United States Department of Agriculture | **Forest Service** | **Region 1** | **200 East Broadway, P. O. Box 7669, Missoula, MT 59807**

File Code: 1570 (215) **Date:** January 25, 2001

Route To:

Subject: Taylor Fork TS and Road Restoration ROD, Appeal #01-01-00-0010, Gallatin NF

To: Appeal Deciding Officer

This is my recommendation on disposition of the appeal filed by Lauren Buckley on behalf of The Ecology Center, Inc. protesting the Taylor Fork Timber Sale and Road Restoration Record of Decision (ROD) signed by the Gallatin Forest Supervisor.

The Forest Supervisor's decision adopts Alternative 3A, with modifications. This alternative provides for harvesting approximately 1.7 million board feet of timber on 198 acres. To facilitate the logging and hauling operations, approximately 0.4 miles of new temporary road will be constructed, and 10.2 miles of existing road will be reconditioned. On existing roads that are normally designated for no public motorized access, temporary access for logging equipment, timber sale contract personnel and log hauling will be allowed behind closed gates. To minimize the effects of allowing vehicles on these closed roads, gates will remain closed at all times, opening only to allow travel of vehicles associated with the logging and road restoration activities. Public access will not be permitted behind currently closed gates. All new roads would be obliterated (scarified, ripped and seeded) once timber harvest and post-reforestation activities are completed.

Apart from the timber harvest and associated road development, this decision allows for the obliteration (restoration) of up to 50 miles of existing roads that are currently closed to public motorized uses in Taylor, Eldridge and Buck Creek drainages.

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), the Administrative Procedures Act (APA) and the Forest Plan. 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. Appeal Overview: The appellants claim that the best available science was not employed in the timber sale or road restoration analysis and monitoring on the GNF is such that population and habitat trends cannot be determined for many essential resources.

Response: The best available science was used in all resource analyses, project design and monitoring for this project. Various forms of reference material (on-site field surveys, research papers, and informal consultations with private and other agency specialists) were cited throughout the FEIS. Documentation of communications with other agency specialists, such as USFWS, Interagency Grizzly Bear Committee, MTFWP and State of Montana DEQ, was provided in the administrative record. For example, one of the key reasons for revising the effects analysis for motorized access densities and core habitat between the draft EIS and FEIS was to utilize the newest technology (*Access Moving Windows* Computer Model). See following issues for more detailed information.

ISSUE II: The GNF has failed to show compliance with its Forest Plan old growth standard due to amending the Forest Plan method of calculating old growth without observing the NEPA amendment process.

Response: The old growth percent calculated for the Taylor Fork analysis area was derived from forested compartment acres. Forested lands are all lands that under 'natural conditions' grow trees to such an extent that at least 10 percent of the area is tree covered (Gallatin National Forest Plan, p. VI-12). Where tree cover is less than 10 percent, it is defined as grass/forb cover. Although the Forest Plan is not clear that the standard applies to the percent of forested lands within the compartment, discussions with Forest planners involved in developing the Gallatin National Forest's Plan have documented that the intent was to calculate forested successional stages (including old growth) from only forested lands within a compartment (Document 186). The Forest Plan Planning Records state that old growth shall be calculated and managed on capable timberlands, i.e. those lands capable of producing timber. Otherwise, it would be impossible to achieve these successional stage percentages in grass/forb-dominated areas.

There was a basis for determining old growth within the Taylor Fork analysis area that used some field-verified data. Documents 398B and 398C show the calculations of how old growth and potential old growth were determined. Briefly, old growth and potential old growth was derived from field verified data (stand examinations) taken over the last 25 years within compartments 614, 615, 718, 719, 720, 721 and 722. Each examined stand was looked at to determine if it was or was not old growth, using Region 1 guidelines developed in 1992 (Document 398D). From that data, potential old growth was determined using aerial photo-interpreted forest cover information for each cover type (Document 398E).

The discrepancy in the percentage old growth figures that occurred between draft to final is well documented in the FEIS (p. III-3; p. A-2, Issue 7). In the draft EIS, successional stages were calculated from total individual compartment acres versus only forested acres within each compartment calculated in the final EIS. Also, the initial calculations did not include any lodgepole pine stands as possible old growth habitat (FEIS, p. E-26). The FEIS analysis for old growth forest habitat concludes that, "Sufficient core old growth and mature habitat will remain under any action alternative to maintain habitat for viable populations of old growth-dependent species" (FEIS, p. A-49).

