

## CHAPTER 6

### RESPONSE TO DRAFT EIS COMMENTS

#### INTRODUCTION

This document summarizes issues and concerns from comments received on the Weed Management Draft EIS (DEIS), and identifies the agency's response to the concerns.

On August 18, 2006, the Notice of Availability appeared in the Federal Register. This officially started the 45-day comment period for the Draft EIS. A legal notice was published in Billings Gazette and Rapid City Journal on August 21, 2006 and August 22, 2006, respectively. On August 22, 2006 a news release was mailed to 14 newspapers<sup>1</sup>. Copies of the Draft EIS were mailed to 11 agencies and 23 individuals<sup>2</sup>. U.S. Fish and Wildlife Service concurred with the biological assessment (project file) on October 20, 2006 (concurrence letter included at the end of this chapter).

#### CHANGES BETWEEN THE DRAFT EIS AND THE FINAL EIS

Based on the public comments to and internal review of the Draft EIS, a few minor changes were made between the Draft EIS and Final EIS as follows: the water quality monitoring section in Chapter 2 was expanded to include water quality monitoring results from the West Fork of Rock Creek; a reference to an available water quality monitoring technique was included in Chapter 5, Reference Section; minor typographical corrections were made, minor tabular corrections in tables were made, a few scientific names were updated, some grammar errors were corrected, and some sentences were restructured for clarification; gravel pit weed prevention guidelines were clarified in Appendix D; updates on some biological agents were incorporated; Appendix C biological control section was expanded to allow for consideration of maintaining successful bio-control sites as a distribution sources for bio-agents; a more thorough discussion of weed spread vectors was incorporated into Appendix D; and a statement was added to page 3-49 requires surface water to be free from substances that create concentrations which are toxic or harmful to aquatic life per Montana Water Quality Standards.

#### COMMENTS ON THE DEIS AND AGENCY RESPONSE

The following content analysis is in compliance with the National Environmental Policy Act (NEPA) and is designed to inform responsible officials of the potential environmental consequences of this project. Comment letters, in their entirety<sup>3</sup>, are included at the end of this chapter.

#### LIST OF PEOPLE WHO COMMENTED ON THE DEIS

Comment Letter #	Agency, Organization, or individuals	Date
1	Public Comment – Harding County Commissioners and Weed Supervisor	9/26/06
2	Public Comment – USDI, Office of Environmental Policy and Compliance	9/28/06
3	Public Comment – EPA Region 8	9/28/06
4	Public Comment – Glenn Gay; Gay Ranch, Inc.	9/28/06
5	Public Comment – USDI Bureau of Indian Affairs	9/21/06

#### Commenter 1

- 1-1. *I am in support of the use of Alternative 1, which includes all IMP methods using existing weed control, use of new herbicides, herbicide use within the Absarokee-Beartooth Wilderness Area and aerial application outside the Wilderness Area.*

<sup>1</sup> News Releases sent to Stillwater Co. News, Carbon Co. News, Lovell Chronicle, Billings Gazette, The Outlook, The Outpost, Yellowstone Co. News, Miles City Star, Powder River Examiner, Nation News, Bowman Co. Pioneer, Rapid City Journal, Independent Press, The Ekalaka Eagle Newspapers

<sup>2</sup> The DEIS mailing list was based upon responses from a March 24, 2006 notice to the mailing list for project scoping. This March mailing asked for response from those interested in staying on the project mailing list and what kind of format they wanted to receive (hard copy, compact disk, executive summary, and/or access via weblink).

<sup>3</sup> USDI, BIA Attachment to the Cover Letter is found in the project file.

**Response:** Thank you for your support for the preferred Alternative 1 which is use of all tools available in combating weed spread and infestations.

- 1-2. *Since weeds know no boundaries and flourish in disturbed ground, wilderness areas should not be exempt from treatment.*

**Response:** Treatment within the Wilderness Area is proposed under Alternatives 1 and 2 based on the reasons you listed.

- 1-3. *New herbicides are often times much more environmentally friendly and less hazardous to the applicator. They can be used close to or in water and in trees with no haying or grazing restrictions when applied according to label.*

**Response:** New and more environmentally friendly herbicides such as aminopyralid and aquatic herbicides have been analyzed under Alternative 1.

- 1-4. *It is less costly to control or eradicate small invasions instead of waiting until there area huge acreages of established weeds.*

**Response:** Economic impacts are related in Chapter 3 and confirm your observations. Alternative 1 addresses the most cost efficient options.

#### Commenter 2

- 2-1. *No Comments.*

**Response:** Thank you for your response.

#### Commenter 3

- 3-1. *The EPA supports the purpose and need of the Custer National Forest Weed Management Project to prevent and reduce the loss of native plant communities associated with the spread of weeds. EPA fully supports the need to minimize spread of noxious weeds, and we support the proposed improvements to the Custer National Forest's integrated weed management program, including use of new herbicides, and herbicide use within the Absaroka-Beartooth Wilderness Area, and aerial application of herbicides outside of Wilderness... The EPA is generally pleased with the proposed protection and prevention measures to be used during herbicide applications to help ensure the accuracy and safety of ground and aerial herbicide applications.*

**Response:** Thank you for your support for the preferred Alternative 1 which is use of all tools available in combating weed spread and infestations.

- 3-2. *While the DEIS includes excellent presentation and disclosure of information, we note that the DEIS only indicates that the interdisciplinary team may recommend that water quality monitoring be conducted. The DEIS does not clearly state that monitoring will be conducted where there are higher risks or potential impacts to sensitive water. We believe the health of downstream domestic, agricultural and recreational water users and the aquatic ecosystem should dictate some level of aquatics monitoring to document and verify that aqueous transport of herbicides, particularly picloram, which is highly mobile and toxic, does not occur. Monitoring is necessary to validate that herbicide application protocols and design criteria are effective in preventing herbicide transport to surface and ground waters, and may increase public confidence that chemical contamination of surface waters did not occur (i.e., select a stream with a high potential for herbicide drift for monitoring or high nearby treatment acreage, and if no herbicide is identified in this stream, you can better validate and extrapolate that mitigation measures were effective in preventing herbicide drift to other aquatic areas with lower intensity of treatments). We note that Table 4-10 shows that only 2.6% of the Forest is in a "high" risk class due to pesticide leachability and depth to ground water. Such high risk areas would*

*be good candidates for water quality monitoring. We recommend a more definitive commitment to conducting water quality monitoring in high risk areas.*

**Response:** The referenced statement, located in the Monitoring section of Chapter 2, follows:

*Whenever there are is reason to suspect that herbicides may have entered water during a spraying operation (such as herbicides detected on drift cards, or if a spill occurred), an interdisciplinary team may recommend that water quality monitoring be conducted.*

To disclose a more thorough analysis as suggested by the commenter, the above sentence was replaced with the following:

*Until the City of Red Lodge started using a well for their water source, the West Fork of Rock Creek historically served as the main water source for the city of Red Lodge. This area also received annual picloram treatments on weeds (mostly spot treatments with minor amounts of broadcast treatment). Because of this association with domestic use of the West Fork of Rock Creek water, the Beartooth Ranger District annually conducted water quality sampling and monitoring for picloram between 1990 and 2004. This area is also considered to be at high risk to ground water contamination according to Chapter 4, Table 4 – 10 and the Ground Water Vulnerability map outlined in the Map section of the EIS. The design criteria and protocols used when treating weeds during this time period were similar to and somewhat less stringent than what is being proposed under the proposed action, Alternative 1. Test results have never shown any levels of picloram.*

*The following are situations of higher risk where an interdisciplinary team should evaluate whether or not water quality monitoring (surface or groundwater) is recommended for line officer support and approval. A high commitment to water quality monitoring in these high risk situations is strongly encouraged.*

- *Whenever there is reason to suspect that herbicides may have entered water during a spraying operation (such as herbicides detected on drift cards, or if a spill occurred),*
- *In situations of large-scale broadcast treatment using persistent herbicides (i.e. picloram), especially within highly leachable soils and proximity of depth to ground water (see Chapter 4, Table 4–10), or in close proximity to surface waters*
- *When picloram levels approach the maximum allowable annual treatment acreage by watershed (sixth code level hydrologic unit – see Chapter 4, Table 4–14).*

- 3-3. *We also recommend including additional information on the probable causes of noxious and invasive weed invasion within the Custer National Forest by describing the more common mechanisms by which weeds spread. We believe an Integrated Weed Management program should strive to explain the reason(s) why noxious and invasive weeds are present, to improve public understanding of mechanisms and vectors for weed spread, and thus, gain public support to reduce activities that spread weeds and apply strategies to mitigate root causes. It is important for an Integrated Weed Management Program to include educational activities for industrial and recreational users to encourage and promote public assistance in weed prevention and control.*

**Response:** A more thorough discussion of weed spread vectors and weed susceptibility was included in Appendix D as a response to this comment.

