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Subject: ARO Letter - Keystone-Quartz Ecosystem Management ROD - Beaverhead-Deerlodge NF - Appeal #03-01-00-0057 - The Ecology Center, Inc., et al.

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 Alliance for the Wild Rockies, protesting the Keystone-Quartz Ecosystem Management Record of Decision (ROD) on the Beaverhead-Deerlodge National Forest.

The District Ranger's decision adopts Modified Alternative 6 as presented in the Keystone Quartz Ecosystem Management Final Supplement to the Environmental Impact Statement (FSEIS). The FSEIS was prepared to document additional soils analysis and disclose the environmental impacts to the soils resource of the selected alternative to manipulate forest and range vegetation on approximately 684 acres. The supplement also includes a revised wildlife Biological Evaluation (BE). Alternative 6 has been modified from the FEIS to the FSEIS by removing treatments on 22 acres in two units and reducing the number of acres needed for new landings from 11 acres to 2.75 acres.

The selected alternative, Modified Alternative 6, allows the following:

- Timber harvest on approximately 57 acres (Units A1, A3, A5, A6, and A7) to remove conifer competition from Aspen stands to encourage sprouting and clone health. Slash would be yarded to landings, piled, and burned. Another 6 acres (Unit A9) are located on adjacent Bureau of Land Management (BLM) land. Treatment of these acres will be dependent on the BLM's decision to tier to this analysis and proceed with the treatment opportunity. Unit A9 is not part of the selected alternative.
- Slashing and girdling of conifer tree competition on approximately 1 acre (Unit A8) of Aspen stands to encourage sprouting and clone health. Conifers ≥ 6.6 " dbh will be girdled with no timber product volume recovery. Conifers < 6.6 " dbh will be slashed. No slash treatment will be required.
- Slashing small conifers and ecosystem burning of fuel concentrations on approximately 280 acres (Units B2, B3, B6, and B7) to maintain and enhance open, Douglas-fir stands.



- Slashing small conifers <6.6" dbh and broadcast burning on approximately 67 acres (Units B10, B11, B12, and B13) to maintain and enhance open, grassland/sagebrush parks.
- Timber harvest removing small diameter trees on approximately 260 acres (Unit P1) to restore open, Douglas-fir forest habitat. Slash concentrations will be piled, followed by underburning. Scattered patches of dense sub-merchantable trees (≤ 5 " dbh) would be left in clumps on approximately one-third of the treatment area to provide elk security cover.
- Timber harvest on approximately 19 acres (Units P2 and P3) to thin dense lodgepole pine stands. Slash will be hand piled and burned.

My review was conducted pursuant to, and in accordance with, 36 CFR 215.19 to ensure the analysis and decision is 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 ROD. An informal meeting was held but no resolution of the issues was reached.

ISSUE REVIEW

Issue 1. Soil Productivity, NFMA and NEPA violations regarding impacts to soils.

Response: The FSEIS (pp. III-2 to 4 and IV-1 to 6) identifies the Regional Soil Standards used in the analysis and the soil quality analysis by alternative. Page III-2 explains the purpose of the standard and notes that 85 percent of an activity area must remain in an acceptable soil quality condition because when more than 15 percent of the soil resources are in a low quality or non-functional condition, additional negative effects become difficult to mitigate or restore. At this threshold, degraded soil processes begin to severely constrain ecosystem productivity, and off-site effects generally become pervasive and severe (Daddow and Warranton, 1983; Maser, 1997; Harvey, et al., 1997; Everett, 1994). Adoption of Regional Soil Quality Standards is outside the scope of this project analysis.

The FSEIS documents the existing condition of the soils resource (pp. III-1 to III-4). It discusses the procedure and methods the soil scientist used to assess the health and impacts to the soil, including past impacts from grazing, logging, mining and roading. In Chapter IV of the FSEIS, the soils scientist discusses the direct, indirect and cumulative effects the alternatives would have to the soil resource (pp. IV-1 to IV-6), including Table 1, which displays the

estimate of detrimentally disturbed soil by treatment unit. Soil is also addressed in Chapter V of the FSEIS (pp. V-4 to V-9), which responds to comments received on the soil resource. Included as appendices to the FSEIS is Appendix B, Soils and Water Conservation Best Management Practices. This information in the EIS is based on soil notes, calculations, survey data, maps, and literature found in the project file (PR, Vol. 1, Doc. 175A, B, C, D, E and J; Vol. III, Docs. 283, 284, and 278-287). The soil analysis is in compliance with NEPA and NFMA.