The final concern related to old growth was worded, "Additionally, the logging of unit 106 would substantially degrade the functional effectiveness of the old growth ecosystem surrounding the unit as disclosed in the FEIS." This concern was addressed further in the FEIS on the same page (A-49) where it stated, "proposed unit 106, if harvested, will have a greater impact on existing core old growth/mature habitat because the unit fragments a relatively large old growth or mature block." However, the FEIS analysis for old growth forest habitat goes on to conclude that, "Sufficient core old growth and mature habitat will remain under any action alternative to maintain habitat for viable populations of old growth-dependent species. (This) conclusion is stated because the difference between mature and old growth is often times small as it pertains to structure of standing dead, mix of different forest layers, and the amount of fallen down trees" (FEIS, p. A-49). On this point, the FEIS disagrees with the appellants' conclusion that logging of unit 106 would substantially degrade functional effectiveness of the old growth ecosystem.

ISSUE III: The inadequate soil productivity analysis fails to show compliance with the GNF Forest Plan and NFMA.

Response: All activities proposed in all action alternatives were analyzed for effects to soil productivity (FEIS, p. A-4; Documents 422 and 423). As stated in the final EIS, based on field reviews by the soil scientist, all proposed harvest units do no access areas of active landslides. The mitigation measures provided in the final EIS, and adopted in the decision, are in compliance with the 1994, and more recent 1999 Soil Quality Monitoring guidelines (Document 427), and include additional measures proven effective on past timber harvest projects on the Forest (Document 428). Descriptions of mitigation measures and their effectiveness outlined in the final EIS (pp. II-29 to 30) and decision (p. 21) were provided in Documents 424 and 425.

To avoid landslide hazards, the soil scientist reviewed the Soil Survey with respect to all harvest units and roads and reviewed all potentially hazardous units on the ground (Documents 423 and 425). No units or roads accessed high-hazard areas (Document 002, A-4). Therefore, mitigation of landslide hazard in this proposal does not depend on BMP effectiveness.

ISSUE IV: The proposed amendments to the GNF Forest Plan violate NEPA and the GNF Forest Plan.

Overall justification for the site-specific Forest Plan amendments is provided throughout the FEIS and ROD. Cumulative effects discussions occur at the end of each issue discussion in Chapter III of the FEIS and included those effects within the cumulative effects analysis areas. Additional information on the cumulative effects analyses used for the significant issues can be found in the administrative record (Documents 277 to 285, 373, 374, 387, 397a, 411, 429, 438, 422, and 443). Other analyses for events or activities that occurred between the time of the draft EIS and final EIS were displayed in the Record of Decision (p. 2) and in the administrative record (Documents 136 through 143). The impact of all site-specific amendments across the Forest is outside the scope of this project.

The reason for a site-specific amendment to the HEI of 70 percent to implement the decision is described in the FEIS (pp. I-6, II-16 to 17, III-54 to 59, and E-6 through E-7) and in the ROD (pp. 6 and 11). As stated, the short-term use of a currently closed road in the Dead Horse-Albino Lake area during the harvest of proposed units 113 and 114 results in a temporary change from the current HEI of 70 percent to 68 percent. HEI would return to 70 percent upon completion of harvest-related activities. In

addition, an alternative considered to address this issue was briefly analyzed in the final EIS (p. II-34).

The Forest Plan standard to, "strive for (HEI) of at least 80 percent for (grizzly bear) MS 1 and at least 60 percent for MS 2 (GNF Forest Plan, p. III-42)" was superceded by Amendment 19 (February 1996) as a result of the 1995 USFWS Biological Opinion to the Gallatin National Forest Plan. Amendment 19 removes all direction for habitat effectiveness within the grizzly bear Recovery Zone related to grizzly bears. Therefore, the elk HEI of 70 percent applies to all management areas on the Gallatin where timber management is allowed.

The need for this site-specific amendment for slight increases in motorized access density (during the timber sale) and decrease in core habitat is discussed in the ROD (pp. 7 and 10) and in the FEIS (pp. I-7, II-113 to 14, III-34 to 43; Appendix C-2, pp. 19 to 26; and Appendix E, pp. 8-9). Road development in the Eldridge drainage will temporarily increase open and total access densities by less than 1 percent. While there would be an increase in open and total road access during the timber harvest activities in the Taylor Fork and Eldridge Creek drainages, there would be no increase in open or total motorized access route density from the current level in the Buck Creek drainage.

ISSUE V: The project violates the management goals for MA (Management Area) 13 in violation of the GNF Forest Plan.