- 3-4. *We also noticed that the preferred alternative includes only 5 acres or less of seeding. As you know, seeding can be very useful to stabilize disturbed areas by re-establishing desirable species that out compete weeds and retard weed infestation. It is not clear why the proposed acreage for seeding is so low. Can the extent of proposed cultural treatments (seeding) to stabilized disturbed lands to withstand weed infestations be increased?*

**Response:** The Forest Service agrees that seeding is an effective technique to minimize weed infestations and spread. Although we routinely seed fire suppression dozer lines (over 500 acres in native grass seed in 2006 alone) and some known weed infestations after wildfire events to

reduce erosion and minimize establishment of potential weed infestation, the wildfire events are not predictable. Five acres was identified as a reasonably foreseeable need due to some anticipated road work and disturbance. However, adaptive management under Alternative 1 allows for the amount of seeding to be increased as the need arises.

- 3-5. *We also observed that the Ashland District saw a net decrease in weed-infested acres from 1985 to 2006 (Table 1-1). We suggest including further discussion of the reasons behind this observation, since understanding of the reasons why the Ashland District experienced a decline in weed-infested acres may provide information helpful for effective weed management on other Custer National Forest Districts.*

**Response:** The 2006 inventory for the Ashland Ranger District is generally less than what was reflected in the 1985 inventory. This is due to successful broadcast treatment of spotted knapweed and continued treatment of spurge.

- 3-6. *Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action and alternatives in an EIS, the DEIS has been rated as Category L. (Lack of Objections).*

**Response:** Thank you for your review and findings.

- 3-7. *We commend the Custer National Forest for this comprehensive disclosure of weed management program information. We encourage you to make these Appendices available to herbicide applicators.*

**Response:** Thank you. The Forest Service intends to provide applicable Appendices to all herbicide applicators, contractors, and cooperators.

- 3-8. *We believe an effective noxious weed control program should include restrictions on motorized uses, particularly off-road uses. Off-road vehicles are designed to travel off-trail, disturbing soil, creating weed seedbeds, and dispersing seeds widely. Weed seed dispersal from non-motorized travel is of lesser concern because of fewer places to collect/transport seed, and the dispersal rate and distances along trails are less with non-motorized travel. Restrictions on motorized uses may also be needed after burning and harvest activities until native vegetation is re-established in the disturbed areas to reduce potential for weed infestation of the disturbed sites.*

*It is particularly important to avoid motorized travel in remaining roadless areas, since roadless areas are often reservoirs of native plants, and limitations on motorized travel in such areas can protect such areas from weed invasion and avoid the subsequent need to treat weeds.*

**Response:** Decisions that will not be made based on the analysis were outlined at the end of Chapter 1. They include changes in travel, road use and access. The Off Highway Vehicle (OHV) amendment for Region One was implemented in January 2001. Off road or trail use by OHVs is restricted and will reduce one vector of weed spread. The first year focused on public education of riders in the field. In 2002 the enforcement phase of the amendment results in citations instead of warnings. Preventative measures for recreation, Wilderness, and roadless areas are outlined in Appendix D under Prevention and Control Measures, section 2.

- 3-9. *In order to prevent the establishment and spread of noxious weeds in recreation areas (trailheads, toilet areas, etc.), it may be helpful to consider the use of mulch where foot traffic is high and revegetation is difficult or impossible. Additionally, aesthetic barriers and posted signs may be utilized to discourage foot traffic in sensitive areas.*

**Response:** In response to this comment, the following was added to page 3-19 in Chapter 3 section on seeding treatment and its effectiveness. "Use of mulching and/or barriers to travel paths in high use areas can make this treatment more effective."

- 3-10. *We are pleased to see the Weed Seed Free Feed and Straw Policy (page D-5). It can be helpful to require cattle and horses, especially those coming from areas with noxious weeds, to be penned and*

*fed weed free hay for several days prior to being released on public lands to prevent introduction of noxious weeds..*

**Response:** Although it could be an encouraged practice where possible, requiring domestic animals to be penned and fed weed free hay prior to entering public lands is not feasible, especially during hunting season, when the use of horses is very high and the number of Forest Service staff is very limited.

- 3-11. *Forest wide programmatic direction should assure that the effects of burning on the potential stimulation of noxious weeds be evaluated during site-specific project level analysis. Prescribed fire has the potential to stimulate weed growth (e.g., Dalmatian toadflax or leafy spurge), and can destroy insects planted for biological weed control. Burning followed by application of appropriate herbicides can provide effective weed control. We suggest that such considerations be evaluated for during development of direction ad plans for prescribed burning.*

**Response:** Guidelines for weed control and the development of plans for prescribed burning are already addressed in the following Appendices: Appendix C outlines protection measures for burn plan development. Appendix D outlines the Forest Service protocol for assessing project risk. Appendix F describes treatment effectiveness by species. Appendix J describes burning effectiveness and guidelines by species.

- 3-12. *Sites selected for application of biological control agents should be protected from other management actions that could negatively influence the biocontrol agent (such as burning as noted above or application of toxic herbicides). Protected biocontrol sites can also function as collection points for redistribution of established biocontrols to other sites.*

**Response:** A criteria for selecting biological control sites is the probability that the site will not be disturbed. However, there are no guarantees that the site will not be disturbed. Many sites already function as collection points for redistribution. However, in response to this comment, the following was added to Table C - 1 in Appendix C biological control section. "Protected biocontrol sites can also function as collection points for redistribution of established biocontrols to other sites. Depending upon management objectives, consideration should be given for possible protection of successful biocontrol sites from other management actions that could negatively influence the biocontrol agent (such as burning or application of herbicides)."

- 3-13. *Spotted knapweed is identified as one of the more prevalent noxious weed species in the project area (page 3-5). We note that spotted knapweed is non-rhizomatous and should be relatively easy to control with lower rates of the most selective low toxicity herbicides.*

**Response:** This herbicide use strategy is already outlined in Appendix I, page I – 1.

- 3-14. *The Forest may also want to consider groundwater monitoring in selected wells in close proximity to applications sites.*

**Response:** Under Alternatives 1 and 3, the Custer National Forest has a low to moderate potential for groundwater contamination from foliar-applied herbicides (FEIS, page 4-41). The areas of higher risk can be mitigated with herbicide selection to minimize the contamination potential. The monitoring section on page 2-9 describes an adaptive approach to surface water, and if appropriate, ground water (well) monitoring.

- 3-15. *We note that bioassay techniques using aquatic species sensitive to the herbicides to be used are available for detecting aquatic impacts from herbicide applications (e.g. stoneflies, cutthroat trout). EPA has prepared a toxicity testing manual entitled, "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms", EPA/600/4-90/027, September 1991. Toxicity testing procedures are described in this manual, including procedures using rainbow and brook trout.*

**Response:** There are different monitoring techniques dependent upon the monitoring needs. In response to this comment, a footnote in Chapter 2 Monitoring section references EPA/600/4-90/027 web link found in Chapter 5 as an available testing technique.

- 3-16. *We are pleased that an adaptive management approach is identified in Appendix E, including identification of treatment priorities, a decision tree for treatment of new weed locations, guidelines for treatments, and a treatment effectiveness guide (Appendix F). As a general practice, EPA suggests prioritizing perimeter weed infestations such as around trailheads and roadside before treating interior weed infestations.*

**Response:** The Forest Service agrees with your suggested priority criteria. This is already addressed in Appendix E, Table E-1. However, if the trailhead or road is in the interior and considered a source for weed spread then these areas could also be considered a priority.

- 3-17. *The presentation of information regarding the herbicides proposed for use is helpful in evaluation of potential effects of herbicide applications (Table 3-10, Effects of Drift factors on Herbicide Drift, Table 3-11, Comparison of Herbicides, Table 3-13, Herbicide Behavior in Soils, Table 3-14, Montana Water Quality Human Health Standards for Herbicides, Appendices G, H, I, J & M). We recommend all applicators have access to these tables in the field.*

**Response:** The Forest Service intends to provide applicable Tables and Appendices to all herbicide applicators, contractors, and cooperators for field use.

- 3-18. *We are generally more concerned about applications of the more toxic, persistent, and mobile herbicides such as picloram (Tordon). As you know most picloram products, including Tordon 22K, are Restricted Use Pesticides requiring pesticide applicator certification to purchase and apply. It is important that U.S. Forest Service employees be certified throughout the duration of the project. If commercial applicators will be contracted for application of Restricted Use Pesticides, we recommend checking to make sure their MT commercial Restricted Use Pesticides license is current. Please contact Montana Dept. of Agriculture at (406) 444-5400 for more information.*

**Response:** The Custer National Forest routinely follows the state laws relative to pesticide use and application in both Montana and South Dakota. The Forest Service also ensures that contractors and cooperators are also certified for commercial Restricted Use Pesticides. This is also stated in Protection Measures outlined in Appendix C, Table C-1.

