 (less than 1 percent) (EA, pp. 10 and 57-59) is low enough that there would be no measurable impact on RMO parameters. The projected reduction in sediment for Alternative 6 (42 percent after 4 years) (EA, pp. 10 and 59) would not reduce RMOs, and would be beneficial to stream conditions (EA, pp. 59 and 77).

**Contention 3: The Lolo National Forest failed to show that sediment from roads not being brought up to BMP standards in the Henry Creek watershed will not overwhelm the restoration activities included in the chosen alternative. The Lolo National Forest has failed to design an alternative that would adequately rehabilitate all the sediment-bleeding roads in the watershed, so that a net benefit could actually be realized.**

**Response:** This issue was responded to in Response to Comments (EA, Appendix D, pp. 9-10). In summary, water yield and sediment modeling analysis conducted on the Henry Creek watershed that incorporated all roads within the watershed, including those outside the analysis area which were modeled as having a 'worst case' condition, displays that all action alternatives would result in a long-term reduction in sediment (EA, pp. 58-59).

## **ISSUE 5. BLACK-BACKED WOODPECKER**

**Contention 1: The Forest Service did not adequately address effects to black-backed woodpeckers.**

**Response:** Appendix A to the Wildlife Report and Biological Evaluation, and additional background information, display the cumulative effects analysis for the black-backed woodpecker (Project File, doc. 137-142). Considering the cumulative effects, the EA disclosed salvage under Alternative 6 would

result in a decrease in black-backed woodpecker habitat. This decrease is compensated for by an overall increase in the amount of fire-killed dead across the Forest due to combined effects of increasing fuel loads and hotter, larger wildfires, increasing levels of mountain pine beetle, and an increased emphasis to restore stand-replacing fire through use of prescribed burns. The EA (p. 73) and the Biological Evaluation (p. 18) disclose that implementation of Alternative 6 may impact individuals or habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species. No other salvage of fire-killed dead is proposed on the Lolo National Forest at this time (EA, p. 73).

**Contention 2: The Lolo National Forest did not commit to leaving the snags most likely to remain habitat for this species - the biggest, longest standing snags.**

**Response:** Effects to fire-killed trees (snags) and species associated with this habitat were identified as one of the four key issues used to develop alternatives in the Boyer Fire Salvage EA (EA, pp. 7-9). Snag retention was built into the Alternatives, where it was noted that nine to twelve snags per acre would be retained on the acres harvested (EA, pp. 61-62). Effects to snags are discussed under wildlife (EA, p. 68) and under the black-backed woodpecker section (EA, pp. 71-73). Also, Lolo National Forest Dead and Down Habitat Components Guidelines (Project File, doc. 145) outline snag retention guidelines, including criteria for size, species, attributes, etc. Monitoring of snags on the adjacent Henry Peak project (Project File, doc. 38) indicated that Forest Plan snag retention needs were met in a similar fire salvage project.

## **ISSUE 6. LYNX**

**Contention 1: The analysis for the threatened lynx is not adequate to assure compliance with the Endangered Species Act.**

**Response:** Since the Boyer Fire Salvage and Rehabilitation project area is outside of mapped lynx habitat, no changes in connectivity are expected and no direct, indirect or cumulative effects to lynx or lynx habitat are expected (EA, p. 69; Project File, doc. 136). The selected alternative would have **no effect** on lynx.

**Contention 2: The Lolo NF has not prepared all the maps the LCAS requires, making it difficult for the public and decision maker to understand the impacts of motorized travel.**

**Response:** A map of suitable lynx habitat on the Lolo National Forest and Lynx Analysis Units (LAUs) has been completed (EA, p. 39; Project File, doc. 136) and is on file at the Plains District Office.

**Contention 3: The EA declined to analyze the project's impacts on lynx since it claims that lynx do not use the project area, based upon LCAS criteria.**

**Response:** Lynx may occur in the analysis area; however, it is unlikely due to the lack of suitable habitat and the lack of forested connectivity with large expanses of suitable habitat that occur outside this analysis area (EA, p. 39). Please see response to Issue 6-1.

**Contention 4: Since an Incidental Take Statement for lynx has not yet been issued for the Lolo National Forest, and the Forest Plan has not been revised to include terms and conditions that would reduce the level of take, formal consultation required under section 7 of ESA should be initiated at both the project and programmatic level, in order to establish the terms and conditions that would minimize the taking of lynx during project activities.**

**Response:** Please see response to 6-1. The selected alternative would have no effect on lynx and, as a result, does not require formal consultation under Section 7 of the ESA.