Response: As stated in the Record of Decision (pp. 10-11), impacts of the proposed actions to grizzly bears and their habitat needs were of primary concern, both to the interdisciplinary team and the public. Alternative 3A, with modifications, complies with the goals and objectives of Management Area 13 (Document 470, pp. 40-43) and the USFWS Biological Opinion to the Gallatin Forest Plan (Document 471), while contributing timber sale receipts for purchase of the remaining BSL sections found in the Taylor Fork area. Analyses of issues related to grizzly bear are provided throughout the FEIS (pp. III-34 through III-50, III-61 through III-64, A-2 through A-4, A-8 through 10, Appendix C-2, and Appendix C-3).

ISSUE VI: An inadequate analysis of grizzly bear population viability violates NEPA, NFMA, APA, FSM, and ESA.

Response: Based on the analyses concerning effects to grizzly bears and their habitat requirements (see Issue V) and the Biological Assessment determination (FEIS, C-3, p. 25), the U.S. Fish and Wildlife Service concluded in their Biological Opinion that the proposed Taylor Fork Timber Sale is not likely to jeopardize grizzly bears in the Yellowstone Grizzly Bear Ecosystem (FEIS; C-3, p. 1). This Opinion meets the requirements for the conservation of grizzly bears based on the USFWS Grizzly Bear Recovery Plan (1993).

ISSUE VII: The DN and FEIS fails to show compliance with the GNF Forest Plan standard for re-entry in grizzly bear habitat.

Response: Documentation supporting the interpretation that only major activities that occur on public lands are considered when assessing re-entry for timber harvesting in MS 1 and MS 2 areas is found in the project file (Documents 212 to 217). All activities however, are discussed in the cumulative effects analysis, as discussed above. Due to the short duration of road obliteration activities, ongoing and

planned road restoration (obliteration) activities are not considered in re-entry determinations (Documents 212, 213 and 217).

ISSUE VIII: The EIS fails to assess population viability of management indicator species as required by NFMA.

Response: Management indicator species were considered in the FEIS. The goshawk analysis is provided in Issue 17, which was updated with the ROD (App. 2, pp. 27-29) after a nest was found in the project area. The new provisions in the ROD protect a recently located active goshawk nest site (ROD, pp. 2, 8 and 24) by modifying the harvest. Three proposed harvest units were dropped from the preferred alternative, 0.8 miles of new road was dropped, and helicopter harvest will be used on another unit to minimize disturbance to the nest site during fledgling and post-fledgling periods. By surveying for goshawks and then protecting nest stands and territories or each project, and protecting greater than 10 percent old growth, the Forest conserves the goshawk and does not detract from species viability. The conclusion was made that the action "… will not likely trend towards Federal listing or cause loss of viability to the population or species" (ROD, p. 28).

Pine marten was addressed in Issue 21 (FEIS, p. A-32). The pine marten is linked to old growth and has been termed an old growth indicator species. The Taylor Fork analysis area is comprised of approximately 43 percent old growth (the Forest Plan standard is to provide at least 10 percent). The action alternatives were designed to provide for structural diversity and will maintain habitat for pine marten.

ISSUE IX: The inadequate analysis for westslope cutthroat trout is in violation of NFMA and the Forest Plan as amended by INFISH.

Response: Genetic purity of westslope cutthroat trout populations throughout the Taylor Fork drainage as determined through electrophoretic analysis are displayed in Table III-1 of the FEIS (p. III-19). The logic behind the conclusion of a genetic purity being less than 90 percent is based on the fish distribution pattern and a subsequent 1993 re-sampling of upper Taylor Creek downstream of Taylor Falls and an adjacent reach on Tumbledown Creek. This is explained on page III-19 of the FEIS and in more detail on page 13 of the transmittal letter. The total sampling effort of 106 individuals in a basin such as Taylor Fork, where physical barriers to upstream migration are lacking, in combination with long term and recent rainbow stocking, actually represent a higher than average sampling intensity when compared to other drainages within the upper Missouri basin.

Potential effects to trout habitat in Taylor Fork Creek from Alternative 3A are extremely small and documented in the FEIS (pp. III-24 to 28). As disclosed on page III-28 of the final EIS, within the Fisheries Biological Evaluation Determination, Alternative 3A will result in extremely minor predicted effects and in combination with watershed rehabilitation activities in the Taylor Fork drainage result in a "may impact individuals but would not lead to reduced viability of the westslope cutthroat trout populations within the Taylor Fork drainage" determination.