- 3-19. *We recommend that applications of more persistent, toxic herbicides such as picloram be limited to once per year to reduce potential for accumulation in soil. Trade-offs between effective weed control and effects on soil productivity and leaching concerns need to be considered. A second treatment application of picloram if needed should only occur after 30 days (or according to label directions).*

**Response:** It is important to carefully consider application rates of all herbicides, including those of the more persistent herbicides. The Forest Service expects all weed treatments to comply with label directions and Protection Measures outlined in Appendix C. Given the extent of weeds on Forest Service land, we question the effectiveness of, and need for multiple treatments per growing season. If there is a need for twice a year applications, then the total seasonal application of herbicide must not exceed the maximum application rate as defined in the specimen label.

- 3-20. *The Montana Department of Agriculture recommends that pesticide/herbicide applicators establish soil depth criteria with sufficient depth to ground water to mitigate the potential for the movement of leachable herbicides such as picloram or clopyralid to ground water (Donna Rise, MDA, phone 444-5400). Six feet of soil may be adequate if the soils are less permeable (e.g. clay) and may provide adequate time for picloram and clopyralid to degrade. Six feet of soil, however, will not be adequate if the soils are sandy, gravelly or have cobbly, stony, or other permeable structural characteristics. The Ground Water Information Center at the Montana Bureau of Mines & Geology in Butte, MT (406-496-4153) may have well log information for estimation of ground water levels in treatment areas.*

**Response:** The EIS acknowledges picloram and clopyralid as leachable herbicides (Chapter 3, Table 3-13, pages 3-45 through 3-48; Chapter 4, pages 4-40 through 4-42; and Appendix C). The majority of the Custer National Forest depth to ground water is greater than six feet. Where they are less than six feet are generally in wetlands and riparian areas which have specific protection measures outlined in Appendix C. Appendix C outlines criteria to be used for each herbicide under a variety of water/riparian/wetland related environments. Applicators can easily recognize riparian/wetland conditions, whereas use of soil/depth criteria for applicators are not a realistic criteria for applicators to use. This is also a reason the analysis included the use of the RAVE model and maps. The RAVE model accounts for soil depth and other soil characteristics which is part of the analysis outlined in Chapters 3 and 4 (pages listed above). Ground water vulnerability map, based on the RAVE model is also displayed in the Map Section.

- 3-21. *For your information, Dow AgroSciences, the manufacturer of Tordon 22K, has recently developed supplemental labeling for Tordon 22K for areas west of the Mississippi River. They have directions for wick or carpet roller applications. Tordon 22K herbicide can be applied using wick or carpet roller equipment where drift presents a hazard to susceptible crops, surface waters, and other sensitive areas. One part Tordon 22K is mixed with 2 parts water to prepare a 33% solution. The wick method of application is more labor intensive but very effective at targeting particular noxious weeds adjacent to surface waters, wetlands, or protected plants.*

**Response:** Thank you for the information. This information has been added to Appendix I, page I-1.

- 3-22. *Also, please note that registration for Access, picloram active ingredient, is cancelled and Appendix G (page G-1) should be updated.*

**Response:** Thank you for the information. This information was updated in Appendix G.

- 3-23. *Table 3-14 shows numeric Montana Water Quality Human Health Standards for herbicides, and a statement is included in the narrative that no aquatic life standards have been established (page 3-49). While it is correct that Montana Water Quality Standards do not include numerical criteria for aquatic life protection for the herbicides proposed for use (since research/data requirements necessary to establish numerical aquatic life water quality criteria are very rigorous), it is important to understand that many herbicides are toxic to aquatic life even though numerical aquatic life criteria have not been established. The Montana Water Quality Standards, however, do include a general narrative standard requiring surface water to be free from substances that create concentrations which are toxic or harmful to aquatic life. It would be helpful to present this important narrative "free from toxicity standard" in the final EIS.*

**Response:** Your comment has been incorporated into page 3-49.

- 3-24. *Weed infestations are often able to out-compete native vegetation in soils where overgrazing, fire, or other disturbance has depleted soil fertility levels. It may be useful to analyze for soil fertility parameters (pH, Ca, Mg, K, P, organic matter, %N). If soil fertility is low, it may be helpful to apply slow release fertilizers to initiate competitive growth of native vegetation. The Forest may also want to consider monitoring of herbicide concentrations in soils; and soil microbiologic assays; monitoring of plant communities; and monitoring of soil erosion and sedimentation rates.*

**Response:** Increasing fertility levels were not considered except for localized treatment of tall larkspur. However, use of fertilization in producing or maintaining healthy native vegetation, to assist competition with weeds, can be done under adaptive management as outlined under Alternative 1 and Appendix E.

Federal law and State water-quality standards set maximum concentration levels for various herbicides in water, but not in soil. The monitoring program emphasizes water to comply with state and federal laws and regulations. The fact that herbicides might appear in water is evidence that the application methods are causing migration of herbicides and could affect non-target plants

and animals. Many herbicides are intentionally designed to persist in soil so that they may control weeds throughout a growing season or longer. With limited resources, the Forest Service believes that monitoring water quality is more efficient and informative.

- 3-25. *There is always concern about the potential for pesticide contamination of surface and ground water, when pesticides (herbicides) are applied, since some pesticides may be harmful to humans and to fish and wildlife and to sensitive crops at very low concentrations. Also, clean-up of ground water supplies that have been contaminated by persistent pesticides can be very difficult, so it is best to avoid contamination in the first place.*

*We are also pleased that the risk assessment for soils and ground water evidences a low risk of ground water contamination (page 4-43). The surface water risk analysis shows some potential for water quality risk with picloram treatments (page 4-53), however, we are pleased that it is stated that site-specific reassessments will be done during contract preparation for aerial applications, and if necessary treatment acres would be reduced to minimize water quality effects.*

**Response:** The analysis included several protection measures (Appendix C) and prevention measures (Appendix D) to minimize the likelihood of herbicide contamination effects.

- 3-26. *Thank you for including the many tables with information on toxicity and hazards associated with herbicide use (e.g., Table 4-4, Human Hazards based on Acute Toxicity Categories, Table 4-5, Chronic Toxicity Summary, Table 4-6, Herbicide Toxicity Hazard Quotients for Workers, Table 4-13, Effects of Proposed Herbicides on Aquatic Organisms, Table 4-19, Mammalian Toxicity). We are pleased that the assessment of herbicide drift indicates no significant off-site drift with proposed mitigation measures (page 4-34), and no anticipated significant cumulative health effects.*

**Response:** Thank you for your review.

- 3-27. *Please be aware that certain pest control activities described in the DEIS may fall under EPA's Worker Protection Standard (WPS) if, (1) the U.S. Forest Service is the "employer" in control of the "operation" and the operation involves or is related to commercial production of timber or timber products, (2) the U.S. Forest Service is using WPS-labeled pesticides, and (3) the pesticide applications in question are related to the production of timber/timber products and they are not covered by one of the applicable exceptions or exemptions. If you have any questions regarding the WPS or its applicability please contact Jaslyn Dobrahner in the Denver EPA office at (303) 312-6252.*

**Response:** It is recognized that when using a pesticide product with labeling that refers to the Worker Protection Standard, one must comply with the WPS, as outlined in adhering to label instruction in Appendix C. However, applications on pastures, rangeland or livestock are exempt from the WPS and the use of herbicide analyzed in the EIS is not related to the production of timber or timber products.

- 3-28. *We are pleased that potential effects to fisheries, amphibians, wildlife and sensitive plants were also evaluated and disclosed in Chapters 3 and 4, with risk evaluation to wildlife on a herbicide-by-herbicide basis. Will Forest biologist and botanists conduct field surveys and identify potential habitats for sensitive and threatened and endangered fish and wildlife and plant species for each treatment area as part of the preparation of the each annual weed management operating plan? We did not see this mitigation measure specifically included in the protection or prevention measures. We suggest that it be included in Appendix C or D.*

**Response:** Weed coordinators review and coordinate with fisheries and wildlife biologists, and botanists to ensure species of concern are protected per protection measures outlined in Appendix C. If a new weed population is identified then the risk to sensitive plants, wildlife, or aquatic organisms will be evaluated through adaptive management approaches as identified in Appendix E of the EIS. Trained individuals will conduct any future surveys for species of concern.