The 2003 ROD (pp. 16-17) and FSEIS (p. 2-1) identify that landing locations will be along existing roads and turnouts or old landing sites. No specific road construction, reconstruction, or road re-routing is included in the project.

The 2003 ROD (p. 2) incorporates all the mitigation measures listed on pages II-01 to II-4 of the FSEIS. This includes a mitigation measure regarding large woody debris, which states, "In all treatment units a minimum of 10 tons per acre of large woody debris will be retained for organic matter recycling." This is consistent with the Beaverhead Forest Plan Soil Standard #3. Soils Management Requirements and Recommendations are identified in the FSEIS (p. III-4) and are integrated into and implemented with the selected alternative. Plan monitoring is done on the Forest-wide level and is outside the scope of this project.

Issue 2. The FEIS and FSEIS fail to ensure adequate habitat protection and population viability of the Northern Goshawk.

Response: The FEIS identifies the existing conditions (FEIS, pp. III-21 to 23) for goshawk. The direct, indirect, and cumulative impacts to goshawk are addressed in the FSEIS (pp. V-2 and V-10 through V-11), the FEIS (pp. IV-28 to IV-34) and the Biological Evaluation (FSEIS, Appendix B). Goshawk habitat in the analysis area (Echo Gulch and Swamp Creek HAU) was evaluated according to the Southwestern Goshawk Guidelines (Reynolds, et al., 1992) (FEIS, pp. III-21 to 22). Forest stand data were converted into Vegetation Structural Stage (VSS) classes to conform to the guidelines. Figure III-9 on page III-40 in the FEIS provides VSS classes for the 6000-acre buffers around known goshawk next sites.

Within the goshawk analysis area, the 6000-acre foraging territory circles of four goshawk pairs overlap, at least partially, and three pairs have nests located in the analysis area. The analysis area was surveyed for goshawks in 1990 (Swamp Creek HAU) and 1998 (both HAUs), and monitoring of known nests has been done from 1998-2002. Supporting documentation is in the project file (PF, Vol. 1, Docs. 178 A-K, 181B, and 183; Vol. III, Docs. 288, 288A, 290, 293, 294, 310 and 521).

The wildlife biologist found that habitat for goshawk is well distributed across the analysis area and the Beaverhead National Forest (FEIS, p. III-21). The wildlife biologist considered forest fragmentation related to Douglas-fir and late seral conifer habitats, including goshawk habitat (FSEIS, pp. IV-13 to IV-19). The Forest is maintaining a viable population by maintaining the

habitat, in compliance with NFMA. The wildlife biologist determined that the project may impact individuals or habitat, but will not likely result in a trend toward federal listing or reduce viability for the population or species (FSEIS, Appendix B; Biological Evaluation).

The 2003 ROD (pp. 20 and 24) addresses the existing condition and effects to old growth from Modified Alternative 6. Table 2 in the 2003 ROD shows that under Modified Alternative 6, 59 acres of Douglas-fir old growth will be affected. The existing condition for old growth is found in the FEIS, pp. III-12 and 13, with discussion of old growth standards and conditions. Figure III-5 (p. III-36) shows the location of old growth forest and proposed treatments units. The effects of each alternative on old growth forests are discussed in the FEIS, pages IV-10 to IV-17, and displayed in Table II-7. The effects of each alternative on old growth forests and dependent wildlife species are analyzed in the goshawk analysis (FEIS, pp. IV-28 to IV-34).

This issue was also addressed in Response to Comments (FSEIS, pp. V-2 and V-10 to V-11). The project is in compliance with the Forest Plans and NFMA.

Issue 3. The FEIS and FSEIS fails to ensure adequate habitat protection and species viability for pine marten as NFMA requires.

Response: The Forest Plan designated the pine marten as an indicator species for old growth spruce-fir. There is limited subalpine fir/spruce habitat (374 acres) and very little old growth subalpine fir/spruce habitat (130 acres) in the project area. All treatment units are in Douglas-fir and pole-sized lodgepole pine, and no subalpine fir/spruce habitat will be treated (FEIS, p. V-5).

Issue 4. The FEIS and FSEIS fail to disclose and analyze the population status of other sensitive species (fisher, boreal toads and wolverine) in violation of NEPA and NFMA.

Response: As with pine marten, since no subalpine fir/spruce habitat will be treated in the project, project effects on pine marten was not an issue and was not analyzed.