INFISH direction does not apply to the Gallatin National Forest. Furthermore, no riparian harvest is proposed as part of this project (FEIS, pp. III-11, 15, and 22).

ISSUE X: The failure of this EIS to adequately analyze impacts to lynx violates the Gallatin Forest Plan as amended by the Lynx Conservation Agreement and Strategy, NFMA, NEPA, and the ESA.

Response: The Taylor Fork EIS has adequately analyzed potential impacts to lynx in the Taylor Fork Timber Sale Issue 16 (pp. A-13 to 17) and as updated in the Biological Assessment Lynx Amendment (Lynx Amendment to USFS BA, pp. 1-5). Habitat connectivity was considered through the mapping of lynx habitat in the BA. The finding for the BA was that this project was "not likely to adversely affect the lynx," and the USFWS BO concurred (FEIS, p. C-3). This project is not likely to affect an individual lynx, much less have a population effect; therefore viability of the lynx population is not affected by this project. This project complies with all standards and guidelines of the Canada Lynx Conservation Assessment and Strategy.

ISSUE XI: The EIS fails to adequately analyze project impacts to biological corridors in violation of NEPA.

Response: Questions on corridors are best answered on a broader scale such as in the Forest Plan. However, issues covered in the FEIS analyze impacts of the Taylor Fork Timber Sale to biological corridors. Issue 12 addresses fragmentation and biodiversity and Issue 19 addresses ungulate migration routes. Effects to grizzly bear are discussed in detail under the grizzly bear related issues (see Issue V). In addition, the Madison Range Landscape Assessment (Document 403, pp. VI-77 to VI-84) analyzed vegetative composition and landscape patterns. It identifies how each endangered, threatened and sensitive species habitat is being maintained at either a coarse or fine filter method. In the Taylor Fork area, which is naturally patchy with meadows and forested areas, the area is becoming less patchy and more homogenous. This would indicate that there are no serious barriers to any wildlife attempting to move through the Taylor Fork area, and that a timber sale of this magnitude would not alter the ability of this area to be used as a corridor.

ISSUE XII: The cumulative effects (are) inadequate for several resources and for activities on private land in violation of NEPA.

Response: See response to Appeal Issue IV. Cumulative effects discussions occur at the end of each issue discussion in Chapter III of the FEIS, in the administrative record, and in the Record of Decision.

Information used to analyze snag habitat and down woody debris was provided in the administrative record (Documents 192, 193, 195 to 196, 300 and 301). These two issues were not considered significant issues because they were not a limiting factor throughout the analysis area (FEIS, p. A-34). Mitigations defining the number of snags and down woody debris to be left behind within each harvest unit is described in the decision (p. 22) and FEIS (p. II-30).

ISSUE XIII: The GNF past and ongoing monitoring has been inadequate to comply with the Forest Plan and NFMA and renders the DN in violation of NEPA.

Response: Adherence to the National Forest Management Act of 1976 (NFMA) was provided in the decision. Past Forest Plan-level monitoring reports, and suggestions for future mitigation and monitoring actions, were used for various portions of this analysis. The Record of Decision, Appendix

ROD-1, outlines the various mitigation measures and project monitoring to be applied to the decision of implementing Alternative 3A, with modifications (pp. 21-25). Additional mitigation was provided with the discovery of an active goshawk nesting site. Mitigation measures and Project Monitoring were provided in the final EIS (pp. II-29 to 34; Appendix B, Best Management Practices).

Monitoring as required by the Forest Plan relates to monitoring at the Forest Plan level and is not required on every project. The broader issue of the Gallatin National Forest's monitoring program is outside the scope of this analysis.

ISSUE XIV: The project purpose of maximizing revenue for land acquisition is inconsistent with timber sales. An inadequate economic analysis conceals this fact.

Response: A discussion of the economic analysis was provided in the FEIS (pp. III-64 to III-67). The analysis identifies the *Gallatin Land Consolidation Act of 1998* direction, which provides for the use of National Forest timber in support of land acquisition (p. III-64). The analysis also explains the possibility of a lesser revenue-generating alternative being selected versus a maximum revenue-generating alternative (p. III-66). Further discussion of the economic analysis was provided in the Response to Public Comments, Comments 65 through 68 (FEIS, pp. E-21 to E-25).

As stated in the decision, Alternative 3A, with modifications, was the lowest timber revenue contributor, harvested the smallest amount of time and constructed the fewest amount of roads of all the alternatives analyzed in this project. Reasons for this were outlined in the Record of Decision on pages 4 and 5.

RECOMMENDATION

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

/s/ J. Doug Glevanik

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