- 3-29. *Thank you for discussion and analysis of potential effects on wildlife resource, including threatened and endangered species including Grizzly Bear, Gray Wolf, and Bald Eagle (page 4-60 to 4-81). We*

*note that the final EIS should include the associated FWS Biological Opinion or formal concurrence for the following reasons: (1) NEPA requires public involvement and full disclosure of all issues upon which a decision is to be made; (2) the CEQ Regulations for implementing the Procedural Provisions of NEPA strongly encourage the integration of NEPA requirements with other environmental review and consultation requirements so that all procedures run concurrently; (3) the Endangered Species Act (ESA) consultation process can result in the identification of reasonable and prudent alternatives to preclude jeopardy, and mandated reasonable and prudent measures to reduce incidental take. These can affect project implementation.*

*Since the Biological Assessment and EIS must evaluate the potential impacts on listed species, they can jointly assist in analyzing the effectiveness of alternatives and mitigation measures. EPA recommends that final EIS and Record of Decision not be completed prior to the completion of ESA consultation. If the consultation process is treated as a separate process, the Agencies risk USFWS identification of additional significant impacts, new mitigation measures, or changes to the preferred alternative. If these changes have not been evaluated in the final EIS, a supplement to the EIS would be warranted.*

**Response:** A Biological Assessment was prepared for the Selected Alternative. The deciding officer selects the alternative only after reviewing public comment on the Draft EIS. This Biological Assessment was submitted to the U.S. Fish & Wildlife Service as required under Section 7 of the Endangered Species Act. The resulting concurrence letter has been incorporated into the Final EIS. The Section 7 consultation was completed prior to the issuance of the final EIS and Record Of Decision.

#### Commenter 4

4-1. *I support Alternative 1 as discussed in the Draft EIS. The only way to control the relentless invasion of noxious weeds is with a coordinated effort using chemical, biological, and cultural methods. The EIS has a comprehensive discussion of the various methods proposed with a realistic prediction of the outcome. The environmental impacts of the various methods are adequately analyzed.*

**Response:** Thank you for your support for the preferred Alternative 1 which is use of all tools available in combating weed spread and infestations.

4-2 *I have been releasing the various Aphythona leafy spurge flea beetles on this ranch and in the Powder River Breaks area since 1990. The last two years, I have not found a leafy spurge infestation in this area that does not have flea beetles. Biocontrol is slow but the beetles are established and will help slow the spread of leafy spurge.*

**Response:** Use of Aphythona leafy spurge flea beetles were analyzed in the DEIS in chapters 3 and 4, along with Appendix I. The Forest Service agrees with your observations and appreciates the biological control work you have been doing in the Bloom Creek / Powder River Breaks over the past few years.

4-3 *Chemical or cultural control should be used in the areas where the noxious weeds are not established and can be eliminated. Biocontrol is too slow and will allow the noxious weed to become established.*

**Response:** Alternative 1 addresses the integration of chemical, cultural, and biological control techniques for effective control and/or containment. Alternative 2 describes that biological control and/or cultural treatments, without herbicide use, is not effective for an overall program for weed management. However, it is recognized that in some circumstances, the location, size, density, and species may determine that biological control be used as a site specific strategy.

Appendix E outlines priorities for weed treatments. This appendix also displays a decision tree to help one quickly and effectively treat newly discovered weed infestations, based on site characteristics, weed species, and location. The analysis in Appendix E also addresses adaptive management strategies to improve effectiveness and reduce impacts through use of new technologies, biological controls, adjuvants, or herbicides.

**Commenter 5**

- 5-1. *Copies of the pages of the DEIS with specific comments are enclosed for your review and use. These comments do not address the merits of the alternatives, but are more directed at the content and presentation of the information.*

**Response:** The commenter thoroughly identified typographical corrections, minor tabular corrections in tables, scientific naming nomenclature updates, grammar corrections, and sentences needing restructuring for clarification. These comments were incorporated into the Final EIS.

Substantive comments on additional information on specific biological agents and their effectiveness were also included in biological control portions of Chapter 3 and 4, and Appendix I.

Chapter 3, Table 3 – 2 infestation acreage within the Sweet Grass portion of the Custer National Forest were corrected to reflect 295.8 gross acres and 8.1 infested acres.

COMMENT LETTERS

DEIS for Custer National Forest Weed Management

I support the use of Alternative 1, which includes all IMP methods using existing weed control, use of new herbicides, herbicide use within the Absorkee-Beartooth Wilderness Area and aerial application outside the Wilderness Area.

If we are going to be successful in the fight on noxious weed infestations, we must use everything available to us. Since weeds know no boundaries and flourish in disturbed ground, wilderness areas should not be exempt from treatment. New herbicides are often times much more environmentally friendly and less hazardous to the applicator. They can be used close to or in water and in trees with no haying or grazing restrictions when applied according to the label. It is less costly to control or eradicate small invasions instead of waiting until there are huge acreages of established weeds.

Mary Tarter

*Mary Tarter*

Harding County Weed and Pest Supervisor  
Harding County Weed and Pest Board  
Box 146  
Buffalo, SD 57720  
1-605-375-3412

September 26, 2006

Robert W. Johnson, Chairman  
*Robert W. Johnson*  
Harding County Commission  
Box 26, Buffalo, SD 57720  
1-605-375-3313

September 26, 2006



United States Department of the Interior



OFFICE OF THE SECRETARY  
Office of Environmental Policy and Compliance  
Denver Federal Center, Building 56, Room 1003  
Post Office Box 25007 (D-108)  
Denver, Colorado 80225-0007

September 28, 2006

9043.1  
ER 06/810

Nancy T. Curriden, Forest Supervisor  
Custer National Forest  
1310 Main Street  
Billings, Montana 59105

Dear Ms. Curriden:

The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement (DEIS) for the Custer National Forest Weed Management Project, Custer National Forest, and has no comments.

Sincerely,

*Robert F. Stewart*

Robert F. Stewart  
Regional Environmental Officer

cc: Kim Reid, Project Coordinator Leader



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 8, MONTANA OFFICE  
FEDERAL BUILDING, 10 West 15<sup>th</sup> St., Suite 3290  
HELENA, MONTANA 59603

3

Ref: 8MO

September 25 2006

Ms. Nancy T. Curriden, Forest Supervisor  
Att: Kim Reid, Project Coordinator  
Custer National Forest  
1310 Main Street  
Billings, MT 59105

Re: CEQ 20060340; Custer National Forest Weed  
Management Draft Environmental Impact  
Statement

Dear Ms Curriden:

The Environmental Protection Agency (EPA) Region VIII Montana Office has reviewed the Draft Environmental Impact Statement (DEIS) for the Custer National Forest Weed Management Project in accordance with its responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 of the Clean Air Act directs EPA to review and comment in writing on the environmental impacts of any major Federal agency action. The EPA's comments include a rating of the environmental impact of the proposed action and the adequacy of the NEPA document.

The EPA supports the purpose and need of the Custer National Forest Weed Management Project to prevent and reduce the loss of native plant communities associated with the spread of weeds. EPA fully supports the need to minimize spread of noxious weeds, and we support the proposed improvements to the Custer National Forest's integrated weed management program, including use of new herbicides, and herbicide use within the Absaroka-Beartooth Wilderness Area, and aerial application of herbicides outside of Wilderness. Noxious weeds are a great threat to biodiversity, and can out-compete native plants and produce a monoculture that has little or no plant species diversity or benefit to wildlife. Given increasing concerns about weed invasion, we recognize the utility of cost-effective methods of weed management such as using newer herbicides, application within infested areas within the Wilderness to prevent wider infestations, and carefully managed aerial application of herbicides. Aerial applications are cost-effective where there are areas of weed infestation across steep and inaccessible terrain.

However, we want to emphasize the importance of incorporating adequate measures into ground and aerial herbicide applications to mitigate risks of adverse health and environmental effects (e.g., avoid drift of potentially toxic herbicides to aquatic areas



or other sensitive areas and impacts to non-target plants). The proposed herbicide application protection measures, prevention practices, BMPs, aerial spray guidelines and drift model results and other mitigation measures identified in the DEIS Appendices evidence clear recognition of the need to avoid drift of herbicides to non-target areas. EPA is generally pleased with the proposed protection and prevention measures to be used during herbicide applications to help ensure the accuracy and safety of ground and aerial herbicide applications.

In fact, the DEIS includes one of the most comprehensive sets of Appendices presenting weed management mitigation measures, data and information that we have seen. The numerous Appendices, many informative tables, and narrative discussions in the DEIS provide valuable information that greatly improves public understanding of proposed Custer National Forest weed management activities, and facilitates review and evaluation of proposed activities. We commend the Custer National Forest for this comprehensive and informative analysis and disclosure regarding the proposed weed management program.

While the DEIS includes excellent presentation and disclosure of information, we note that the DEIS only indicates that the interdisciplinary team may recommend that water quality monitoring be conducted. The DEIS does not clearly state that monitoring will be conducted where there are higher risks or potential impacts to sensitive waters. We believe the health of downstream domestic, agricultural and recreational water users and the aquatic ecosystem should dictate some level of aquatic monitoring to document and verify that aqueous transport of herbicides, particularly picloram, which is highly mobile and toxic, does not occur. Monitoring is necessary to validate that herbicide application protocols and design criteria are effective in preventing herbicide transport to surface and ground waters, and may increase public confidence that chemical contamination of surface waters did not occur (i.e., select a stream with a high potential for herbicide drift for monitoring or high nearby treatment acreage, and if no herbicide is identified in this stream, you can better validate and extrapolate that mitigation measures were effective in preventing herbicide drift to other aquatic areas with lower intensity of treatments). We note that Table 4-10 shows that only 2.6% of the Forest is in a "high" risk class due to pesticide leachability and depth to ground water. Such high risk areas would be good candidates for water quality monitoring. We recommend a more definitive commitment to conducting water quality monitoring in high risk areas.

