



File Code: 1570-1

Date: September 22, 2005

Route To: (1570 - 215)

Subject: 215 - ARO Letter - Gallatin NF Noxious and Invasive Weed Treatment Project
ROD - Gallatin NF - Appeal #05-01-00-0043 - Alliance for the Wild Rockies, et
al.

To: Appeal Deciding Officer

This is my recommendation on disposition of the appeal filed by Tony Tweedale on behalf of Alliance for the Wild Rockies and The Ecology Center, Inc. protesting the Gallatin National Forest Noxious and Invasive Weed Treatment Record of Decision (ROD) on the Gallatin National Forest.

The selected alternative, Alternative 1, allows the following:

- Treat 13,260 acres with a combination of aerial spray and ground spray treatments, mechanical, cultural and biological methods;
- Use twelve different herbicides (adhering to label application instructions and appropriate mitigation measures);
- Use an adaptive management technique that allows for the treatment of new invasive weed species and locations (up to 25 percent increase in total number of treatment acres), use of new biological control agents if approved by the Animal Protection and Health Inspection Service, and use of new herbicides provided they are approved by the EPA and a risk assessment is completed; and
- All treatments need to adhere to the environmental protection measures listed in the ROD and Environmental Impact Statement (EIS).

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), the Endangered Species Act (ESA), and the Clean Water Act (CWA). The appellants request a reversal of the ROD. An informal disposition meeting was held August 19, 2005, in the form of a conference call. No resolution was reached and the appellants decided to continue with their appeal.

ISSUE REVIEW

Issue 1. The EIS and ROD failed to develop and consider a prevention-focused alternative put forth by the appellants. The FEIS and ROD claimed that increasing weed prevention is outside the scope of the identified need. The comprehensive approach to the weed problem was the place to analyze the impact of a weed prevention alternative. The Gallatin



National Forest was obligated to analyze thoroughly a reasonable range of alternatives that address the purpose and need that it identified. It failed to do so.

Response. Weed prevention is very important and was so recognized in the EIS by incorporating it into all alternatives (ROD, p. 6; EIS, p. 2-16, Appendix A). However, weed prevention alone does not address the management of the existing weeds or meet the purpose for this project, which is to treat weeds within the Gallatin National Forest and to reduce the impact of weeds on other resources (EIS, p. 1-13). The Forest responded to the appellants request to consider a prevention-focused alternative in Response to Comments on the DEIS (EIS, p. 6-16).

The Northern Region of the Forest Service adopted a comprehensive and programmatic weed prevention strategy in May of 2001, when Kathy McAllister, Acting Regional Forester, approved changes in Forest Service Manual 2080 (EIS, Appendix A). The Gallatin has developed an implementation checklist to document compliance or lack of compliance with FS Manual 2080 (Project Record, Doc. B-8). The Off-Highway Vehicle Record of Decision was also approved in 2001, and the Forest is enforcing the OHV decision (EIS, p. 2-17 and 6-16). Many of the weeds on the Gallatin were in place prior to the implementation of these prevention activities, and it is premature to determine the effectiveness of these programs in preventing weed spread. Monitoring included in the Gallatin Forest Noxious and Invasive Weed Treatment Record of Decision (p. 16) will hopefully show effectiveness of ongoing prevention activities.

This project is in compliance with the Forest Plan and National Forest Management Act (ROD, p. 28; EIS, p. 3-1).

Issue 2. The decision to use an Adaptive Management approach to new weed species and locations, as well as the decision to not increase weed prevention efforts, are both definitive indicators that the EIS/ROD is programmatic in nature, rather than project-specific.

Response: The adaptive management approach is site-specific in that all new weed sites will be mapped, inventoried, adhere to the decision tree for new locations (ROD, p. 11-23; EIS, p. 2-12) and adhere to the Environmental Protection Measure (ROD, pp. 11 to 16). Because weed infestations change over time, adaptive management is necessary. The EIS stated that the analysis included a possible 25 percent increase in acres (maximum total of 16,575 acres treated within a given year), which may need to be treated in the future (EIS, p. 2-12). All weed infestations will be treated within the parameters of the EIS (see Environmental Protection Measures and Monitoring, ROD, p. 11-16). Prevention efforts are common to all alternatives (EIS, p. 2-16).

Issue 3. The EIS contains an inadequate monitoring plan. Better monitoring is needed for an effective weed control program. The monitoring activities failed to monitor even the primary parameters of either weeds or native vegetation (soil type, moisture, nitrogen, sunlight), nor is there any monitoring of the ecologic impacts of herbicides (including interactions such as non-selectivity and resistance).

Response: The monitoring described in the EIS does monitor some primary parameters and ecological impact of herbicides (ROD, p. 16-23; FEIS, pp. 2-17, 6-3, 6-4, 6-6 to 6-8, and 6-17).

The EIS is not monitoring soil microbiological assays or assessment of soil fertility because studies geographically near, and environmentally similar, have concluded there are no measurable effects on soils from level of herbicides used on the Forest (EIS, p. 6-8). Non-selectivity and resistance information is available through published literature (EIS, pp. 3-4, 3-10, 4-3, 6-5, and 6-24; Project Record, Docs. H-5, H-6, and Y-1).