## **ISSUE 7. CUMULATIVE EFFECTS WITH DNRC LOGGING**

**Contention 1: The Forest Service failed to adequately address cumulative effects of salvage harvest on State land.**

**Response:** The Forest Service and The Montana Department of Natural Resources and Conservation worked cooperatively to scope for public comment (Project File, doc. 8) and to analyze effects of each agency's project proposal (Project File, docs. 44, 46, 48, 50, 90, 91-94, 99, 100, and 102). The DNRC Boyer Fire Salvage Timber Sale, along with other past, present and reasonably foreseeable future activities, has been considered in the cumulative effects analysis for each resource (EA, p. 52). The Soils and Hydrology effects analysis considered the current DNRC fire salvage (EA, pp. 53 and 57-60; Project File, doc. 91), as did the Wildlife effects analysis (EA, p. 66; Project File, doc. 136) and the fisheries effects analysis (EA, pp. 76-77; Project File, doc. 128). Mitigation Requirements listed on pages 11 and 12 are incorporated into the project design in order that all State, Federal, and Lolo National Forest Plan standards and guidelines are met.

**Contention 1: The October 14, 1998 memo discussing watershed impacts is not disclosed in the Lolo National Forest's EA. The fact that the Lolo NF did not even include a copy of the DNRC EA in the project file shows that the Lolo NF failed to take a 'hard look' at the cumulative effects of the State's action, as NEPA requires.**

**Response:** This memo from the DNRC hydrologist to the DNRC forester is included in the Project File as document 92. The Department of Natural Resources and Conservation's Environmental Analysis for the Boyer Fire Salvage Timber Sale is included in the Project File as Appendix B. The Project File has always been available for public review at the Plains/Thompson Falls Ranger District Office in Plains, Montana.

## **ISSUE 8. OLD GROWTH AND OLD GROWTH MANAGEMENT INDICATOR SPECIES (MIS)**

**Contention 1: The Lolo National Forest's EA did not disclose the fact that the DNRC planned to log old growth, nor the impacts upon species viability caused by the DNRC logging.**

**Response:** The DNRC Environmental Analysis for the Boyer Fire Salvage Timber Sale is Appendix B to the Project File, which discusses impacts on old growth (pp. 6-8). The Forest Service EA identifies that a very small percentage of the Henry Ecosystem Management Area (EMA), in which this project resides, meets Forest Service Regional criteria for old growth. A total of 2.7 percent is estimated to

actually meet old growth criteria and 4.9 percent is recruitment old growth that does not currently meet old growth criteria, but can be expected to do so in 4 to 6 decades (EA, pp. 30-31; Project File, doc. 64). However, selected Alternative 6 of the Boyer Fire Salvage and Rehabilitation project does not harvest any old growth. Stand 520-01-024, which may have met minimum old growth criteria within 50 years, was burned at moderate intensity (approximately 59 percent mortality) and will no longer meet old growth criteria in 50 years.

**Contention 2: The Lolo EA did not disclose that the Forest Plan for the Lolo National Forest has old growth Standards scientifically inadequate to maintain viable populations of old growth management indicator species (MIS).**

**Response:** The Boyer Fire Salvage and Rehabilitation project does not harvest any old growth (EA, p. 64). Your comment is beyond the scope of this project.

**Contention 3: The EA fails to disclose that the Lolo National Forest has not kept an accurate, up-to-date inventory of old growth on the Forest.**

**Response:** An old growth assessment was completed for the Henry EMA (Project File, doc. 64). The Boyer Fire Salvage and Rehabilitation project does not harvest any old growth (EA, p. 64). Forest-wide old growth inventories are beyond the scope of this project.

**Contention 4: The EA did not disclose the fact that the Lolo National Forest has not monitored populations of old growth MIS, as the Forest Plan requires.**

**Response:** The Boyer Fire Salvage and Rehabilitation project does not harvest any old growth (EA, p. 64). Your comment is beyond the scope of this project.

**Contention 5: With the forestwide failures of the Lolo National Forest to deal with the old growth and biodiversity issues, a decision to log more forest that could provide habitat for old growth MIS violates the National Forest Management Act's biodiversity provisions.**

**Response:** The Boyer Fire Salvage and Rehabilitation project does not harvest any old growth (EA, p. 64).

## **RECOMMENDATION**

I recommend the Forest Supervisor's decision be affirmed and the Appellants' requested relief be denied.

/s/ J. Doug Glevanik (For)

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Reviewing Officer  
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