We also recommend including additional information on the probable causes of noxious and invasive weed invasion within the Custer National Forest by describing the more common mechanisms by which weeds spread. We believe an Integrated Weed Management program should strive to explain the reason(s) why noxious and invasive weeds are present, to improve public understanding of mechanisms and vectors for weed spread, and thus, gain public support to reduce activities that spread weeds and apply strategies to mitigate root causes. It is important for an Integrated Weed Management Program to include educational activities for industrial and recreational users to encourage and promote public assistance in weed prevention and control.

We also noticed that the preferred alternative includes only 5 acres or less of seeding. As you know, seeding can be very useful to stabilize disturbed areas by re-establishing desirable

species that out compete weeds and retard weed infestation. It is not clear why the proposed acreage for seeding is so low. Can the extent of proposed cultural treatments (seeding) to stabilize disturbed lands to withstand weed infestations be increased?

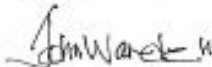
We also observed that the Ashland District saw a net decrease in weed-infested acres from 1985 to 2006 (Table 1-1). We suggest including further discussion of the reasons behind this observation, since understanding of the reasons why the Ashland District experienced a decline in weed-infested acres may provide information helpful for effective weed management on other Custer National Forest Districts.

Our more detailed comments, questions, and concerns regarding the analysis, documentation, and/or potential environmental impacts of the Custer National Forest Weed Management Project DEIS are enclosed for your review and consideration as you complete the Final Environmental Impact Statement (FEIS). Based on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action and alternatives in an EIS, the DEIS has been rated as Category LO (Lack of Objections). A copy of EPA's rating criteria is attached.

EPA concurs with the need for an expanded integrated weed management program to prevent the establishment and spread of weeds, including aerial application of herbicides. EPA did not identify any potential environmental impacts requiring substantive changes to the proposal, although EPA recommended that additional information on the causes of weed spread, additional cultural weed control methods (seeding), and a more definitive commitment to aquatic monitoring be considered.

The EPA appreciates the opportunity to review and comment on the DEIS. If we may provide further explanation of our concerns please contact Mr. Steve Potts of my staff in Helena at (406) 457-5022 or in Missoula at 406-329-3313.

Sincerely,



John F. Wardell  
Director  
Montana Office

Enclosures

cc: Larry Svoboda/Julia Johnson, EPA, REPR-N, Denver  
Donna Rise, Montana Dept. of Agriculture, Helena  
Mark Kelley, MDEQ, Helena

**U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements**  
**Definitions and Follow-Up Action\***

Environmental Impact of the Action

**LO - Lack of Objections:** The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

**EC - Environmental Concerns:** The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

**EO - Environmental Objections:** The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

**EU - Environmentally Unsatisfactory:** The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

**Category 1 - Adequate:** EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

**Category 2 - Insufficient Information:** The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

**Category 3 - Inadequate:** EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment, February, 1987.

## EPA Comments on Custer National Forest Weed Management Draft Environmental Impact Statement

### BRIEF PROJECT OVERVIEW:

The Custer National Forest (CNF) prepared this DEIS to evaluate a proposal to implement specific invasive weed treatments on approximately 14,000 gross managed acres (1,500 net treatment acres) in support of the 1987 Forest Plan, agency policy, Executive Order 13112, and other public land laws, rules, and regulations; and disclose the environmental effects of expansion of the current weed control program. The current weed management program did not authorize use of herbicides in the Absaroka - Beartooth Wilderness Area, and did not analyze effects of new herbicides or aerial application of herbicides.

Custer National Forest lands in south central and southeastern Montana, and northwestern South Dakota encompass about 1.2 million acres and share boundaries with Yellowstone National Park, Bighorn National Recreation Area, Bureau of Land Management, the state border with Wyoming, the Gallatin and Shoshone National Forests, the Crow and Northern Cheyenne Indian Reservations, and numerous state and private lands. The project area covers the entire Custer National Forest, and includes existing, as well as future potential weed infestation areas. This analysis will assess forest-wide treatment effects, and application of adaptive management strategies for new weed infestations. Three alternatives have been developed to address these objectives.

Alternative 1 includes all integrated pest management (IPM) methods used for existing weed control, use of new herbicides, herbicide use within the Absaroka- Beartooth Wilderness Area, and aerial application of herbicides outside of Wilderness. This includes ground herbicide application on 1415 acres (including 45 acres in AB wilderness area); 85 acres of aerial herbicide application; 155 acres of biological control; less than 5 acres of hand pulling; less than 5 acres of seeding; 60 acres of tall larkspur herbicide treatments; and less than 5 acres of treatment along paved roads and other infrastructure construction, all within a 15 year period. The preferred alternative is Alternative 1.

Alternative 2 is to use all integrated pest management methods as outlined in Alternative 1, but without the use of herbicides (155 acres of biological control; less than 5 acres of hand pulling; less than 5 acres of seeding; 60 acres of tall larkspur treatments with sheep).

Alternative 3 takes no action to change the current integrated pest management identified in the 1987 Custer Forest Noxious Weed Control EIS, including ground based herbicide treatment with only four herbicide choices (2,4-D, picloram, dicamba, and glyphosphate), and no herbicide use within the A-B Wilderness Area.

1

### COMMENTS:

1. The EPA supports the purpose and need of the Custer National Forest Weed Management Project to prevent and reduce the loss of native plant communities associated with the spread of weeds (page1-5). EPA fully supports the need to minimize spread of noxious weeds. Noxious weeds are a great threat to biodiversity, and can out-compete native plants and produce a monoculture that has little or no plant species diversity or benefit to wildlife. Impacts to native plant communities are much reduced when control actions are taken at an early stage of invasion.

We support the proposed improvements of the Custer National Forest's integrated weed management program, including use of new herbicides, and herbicide use within the Absaroka- Beartooth Wilderness Area, and aerial application of herbicides outside of Wilderness. Use of an expanded list of herbicides and applications within infested portions of the Wilderness Area, along with carefully managed aerial applications of herbicides outside the Wilderness Area are likely to facilitate more effective weed management. Aerial applications are cost-effective where there are areas of weed infestation across steep and inaccessible terrain (Tables 3-21 to 3-24).

The relative effectiveness of Alternative 1 using integrated weed management, including herbicide applications in comparison to Alternative 2 (without herbicide applications), and Alternative 3 (using only ground based herbicide treatments with only four herbicide choices, and no herbicide use within the A-B Wilderness Area) is evident from review of Table 2-3, Summary of Potential Impacts Between Alternatives (page 2-10), and from the cost analysis tables in Chapter 3 (Tables 3-21 to 3-24).

Given increasing concerns about weed invasion, we recognize the utility of cost-effective methods of weed management such as using newer herbicides, application within infested areas within the Wilderness to prevent wider infestations, and carefully managed aerial application of herbicides. We want to also emphasize the importance of incorporating adequate measures into ground and aerial herbicide applications to mitigate risks of adverse health and environmental effects (e.g., avoid drift of potentially toxic herbicides to aquatic areas or other sensitive areas and impacts to non-target plants).

2. We appreciate the inclusion of a map section in the DEIS with many maps showing alternatives, proposed treatment areas, and Relative Aquifer Vulnerability Evaluations for Herbicide Contamination. We also appreciate the many informative and comprehensive Appendices in the DEIS that include useful information as follows:

- Weed species of concern and invasive species in or near the Forest (Appendices A & B);
- Protection measures (Appendix C);
- Prevention, risk assessment and BMPs (Appendix D);

2

-Treatment priorities (Appendix E);  
 -Effectiveness of treatments by species (Appendix F);  
 -Herbicide trade names and target species (Appendix G);  
 -Grazing restrictions by herbicide (Appendix H);  
 -Herbicide application rates (Appendix I);  
 -Herbicide efficacy (Appendix J);  
 -Calibration information (Appendix K);  
 -Maintenance, cleaning and storage of sprayers (Appendix L);  
 -Herbicide safety (Appendix M);  
 -Aerial spray guidelines and drift model results (Appendix N).

This is one of the most impressive sets of Appendices presenting weed management program mitigation measures, data and information that we have seen. The maps and numerous Appendices and narrative discussions provide valuable information that greatly improves public understanding of the proposed Custer National Forest weed management activities, and facilitates review and evaluation of proposed activities.

We commend the Custer National Forest for this comprehensive disclosure of weed management program information. We encourage you to make these Appendices available to herbicide applicators.

3. The Appendix C protection measures, Appendix D prevention practices and BMPs, and Appendix N aerial spray guidelines and drift model results, evidence clear recognition of the need to avoid drift of herbicides to non-target areas. EPA is generally pleased with the proposed protection and preventative measures to be used during herbicide applications to help ensure the accuracy and safety of ground and aerial herbicide applications.