Monitoring as described by Tony Tweedale (Project Record, Doc. X-9) is not acceptable because the weed problem will become worse by delaying treatment until after monitoring for 3 or more years (EIS, p. 3-9), and conditions that promote native species and suppress invasive species has already been researched (EIS, pp. 1-4 to 1-11 and 3-4). The purpose for monitoring weeds in this EIS is to document the density and spread rate of weeds, the effectiveness of different treatments, and to detect the presence of herbicide in water (EIS, p. 2-17).

Issue 4. The EIS came to a completely wrong conclusion on the chronic toxicity of herbicide and ignored the consequences of the data gaps in chronic toxicity. The Forest neglected to review and disclose a large and growing body of scientific, peer-reviewed literature that disputed conclusions reached in the EIS. The Forest neglected to respond to the specific claims that we made about each health effect for each herbicide. Rather, the Forest tries to explain away en-masses our cited chronic toxicity studies. By ignoring our specific claims and by ignoring the quality of the competing claims, the Forest violates NEPA and the Data Quality Act.

Response: The ROD acknowledged that there is a body of literature on herbicides that raises concerns about health risks associated with herbicides (ROD, p. 26). Similarly, the EIS acknowledged a body of literature that raises concerns and uncertainty with regard to health risk (EIS, pp. 3-48 and 4-71). The EIS addressed the appellants' comments (pp. 6-16 through 6-25) and included the appellants' comments/appendices in their entirety (end of chapter 6) for public disclosure. The Forest Service is using the SERA risk assessments because it is current and it incorporates a wide selection of available literature (published literature, studies submitted to EPA by the registrants of the chemical, and various internet sites) to assess the toxicity of herbicide (ROD, p. 25; Project Record, Document T-3, pp. 1-1 and 1-2). Some of the cited literature or claims identified by the appellants is identified in the EIS (Table 3-22, p. 3-49) and in the SERA assessments, and is considered when establishing the dose response level (Project Record, Doc. T-8b, pp. XIV, 3-1 to 3-7; Doc. T-9b, pp. 3-1 to 3-8; Doc. T10-c, pp. 3-4 to 3-9; Doc. T-11d, pp. 3-1 to 3-18; Doc. T-12d, pp. 3-1 to 3-7; Doc. T-13a, pp. 3-1 to 3-5; Doc. T-14a, pp. 3-3 to 3-7; Doc. T-15c, pp. 3-1 to 3-8; Doc. T-16e, pp. 3-1 to 3-9; Doc. T-17c, pp. 3-1 to 3-7; Doc. T-18d, pp. 3-1 to 3-11; and Doc. T-19d, pp. 3-1 to 3-31). The risk analysis also evaluated different exposure scenarios (general public, both adults and children, workers, backpack sprayers, broad cast, aerial treatment, wildlife and aquatic) to estimate the amount of herbicide encountered (Project Record, Doc. T-3, pp. 4-4 to 4-14). If the exposure exceeds the dose response level, then mitigation measures are incorporated into the project to reduce the risk (EIS, pp. 4-65, 4-66 and 6-20). A number of the mitigation measures in this project are designed to reduce the amount of exposure to herbicides (ROD, pp. 11 to 13).

Issue 5. The EIS failed to adequately disclose and assess impacts of chronic toxicity on animals and non-vertebrates. The appellants maintain that their DEIS comments implied

that chronic toxicity to wildlife was an issue. Because chronic toxicity for wildlife was not addressed, the Gallatin Forest violated the Endangered Species Act mandate to analyze impacts. Also, the Forest violated the National Forest Management requirements to ensure the viability and diversity of sensitive species.

Response: The comments and appendices submitted by the appellants did not reference the issue of chronic toxicity to wildlife and non-vertebrates (EIS, end of Chapter 6, Comment letter). However, the Biological Assessment (EIS, Appendix F, pp. 12 to 15) addressed herbicide toxicity to mammals and birds. The Biological Evaluation determination for sensitive fish and amphibian species is in the EIS (p. 4-25). The water quality analysis in the EIS (pp. 4-21 to 4-25) limited the amount of herbicide in each watershed, consequently, limiting the concentration to less than 0.12 ppm (below acute toxicity level). Bio-accumulation and bio-magnifications, which reflect chronic toxicity, are in the EIS (p. 3-34) and the Biological Assessment (Appendix F, p. 13).

Most of the chronic toxicity data used to estimate impacts to humans is derived from test animals (EIS, p. 3-48; Project Record, Doc. R-1, p. 5, and Doc. T-3, p. 3-5). The SERA risk assessments completed for each herbicide does consider acute and chronic toxicity for wildlife and aquatic species (Project Record, Docs. T-3, T-8b, T-9b, T-10c, T-11d, T-12d, T-13a, T-14a, T-15c, T16e, T-17c, T-18d, and T-19d)

Issue 6. The Gallatin National Forest failed to show that the aquatic impacts of herbicides were adequately evaluated as required by the Clean Water Act. A number of Gallatin National Forest activities cause water impairment including logging, fire suppression, grazing, and motorized recreation. Therefore, it is likely that impacts to water such as sediment add cumulatively to aquatic impacts of herbicides.

Response: Although the appellants did not raise this issue previously, the Montana Office of EPA did raise this issue (EIS, p. 6-12). The response to the EPA's comment shows that the project did consider water quality, sediment loads, and herbicides. Also, the letter from Carol Mackin (Water Quality Specialist, Montana Department of Environmental Quality) states that the Montana DEQ is comfortable with the water quality protection measures in our EIS (Project Record, Doc. L-11).

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

/s/ Barry Paulson
BARRY PAULSON
Appeal Reviewing Officer