Boreal toads are addressed in the Biological Assessment (pp. B1-26 to 27). Suitable habitat exists and boreal toads are known to inhabit two locations in the analysis area. However, no vegetation treatments are proposed within aquatic habitats. The proposed treatments would modify a small amount of intermittent stream riparian habitat; however, no boreal toads were found in the riparian habitat in this drainage. Based on this, the wildlife biologist determined that the proposed action would have no impact on the boreal toad.

Wolverines are addressed in the Biological Evaluation (FSEIS, pp. B-12 to B-15; FEIS, pp. B1-11 to B1-14). The proposed actions may improve wolverine habitat over the long term, but are more likely not to have much impact either way. No potential denning habitat will be affected by the proposed treatments. As a result, it is the wildlife biologist's determination that the Keystone-Quartz proposed actions will have no impact on the wolverine.

Issue 5. The FEIS and FSEIS violate NEPA, NFMA and ESA by failing to fully assess cumulative impacts to Canada lynx, and ensuring adequate habitat protection that will maintain species viability.

Response: The existing condition and direct, indirect, and cumulative impacts the project would have on Canada lynx are addressed in the Biological Assessment (FSEIS, Appendix B, pp. B-7 to 12). The BA discusses how the project meets the LCAS (pp. B-11 to B-12). The wildlife biologist determined the project “may affect the lynx but is not likely to adversely affect the lynx or its habitat” (FSEIS, Appendix B, p. 12). Supporting information for the lynx analysis is included in the project file (Vol. I, Docs. 178C, D, and E; Vol. III, Docs. 239, 259, 260, 276, 277, 291, 297, 299, 300-306, 310 and 312).

The LCAS is the best available science on lynx. The LCAS was authored by a team of scientists and researchers, and is based on numerous publications. The validity of the LCAS is outside the scope of this project. The listing of lynx as a threatened species and the designation of critical habitat by the USFWS is not reviewable under 36 CFR 215. However, the USFWS published a clarification of findings on Canada lynx in the July 3, 2003, Federal Register. In that clarification they state, “As a result of our reanalysis...which was directed by the Court, we find that the lynx is not endangered throughout a significant portion of its range...the lynx continues to be listed as threatened...” The USFWS also considered the Court’s order to designate critical habitat. They stated, “This [clarification of findings] does not address critical habitat for the lynx, since our listing budget is currently insufficient to begin work on a rule for critical habitat. The Service will seek public comment in the future when it proposes critical habitat” (Federal Register, Vol. 68, No. 128, p. 40076).

In their Biological Opinion, the USFWS concluded, “the Keystone-Quartz Ecosystem Management Project as proposed, is not likely to jeopardize the continued existence of the Canada lynx. No critical habitat has been designated for this species, therefore, none will be affected. The impact to habitat for Canada lynx would be insignificant or discountable.” Regarding incidental take they stated, “No incidental take is expected as a result of the proposed action” (PF, Vol. III, Doc. 276, p. 19). The EIS is in compliance with NEPA, NFMA, and ESA.

Issue 6. The ROD’s adoption of Alternative 6-Modified authorizes the logging of habitat for old growth species. This is shown in the fact that the FSEIS discloses habitat reduction for species such as the northern goshawk.

Response: See response to Issues 2, 3, and 4 above.

Issue 7. The Deerlodge NF considers the pileated woodpecker to be a management indicator species (MIS). However, the Beaverhead NF does not recognize the pileated woodpecker as a species needing any consideration even though the species occurs on the Forest.

Response: Designation of new MIS at the Forest level is outside the scope of this project analysis.

Issue 8. The FEIS failed to consider adequate retention of snags for snag-dependent species.

Response: The 2003 ROD (p. 2) incorporates all the mitigation measures listed as “Specific Resource Mitigation Measures” on pages II-1 to II-4 of the FSEIS. Page II-2 of the FSEIS identifies mitigation measures for snag management, which were based on recommendations by researchers (including the Northern Region Snag Protocol cited as USDA 2000) and range from 2.1 to 11 snags per acre. Retention of 3 snags per acre falls within these standards (FSEIS, p. IV-15). The adequacy of the Forest Plan as related to snags and selected cavity nesting species is outside the scope of this project.

RECOMMENDATION

I have reviewed the record for each of the contentions addressed above and have found that the analysis and decision adequately address the issues raised by the appellants. I recommend the District Ranger’s decision be affirmed and the appellants’ requested relief be denied.

/s/ Ed Nesselroad
ED NESSELROAD
Appeal Reviewing Officer
Director of Public and Governmental Relations