We support the proposed 300 foot buffer for aerial applications around streams and wetlands, and for including other measures to reduce risk of herbicide drift to sensitive areas. Herbicide drift into streams and wetlands could adversely affect aquatic life and wetland functions such as food chain support and habitat for wetland species. We believe a 300 foot buffer provides an appropriate safety zone to reduce risk of drift and runoff of potentially toxic herbicides to streams and wetlands during aerial applications. A buffer zone is particularly important for streams with valuable or sensitive fisheries resources (e.g., yellowstone cutthroat trout) or where there are downstream public water supplies.

We are also appreciative of the many other proposed measures to minimize risk of herbicide drift to sensitive areas (e.g., wind monitoring; use drift cards, dyes, drift reduction agents, spray nozzles that produce larger droplets, etc.).

4. We particularly appreciate the attention given to prevention practices and BMPs for weed control (Appendix D), since weed prevention is often the most cost-effective way to

3

manage and control weeds by avoiding new infestations and spread of weeds, and thus, avoiding the need for subsequent weed treatments (e.g., revegetation of disturbed areas, use of weed free seed, cleaning vehicles and equipment, and other practices that prevent infestation and spread of weeds). Early recognition and control of new infestations avoids wider future use of herbicides and other control methods. Weed prevention is a critical component in a weed management program.

5. The discussion and presentation of information on weed species, weed biology, vulnerability to infestations and rate of spread, treatment methods, and risk assessment in Chapter 3 and weed species specific ecology and IPM treatments in Appendix I are very informative. This type of information is an important part of an effective IPM program, and we are pleased to see so much valuable information included in the DEIS.

Noxious weeds tend to gain a foothold where there is disturbance in the ecosystem (e.g., logging sites, construction sites, road building, soil disturbance, fire, motorized travel, recreation, livestock grazing, etc.). We believe an Integrated Weed Management program should strive to explain the reason(s) why noxious and invasive weeds are present, to improve public understanding of mechanisms and vectors for weed spread. We, therefore, suggest including additional discussion on the probable causes of noxious and invasive weed invasion within the Custer National Forest. By describing the more common mechanisms by which weeds spread, the Custer National Forest may be better able to gain public support to reduce activities that spread weeds and better apply strategies to mitigate root causes. It is important for an Integrated Weed Management Program to include educational activities for industrial and recreational users to encourage and promote public assistance in weed prevention and control.

For example, weed seeds are transported by wind and water, animal fur, feathers and feces, but primarily by people. The greatest vector for spread of weeds is through motorized vehicles—cars, trucks, ATVs, motorcycles, and even snowmobiles. Weed seeds are often caught on the vehicle undercarriage in mud and released on the Forest. A single vehicle driven several feet through a knapweed site can acquire up to 2,000 seeds, 200 of which may still be attached after 10 miles of driving (Montana Knapweeds: Identification, Biology and Management, MSU Extension Service).

We believe an effective noxious weed control program should include restrictions on motorized uses, particularly off-road uses. Off-road vehicles are designed to travel off-trail, disturbing soil, creating weed seedbeds, and dispersing seeds widely. Weed seed dispersal from non-motorized travel is of lesser concern because of fewer places to collect/transport seed, and the dispersal rate and distances along trails are less with non-motorized travel. Restrictions on motorized uses may also be needed after burning and harvest activities until native vegetation is reestablished in the disturbed areas to reduce potential for weed infestation of the disturbed sites.

4

It is particularly important to avoid motorized travel in remaining roadless areas, since roadless areas are often reservoirs of native plants, and limitations on motorized travel in such areas can protect such areas from weed invasion and avoid the subsequent need to treat weeds.

6. We noticed that the preferred alternative includes 5 acres or less of cultural treatments (seeding, page 2-5). As you know, seeding can be very useful to stabilize disturbed areas by re-establishing desirable species that out compete weeds and retard weed infestation (page 3-18). It is not clear why the proposed acreage for seeding is so low. Can the extent of proposed cultural treatments (seeding) to stabilize disturbed lands to withstand weed infestations be increased? It is important that disturbed sites be seeded as soon as possible after disturbance to reduce potential for weed establishment. The goal of the seeding program should be to establish the sustainability of the area.
7. In order to prevent the establishment and spread of noxious weeds in recreation areas (trailheads, toilet areas, etc...), it may be helpful to consider the use of mulch where foot traffic is high and revegetation is difficult or impossible. Additionally, aesthetic barriers and posted signs may be utilized to discourage foot traffic in sensitive areas.
8. According to information in Table 1-1 (page 1-5), the Ashland District saw a net decrease in weed-infested acres from 1985 to 2006. We suggest including further discussion of this observation, since understanding of the reasons why the Ashland District experienced a decline in weed-infested acres may provide information helpful for effective weed management on other Custer National Forest Districts.
9. We are pleased to see the *Weed Seed Free Feed and Straw Policy* (page D-5). It can be helpful to require cattle and horses, especially those coming from areas with noxious weeds, to be penned and fed weed free hay for several days prior to being released on public lands to prevent introduction of noxious weeds.
10. Forest wide programmatic direction should assure that the effects of burning on the potential stimulation of noxious weeds be evaluated during site-specific project level analysis. Prescribed fire has the potential to stimulate weed growth (e.g., Dalmatian toadflax or leafy spurge), and can destroy insects planted for biological weed control. Burning followed by application of appropriate herbicides can provide effective weed control. We suggest that such considerations be evaluated for during development of direction and plans for prescribed burning.
11. Sites selected for application of biological control agents should be protected from other management actions that could negatively influence the biocontrol agent (such as burning as noted above, or application of toxic herbicides). Protected biocontrol sites can also function as collection points for redistribution of established biocontrols to other sites.

12. Spotted knapweed is identified as one of the more prevalent noxious weed species in the project area (page 3-5). We note that spotted knapweed is non-rhizomatous and should be relatively easy to control with lower rates of the most selective low toxicity herbicides.
13. It is important to monitor results of weed treatment activities to document and assure effective weed treatment with minimal impacts on non-target species and avoidance of other adverse environmental or public health effects. Monitoring should be an integral part of the weed management program. EPA is pleased to see (page 2-8) that the Custer National Forest would incorporate monitoring into each alternative focusing on the: 1) density and rate of weed spread and their effects; 2) effects of herbicides on noxious weeds; 3) establishment and effectiveness of biological control agents; 4) presence of herbicide in surface or ground water in high risk areas (i.e. accidental spills, aerial application), and 5) implementation of protection measures.

We believe the health of downstream domestic, agricultural and recreational water users and of the aquatic ecosystem should dictate some level of aquatic monitoring to document and verify that aqueous transport of herbicides, particularly picloram, which is highly mobile and toxic, does not occur. Monitoring is necessary to validate that herbicide application protocols and design criteria are effective in preventing herbicide transport to surface and ground waters, and may increase public confidence that chemical contamination of surface waters did not occur. We are pleased that sensitive resources (streams, lakes, wetlands and sensitive plants) would be monitored, and that spray detection cards would be used to evaluate herbicide drift towards sensitive resources (page 2-9).

We support monitoring of water samples where there higher probability for herbicide transport to surface or ground waters, and collection of water samples after the first substantial rain to detect the presence of herbicides from leaching or runoff. We suggest focusing monitoring on waters in high risk watersheds with increased risk factors such as: higher levels of herbicide applications; applications in close proximity to surface waters or areas with porous soils and high groundwater levels; herbicide applications near sensitive fisheries and near public water supplies, etc.. Monitoring of higher risk and more sensitive waters can validate that herbicide transport to aquatic areas does not occur, particularly monitoring for picloram and clopyralid, since these herbicides are highly soluble and mobile, and relatively persistent and toxic (i.e., select a stream with a high potential for herbicide drift for monitoring or high nearby treatment acreage, and if no herbicide is identified in this stream, you can better validate and extrapolate that mitigation measures were effective in preventing herbicide drift to other aquatic areas with lower intensity of treatments). The Forest may also want to consider groundwater monitoring in selected wells in close proximity to application sites.

While the Custer National Forest Weed Management DEIS includes excellent presentation and disclosure of information, the DEIS only indicates that the

interdisciplinary team may recommend that water quality monitoring may be conducted. The DEIS does not clearly state that monitoring will be conducted where there are higher risks or potential impacts to sensitive waters. We note that Table 4-10 (page 4-40) shows that only 2.6% of the Forest is in a "high" risk class due to pesticide leachability and depth to ground water. Such high risk areas would be candidates for water quality monitoring. We recommend a more definitive commitment to conducting water quality monitoring in high risk areas be included in the FEIS.

