



United States
Department of
Agriculture

Forest
Service

Region One

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File Code: 1570-1
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Date: July 27, 2001

Subject: ARO Letter, Sheafman Fuels Reduction DN, Appeal #01-01-00-0053, Bitterroot NF

To: Appeal Deciding Officer

This is my recommendation on disposition of the appeal filed by Lauren Buckley on behalf of The Ecology Center and Alliance for the Wild Rockies protesting the Sheafman Fuels Reduction Decision Notice (DN) signed by the Bitterroot Forest Supervisor.

The Forest Supervisor's decision selects Alternative 2, which authorizes the following activities within the 475-acre project area:

- Underburn on about 28 acres (2 units) of naturally open ponderosa pine/grass slopes with low intensity prescribed fire. Periodic underburns will occur every 5 to 15 years to maintain vegetation conditions.
- Thin and remove trees on about 70 acres (3 units) to approximately 50 trees per acre, followed by an underburn or jackpot burning (burning concentrations of slash). Periodic underburns will occur every 5 to 15 years to maintain vegetation conditions.
- Use prescribed fire (low and moderate intensity) on about 139 acres (1 unit).
- Implement all of the features common to all action alternatives and project-specific mitigation actions detailed in the Environmental Assessment (EA) on pages 2-1 through 2-3, and 2-3 through 2-5, respectively. Implement Appendix A – Best Management Practices from the EA.

The decision included a site-specific Forest Plan amendment. This amendment changed the thermal cover standard for this project in elk winter range from the minimum of 25 percent, currently required by the Forest Plan, to a minimum of 5 percent.

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), the Endangered Species Act (ESA), and the Administrative



Procedures Act (APA). The appellants request a remand of the DN. An informal meeting was held but no resolution of the issues was reached.

ISSUE REVIEW

Issue 1: The EA's discussion of the project effects on wildfire lack scientific integrity.

Response: The current fuels condition is discussed in detail in the EA (pp. 1-5 to 1-6; 3-6 to 3-8; and 3-9 to 3-13), project record (Exhibit J-1) and in four additional assessments incorporated into the record (the Stevensville Southwest Integrated Resource Analysis, the Stevensville Southwest Environmental Assessment, the Bitterroot Landscape Assessment (draft), and the assessment on the Bitterroot Fires of 2000). Scientific knowledge and practical experience are both used throughout the analysis. Many references to supporting information for fire and fuels are included in the above references and in the Literature Cited section of the EA (Lit. Cited; pp. 1 to 5).

Issue 2: The EA's discussion of the project effects on protection of structures from wildfire lacks scientific integrity.

Response: The main purpose and need for this project is to reduce the number of small fires that become large, and to restore natural ecological systems to minimize uncharacteristically intense fires (EA, pp. I-5 through I-6). The treatments proposed are meant to decrease the probability that a structure in the immediate area of the project is threatened. This includes treating fuels on National Forest lands that could produce firebrands, which may threaten homes immediately downwind of the project area (EA, p. 3-35). Cohen (1999) is discussed in detail in the EA (pp. 3-35 to 3-38), including the concern that firebrands can result in ignitions originating from wildland fires that are at a distance of 1 kilometer or more. The EA (pp. 3-34 to 3-39) discuss that a structure can be threatened in several different ways, including direct exposure from flames, radiated heat, and airborne firebrands.

Issue 3: The EA Fails to adequately consider the potential ecological impacts of prescribed fire.

Response: The impacts of prescribed fire are evaluated in Chapter 3 of the EA. The impact of prescribed fire on vegetation (pp. 3-14 to 3-22), soils (pp. 3-74 to 3-79) and roadless areas (pp. 3-109 to 3-114) is addressed. This was also addressed in response to comments (DN, Appendix B, pp. B4 to B5).

Issue 4: The EA fails to adequately analyze project impacts to wildlife population viability in violation of NFMA.

Response: Habitat for Management Indicator Species and Sensitive species is adequately discussed in the EA (pp. 3-53 to 3-71), including pileated woodpeckers, pine martens, flammulated owls, black-backed woodpeckers, fisher, northern goshawk, and boreal toads. Maps are provided in the project record (Exhibits J-14, 15 and 17).

Old growth attributes which affect northern goshawks and other species are discussed in the EA in the vegetation (p. 3-24, Table 3-2) and wildlife (pp. 3-68 to 3-39) discussions, and in the

Silvicultural Report (Project Record, Exhibit J-1). Current levels of snags in the project and analysis area are discussed in numerous locations in the EA, including the discussion on vegetation (pp. 3-10, 3-14 to 3-18, and 3-24) and wildlife (pp. 3-63 and 3-59).

Current condition of coarse woody debris within the project area is identified in Table 3-2 (p. 3-24), with supporting information in the soils discussion (EA, pp. 3-78 to 3-79), and in the Silvicultural Report (Project Record, Exhibit J-1).

Fragmentation of the area is also discussed in numerous locations in the EA, including under vegetation (p. 3-8) and wildlife (p. 3-49) sections, and in the Silvicultural Report (Project Record, Exhibit J-1).

Issue 5: The EIS fails to disclose its methods for estimating the historic range of variability in violation of NEPA and APA.

Response: Historic conditions in the project area are discussed in detail in the vegetation section of the EA (pp. 3-6 to 3-8) and in the Silvicultural Report (Project Record, Exhibit J-1). Much of the information presented is incorporated by reference from the Bitterroot Landscape Assessment (draft) and the Stevensville Southwest Integrated Resource Analysis and Environmental Assessment. The Bitterroot NF also recently completed an assessment of post-fire conditions after the 2000 fire season, which also provided the necessary landscape context for the analysis of vegetation at the Sheafman project level.

Issue 6: The EA analysis of water quality and soil impact is inadequate in violation of NEPA and NFMA.

Response: The affected environment and environmental consequences for soil impacts are discussed in the EA on pages 3-74 to 3-78. The proposed treatments were designed to minimize soil compaction or soil displacement, thereby reducing effects to soil productivity. The estimated soil compaction/soil displacement area is well within the acceptable range specified in the Forest Plan and the Region 1 Soil Quality Standards. The project record (Exhibits J-6, J-7 and J-19) provides documentation on the calculations used to determine soil and water disturbances.

The affected environment and environmental consequences for hydrology are discussed in the EA on pages 3-80 to 3-87. The proposed treatments were designed to minimize soil compaction or soil displacement, thereby reducing the potential for surface soil erosion. Implementation of INFISH standards and Best Management Practices would result in a very low potential for sedimentation from units into streams. The Water Erosion Prediction Project model also indicated the low potential for sedimentation (Project Record, Exhibit J-7). Water yield is predicted to be about 2.1 percent over pretreatment conditions (Project Record, Exhibit J-5). The slight water yield increase would slowly decrease as the canopy coverage increases with regrowth. The Watershed Assessment (Project Record, Exhibit J-19) provides supporting information for the soils and water affected environment and environmental consequences.

Issue 7: The economic analysis is inadequate in violation of NEPA and NFMA.

Response: The economics analysis for this project is included on pages 3-115 to 3-119 of the EA, with supporting information in the project record (Exhibit J-12). The primary focus at the project level is to identify economic implications that are unique for the decision. The economic analysis complies with NEPA guidelines in determining effects.

RECOMMENDATION

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

/s/ Cindy S. Swanson
CINDY S. SWANSON
Director of Watershed, Wildlife, Fisheries and Rare Plants