We note that bioassay techniques using aquatic species sensitive to the herbicides to be used are available for detecting aquatic impacts from herbicide applications (e.g., stoneflies, cutthroat trout). EPA has prepared a toxicity testing manual entitled, "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms", EPA/600/4-90/027, September 1991. Toxicity testing procedures are described in this manual, including procedures using rainbow and brook trout.

14. We are pleased that an adaptive management approach is identified in Appendix E, including identification of treatment priorities, a decision tree for treatment of new weed locations, guidelines for treatments, and a treatment effectiveness guide (Appendix F). As a general practice, EPA suggests prioritizing perimeter weed infestations such as around trailheads and roadsides before treating interior weed infestations.

Thank you for including pre- and post-evaluations of effectiveness for all weed control projects. Evaluation of the effectiveness of treatments is critical to the long-term success of the program. Non-effective treatments need to be re-evaluated and potentially replaced with other treatment methods. All treatment methods used should be tracked to provide a comparison of the effectiveness of control measures, and weed infestations and control actions should be tracked in a Forest-level weed database. The Custer NP Weed Management program appears consistent with these concepts.

15. The presentation of information regarding the herbicides proposed for use is helpful in evaluation of potential effects of herbicide applications (Table 3-10, *Effects of Drift Factors on Herbicide Drift*, Table 3-11, *Comparison of Herbicides*, Table 3-13, *Herbicide Behavior in Soils*, Table 3-14, *Montana Water Quality Human Health Standards for Herbicides*, Appendices G, H, I, J & M). We recommend all applicators have access to these tables in the field.
16. We are generally more concerned about applications of the more toxic, persistent, and mobile herbicides such as picloram (Tordon). As you know most picloram products, including Tordon 22K, are Restricted Use Pesticides requiring pesticide applicator certification to purchase and apply. It is important that U.S. Forest Service employees be certified throughout the duration of the project. If commercial applicators will be contracted for application of Restricted Use Pesticides, we recommend checking to make

sure their MT commercial Restricted Use Pesticides license is current. Please contact Montana Dept. of Agriculture at (406) 444-5400 for more information.

We recommend that applications of more persistent, toxic herbicides such as picloram be limited to once per year to reduce potential for accumulation in soil. Trade-offs between effective weed control and effects on soil productivity and leaching concerns need to be considered. A second treatment application of picloram if needed should only occur after 30 days (or according to label directions).

The Montana Department of Agriculture recommends that pesticide/herbicide applicators establish soil depth criteria with sufficient depth to ground water to mitigate the potential for the movement of leachable herbicides such as picloram or clopyralid to ground water (Donna Rise, MDA, phone 444-5400). Six feet of soil may be adequate if the soils are less permeable (e.g., clay) and may provide adequate time for picloram and clopyralid to degrade. Six feet of soil, however, will not be adequate if the soils are sandy, gravelly or have cobbly, stony, or other permeable structural characteristics. The Ground Water Information Center at the Montana Bureau of Mines & Geology in Butte, MT (406-496-4153) may have well log information for estimation of ground water levels in treatment areas.

17. For your information, Dow AgroSciences, the manufacturer of Tordon 22K, has recently developed supplemental labeling for Tordon 22K for areas west of the Mississippi River. They have directions for wick or carpet roller applications. Tordon 22K herbicide can be applied using wick or carpet roller equipment where drift presents a hazard to susceptible crops, surface waters, and other sensitive areas. One part Tordon 22K is mixed with 2 parts water to prepare a 33% solution. The wick method of application is more labor intensive but very effective at targeting particular noxious weeds adjacent to surface waters, wetlands, or protected plants.

Also, please note that registration for Access, picloram active ingredient, is cancelled and Appendix E (page G-1) should be updated.

18. Thank you for providing detailed information on potential effects to soils and ground water and water quality effects (starting on page 3-44), and presenting results of relative aquifer vulnerability evaluations (RAVE) in Chapter 4 (starting on page 4-40).

Table 3-14 shows numeric Montana Water Quality Human Health Standards for herbicides, and a statement is included in the narrative that no aquatic life standards have been established (page 3-49). While it is correct that Montana Water Quality Standards do not include numerical criteria for aquatic life protection for the herbicides proposed for use (since research/data requirements necessary to establish numerical aquatic life water quality criteria are very rigorous), it is important to understand that many herbicides are toxic to aquatic life even though numerical aquatic life criteria have not

been established. The Montana Water Quality Standards, however, do include a general narrative standard requiring surface waters to be free from substances that create concentrations which are toxic or harmful to aquatic life. It would be helpful to present this important narrative "free from toxicity standard" in the final EIS.

19. Table 4-10 shows that only 2.6% of the areas are in a "high" risk category and no areas are in the "unacceptable" risk category, and it is stated that pesticide leachability and high ground water account for the few "high" risk ratings (page 4-41). We are pleased that almost all of the Forest is in the "low" or "low to moderate" risk class.

As noted in our comment #16 above, we are more concerned about applications of the more toxic, persistent, and mobile herbicides such as picloram (Tordon). Trade-offs between effective weed control and effects on soil productivity and leaching herbicide transport and contamination concerns need to be considered. While the DEIS does not show adverse effects on soil productivity from proposed herbicide use, we recommend that applications of more persistent herbicides such as picloram be limited to once per year to reduce potential for accumulation in soil. A second treatment application if needed should only occur after 30 days (or according to label directions).

Weed infestations are often able to out compete native vegetation in soils where overgrazing, fire, or other disturbance has depleted soil fertility levels. It may be useful to analyze for soil fertility parameters (pH, Ca, Mg, K, P, organic matter, % N). If soil fertility is low, it may be helpful to apply slow release fertilizers to initiate competitive growth of native vegetation. The Forest may also want to consider monitoring for herbicide concentrations in soils; and soil microbiologic assays; monitoring of plant communities; and monitoring of soil erosion and sedimentation rates.

20. There is always concern about the potential for pesticide contamination of surface and ground water, when pesticides (herbicides) are applied, since some pesticides may be harmful to humans and to fish and wildlife and to sensitive crops at very low concentrations. Also, clean-up of ground water supplies that have been contaminated by persistent pesticides can be very difficult, so it is best to avoid contamination in the first place.

We are also pleased that the risk assessment for soils and ground water evidences a low risk of ground water contamination (page 4-43). The surface water risk analysis shows some potential for water quality risk with picloram treatments (page 4-53), however, we see pleased that it is stated that site-specific reassessments will be done during contract preparation for aerial applications, and if necessary treatment acres would be reduced to minimize water quality effects.

21. Thank you for including the many tables with information on toxicity and hazards associated with herbicide use (e.g., Table 4-4, *Haman Hazards Based on Acute Toxicity*

*Categories*, Table 4-5, *Chronic Toxicity Summary*, Table 4-6, *Herbicide Toxicity Hazard Quotients for Workers*, Table 4-13, *Effects of Proposed Herbicides on Aquatic Organisms*, Table 4-19, *Mammalian Toxicity*). We are pleased that the assessment of herbicide drift indicates no significant off-site drift with proposed mitigation measures (page 4-34), and no anticipated significant cumulative health effects.

22. Please be aware that certain pest control activities described in the DEIS may fall under EPA's Worker Protection Standard (WPS) if, (1) the U.S. Forest Service is the "employer" in control of the "operation" and the operation involves or is related to commercial production of timber or timber products, (2) the U.S. Forest Service is using WPS-labeled pesticides, and (3) the pesticide applications in question are related to the production of timber/timber products and they are not covered by one of the applicable exceptions or exemptions. If you have any questions regarding the WPS or its applicability please contact Jaslyn Dobrahter in the Denver EPA office at (303) 312-6252.
23. We are pleased that potential effects to fisheries, amphibians, wildlife and sensitive plants were also evaluated and disclosed in Chapters 3 and 4, with risk evaluation to wildlife on a herbicide-by-herbicide basis. Will Forest biologists and botanists conduct field surveys and identify potential habitats for sensitive and threatened and endangered fish and wildlife and plant species for each treatment area as part of the preparation of the each annual weed management operating plan? We did not see this mitigation measure specifically included in the protection or prevention measures. We suggest that it be included in Appendix C or D.
24. Thank you for discussion and analysis of potential effects on wildlife resources, including threatened and endangered species including Grizzly Bear, Gray Wolf, and Bald Eagle (page 4-60 to 4-81). We note that the final EIS should include the associated FWS Biological Opinion or formal concurrence for the following reasons:
- (1) NEPA requires public involvement and full disclosure of all issues upon which a decision is to be made;
  - (2) The CEQ Regulations for Implementing the Procedural Provisions of NEPA strongly encourage the integration of NEPA requirements with other environmental review and consultation requirements so that all such procedures run concurrently rather than consecutively (40 CFR 1500.2(c) and 1502.25); and
  - (3) The Endangered Species Act (ESA) consultation process can result in the identification of reasonable and prudent alternatives to preclude jeopardy, and mandated reasonable and prudent measures to reduce incidental take. These can affect project implementation.

Since the Biological Assessment and EIS must evaluate the potential impacts on listed species, they can jointly assist in analyzing the effectiveness of alternatives and

mitigation measures. EPA recommends that the final EIS and Record of Decision not be completed prior to the completion of ESA consultation. If the consultation process is treated as a separate process, the Agencies risk USFWS identification of additional significant impacts, new mitigation measures, or changes to the preferred alternative. If these changes have not been evaluated in the final EIS, a supplement to the EIS would be warranted.

Glenn Gay  
Gay Ranch, Inc.  
HC 59 Box 7  
Broadus, MT 59317  
(406) 427-5457

September 28, 2006

Nancy T. Carriden, Forest Supervisor  
Attn. Kim Reid, Project Coordinator  
Custer National Forest  
1310 Main Street  
Billings, MT 59105

RE: Draft Custer National Forest Weed Management EIS

Gay Ranch, Inc. borders the southeast corner of the Ashland Ranger District of Custer National Forest. We also have the Bloom Creek Allotment grazing permit on the Ashland Ranger District. This is the Powder River Breaks area identified for biocontrol treatment.

I support Alternative 1 as discussed in the Draft EIS. The only way to control the relentless invasion of noxious weeds is with a coordinated effort using chemical, biological, and cultural methods. The EIS has a comprehensive discussion of the various methods proposed with a realistic prediction of the outcome. The environmental impacts of the various methods are adequately analyzed.

I have been releasing the various *Aphthona* leafy spurge flea beetles on this ranch and in the Powder River Breaks area since 1990. The last two years, I have not found a leafy spurge infestation in this area that does not have flea beetles. Biocontrol is slow but the beetles are established and will help slow the spread of leafy spurge.

Chemical or cultural control should be used in the areas where the noxious weeds are not established and can be eliminated. Biocontrol is too slow and will allow the noxious weed to become established.

Unfortunately leafy spurge will never be eliminated from the Powder River Breaks area but with the methods discussed in the EIS we should be able to slow the spread and maybe even contain the infestation to this area.

Yours truly,



Glenn Gay



**United States Department of the Interior**  
BUREAU OF INDIAN AFFAIRS  
Rocky Mountain Regional Office  
316 North 26<sup>th</sup> Street  
Billings, Montana 59101



In Reply Refer To:  
Agriculture & Wildlife Management  
Code 462

SEP 21 2006

Kim Reid, Project Coordinator  
Custer National Forest  
1310 Main Street  
Billings, Montana 59105

Dear Ms. Reid:

Enclosed are comments regarding the Custer National Forest Weed Management Draft Environmental Impact Statement (DEIS). Copies of the pages of the DEIS with specific comments are enclosed for your review and use. These comments do not address the merits of the alternatives, but are more directed at the content and presentation of the information.

My name and work address are:

Larry Beneker  
Bureau of Indian Affairs  
Rocky Mountain Regional Office  
316 North 26<sup>th</sup> Street  
Billings, Montana 59101

Thank you for the opportunity to review and comment on the DEIS. If you have any questions, please contact me at (406)247-7925.

Sincerely,

7248

Soil Conservationist

Enclosure



**United States Department of the Interior**

FISH AND WILDLIFE SERVICE

ECOLOGICAL SERVICES  
MONTANA FIELD OFFICE  
385 Shepard Way  
HELENA, MONTANA 59601  
PHONE (406) 449-5225, FAX (406) 449-5339

ES-61130 - Billings  
M.19 - Custer National Forest  
Custer National Forest Weed Management

October 20, 2006

Nancy Curriden, Forest Supervisor  
Custer National Forest  
1310 Main Street  
Billings, MT 59105

Dear Ms. Curriden:

This document transmits the U.S. Fish and Wildlife Service's (Service) concurrence on your determination of effects for listed species in your biological assessment (BA) for the proposed Custer National Forest Weed Management Plan. Your BA was received in the Billings Sub Office on October 3, 2006. This response is provided by the Service under the authority of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543), the Migratory Bird Treaty Act (16 U.S.C. 703-712), and the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.).

The proposed project would occur on lands administered by the U.S. Department of Agriculture, Forest Service within the Custer National Forest. The Forest is located in southeast Montana on approximately 1.2 million acres of land in parts of Sweet Grass, Stillwater, Carbon, Rosebud, Powder River, and Carter Counties in Montana, and Harding County in South Dakota.

The Forest Service has determined that the proposed action will not affect black-footed ferret (*Mustela nigripes*), and bald eagle (*Haliaeetus leucocephalus*). The Forest Service has determined the fuels reduction program may affect, but is not likely to adversely affect the grizzly bear (*Ursus arctos*), and Canada lynx (*Lynx canadensis*). The project is also not likely to jeopardize the continued existence of the non-essential experimental population of the gray wolf (*Canis lupus*).

The Service concurs with your determination of effects of your project on listed species, and formal consultation is not required. The Service bases its concurrence on the implementation of the conservation measures stated in the BA, and the protection measures in the *Custer National Forest Weed Management Environmental Impact Statement - Biological Assessment Appendices* provided as an attachment to the BA.

The Custer National Forest proposes annual weed control on about 1,500 net infested acres (approximately 14,000 managed gross acres) of noxious weeds, 60 net acres tall larkspur, and 5 net acres for infrastructure maintenance (i.e., paved road shoulder maintenance). Actual treatment would provide for adaptive management practices while addressing current infestations as follows:

- About 1,415 net infested acres ground herbicide application is proposed (includes 45 acres of in the AB Wilderness Area);
- About 85 net infested acres aerial treatment application is proposed. Currently, there are about 5 net acres of infestation in the Dry Creek area and about 80 net acres of infestation in the Stillwater area. These areas have potential for aerial treatment needs in the near future due to their remote and steep characteristics. These characteristics reduce the ability for effective ground treatment and have a potential to spread to about 7,300 acres of remote and inaccessible areas.
- About 155 acres using biological control is proposed. Herbicide treatment will be used along the perimeter and small patches to contain the weeds. Current targeted areas include 80 Acres Stillwater, 5 Acres Dry Creek, 28 Acres Rock Cr., 20 Acres Ski Run Rd., 2 Acres Pryor Mountain (Beartooth Ranger District), 10 Acres Powder River Breaks (Ashland Ranger District), 10 Acres Long Pines (Sioux Ranger District).
- Less than 5 acres is proposed to be treated by hand-pulling (herbicides may be used to reduce plant density to low levels, then pull isolated plants);
- Less than 5 acres of cultural treatment by seeding is proposed. Herbicides or grazing may be used to reduce plant density, then plant more desirable and competing vegetation; tilling or burning will most likely apply if future populations are more sizable as to make the treatment more cost effective.
- About 60 acres of tall larkspur control using ground herbicide application is proposed.
- Less than 5 acres for infrastructure maintenance or construction. This includes periodic treatment along paved road shoulders. Other examples include helibases, drainage culverts, special use permits such as telephone and electric transmission lines that may have undesirable vegetation growing in or adjacent to them.

Implementation would occur within a 15 year period. Not all acres would be treated every year. Acres treated will depend on available funding and on a priority rating system. Historical funding has allowed for treatment of between 600 and 1,200 acres annually. Most areas would need repeated treatment for 5 to 8 years to ensure effective control. Monitoring would be used to determine effectiveness and to identify areas that would need to be re-treated or if treatment areas could be reduced based on effectiveness of previous treatments.

Under the proposed action alternative new weed infestations could be treated provided that the steps identified in the Adaptive Management section of the BA's appendices are followed. They include criteria to help determine the appropriate treatment for new weed sites. All infestations

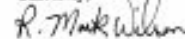
will use the priority decision process outlined in the BA. If the weeds are in the AB Wilderness, then Wilderness Minimum Tool Guidelines will be used.

All herbicides will be applied according to label specification; or when additional protection measures are required by Forest Service policy as described in the BA. Impacts on soil and water will be mitigated to meet public land water laws, state pesticide application requirements, Northern Region Soil and Water Standards, and Custer Forest Plan Standards.

This concludes informal consultation and conference pursuant to regulations in 50 CFR 402.13 implementing the ESA of 1973, as amended. This project should be re-analyzed if new information reveals effects of the action that may affect threatened, endangered or proposed species, if the project is modified in a manner that causes an effect not considered in this consultation, the proposed action may affect a new species that is listed or critical habitat identified or if timing, spatial restrictions, and protective measures will not be implemented.

The Service appreciates efforts by Custer National Forest to minimize negative impacts to listed species in Montana. We also support your efforts to minimize impacts on sensitive and management indicator species. For further questions, please call Lou Hanebury at the Billings Sub Office at 406-247-7367.

Sincerely,



R. Mark Wilson  
Field Supervisor

cc: FWS/ES, Billings, MT (Attn: Lou Hanebury)  
FWS/ES, Pierre, SD (Attn: Pete Gober)  
USFS/Custer National Forest, Billings, MT (Attn: Tom Whitford)

