United States
Department of
Agriculture

Forest Service
Northern Region

Record of Decision
For the
Gallatin National Forest
Noxious and Invasive
Weed Treatment Project

Gallatin National Forest

Carbon, Gallatin, Madison, Meagher, Park and Sweet Grass Counties;
Montana

June 2005

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BRIEF DESCRIPTION OF MY DECISION

This Record of Decision documents my decision for selecting Alternative 1 as described in the Gallatin National Forest Noxious and Invasive Weed Control Final Environmental Impact Statement (FEIS). The selected alternative will authorize treatment of 13,260 acres of existing weeds with a combination of herbicides (both aerial and ground), biological control agents, cultural, and mechanical treatments. See Figure 2-1, 2-4, 2-7, 2-11, 2-15, and 2-18 at the end of this document for maps with specific treatment type and location. In addition, the selected alternative will allow for adaptive management including: treatment of new weed species, new weed patches, and new control methods (including new herbicides, biological control agents, mechanical and cultural techniques) provided that the environmental impacts are within the scope of those disclosed within the accompanying FEIS for Alternative 1. This alternative provides for the use of the most effective tools for controlling weeds while having minimal impact on the environment. Weed treatment would occur annually within the 1.8 million acres of the Gallatin National Forest. This includes sections of the following counties: Carbon, Gallatin, Madison, Meagher, Park and Sweet Grass.

OVERVIEW OF OUR ANALYSIS AND DECISION PROCESS

The Gallatin National Forest completed a forest-wide Noxious Weeds EIS in 1987 and the East Dam Spotted Knapweed EA in 1992. In the summer of 2002 the Gallatin Forest mapped and inventoried all known weed infestations into a consolidated database. A proposal was developed for managing the existing weeds. The public was invited to help identify issues and concerns associated with weed management from December 2002 to January 2003. Through public and internal scoping the following key issues were identified for the purpose of developing and evaluating alternatives: concern about the effect of weeds on the environment; concern about the effects of herbicides on human health, wildlife, and aquatic resources; and concern about the risk of aerial spraying drifting off target. Four alternatives were developed and the environmental effects disclosed in the draft EIS on August 2004, and made available for the 45 day public review and comment period. The decision described in this Record of Decision was made following a thorough review of the public comments and of the Environmental Impact Statement.

PURPOSE AND NEED FOR ACTION

Invasive weeds are threatening or dominating areas of the Forest with negative impacts on native plant communities, wildlife habitat, soil and watershed resources, recreation, and aesthetic values. A shift from native vegetation to invasive weeds decreases wildlife forage, reduces species diversity, and increases soil erosion due to a decrease in surface cover. For these reasons it is imperative to aggressively manage weeds across the Forest.

The purpose of the project is to minimize the loss of native plant communities resulting from invasive weeds. For a more detailed description of the purpose and need for action refer to Chapter 1 of the FEIS.

PROPOSED ACTION

The Forest is proposing to supersede the 1987 Environmental Impact Statement and ROD for control of weeds to:

1. Permit the use of different types of herbicides;

2. Treat 13,260 acres with a combination of treatment methods such as herbicides, biological control agents, grazing, mechanical and cultural (the actual amount of annual treatment will depend on available funding and monitoring results);
3. Adopt adaptive management tools for assessing new treatments, new weed species and new sites; and
4. Broaden control methods to include the use of aerial herbicide application (on 255 acres).

SCOPE OF THE DECISION

The scope of my decision is limited to the activities described in the Gallatin National Forest Noxious and Invasive Weed Control EIS. Given the purpose and need, the alternatives, the environmental consequences and the public comments, I am making the following decisions:

- Whether to expand current efforts to control invasive weeds;
- What treatment methods would be used;
- What herbicides would be used;
- What mitigation and monitoring measures would be required; and
- Whether to include an adaptive approach to address future control of weeds.

The accompanying EIS discloses the results of a project level analysis. The scope is confined to issues and potential environmental consequences relevant to the decision over a program to control invasive weeds on the Gallatin National Forest.

National, regional, and Forest Plan rules, policies, and direction require consideration of effects of all projects on weed spread and prescribe mitigation measures where practical to limit those effects. Reconsideration of other existing project level decisions or programmatically prescribing mitigation measures or standards for future Forest management activities (such as travel management, timber harvest, and grazing management) are beyond the scope of this decision. If these type of project proposals involve concern over the potential spread of invasive weeds, appropriate mitigation measures will be proposed and incorporated at such time those decisions are being made.

PUBLIC INVOLVEMENT PROCESS AND ISSUES

The public was extensively involved throughout the development of the EIS. Public comment was used to define issues and develop the range of alternatives for accomplishing management goals and objectives. This project was listed on the Gallatin Forest Schedule of Proposed Actions since October 2002. Public notice was also provided via: publication of a Notice of Intent to prepare an EIS in the Federal Register (January 17, 2003); publication of a legal notice in the Bozeman Chronicle (January 12, 2003); and an information package (scoping letter) that was mailed to 60 agencies, groups and individuals. For more information refer to page 2-1 in the EIS.

The comments received identified three key public concerns (EIS, page 2-2- to 2-4). (1) The potential effects of herbicides on human health, animals, fisheries and water quality. (2) The potential effects of aerial application of herbicides. (3) The effect weeds have on native plants, wildlife habitat and biodiversity. My selected alternative responds to these concerns as follows:

Potential effects of herbicides on human health, animals, fisheries and water quality - Although herbicides proposed for weed control have gone through rigorous scientific testing and government approval, some people believe that herbicides are unsafe.

Alternative 1 includes an extensive list of mitigation measures that reduce the risk of herbicides having a measurable effect on human health, animals, fisheries and water quality (EIS, pages 2-18 to 2-23).

Potential effects of aerial application of herbicides – Some people are concerned that impacts from herbicides would increase with the use of aerial application. Alternative 1 includes mitigation measures that have been successfully implemented on the Lolo National Forest (EIS, pages 2-18 to 2-19).

Invasive weeds displace native plants and wildlife habitat, resulting in a reduction in biodiversity and habitat function - Alternative 1 responds to this issue by providing a range of options for weed control, including aerial application of herbicides. Both Alternatives 1 and 4 would treat approximately 24 percent of the weed acres each year based on available funding (EIS, Table 2-10, page 2-16). Alternative 2 would only treat 16 percent, and Alternative 3 would only threat 7 percent.

Comments received in response to the scoping letter were analyzed in March of 2003. These helped shape the alternatives described in the draft EIS. Copies of the DEIS and a request for comments were mailed to 12 agencies and individuals on July 8, 2004. An additional 184 letters were mailed to individuals and groups announcing the availability of the DEIS. A news release was sent to 35 potentially interested parties (newspapers, organizations and individuals). The Notice of Availability of the DEIS was published in the Federal Register on July 16, 2004, and a legal notice was published in the Bozeman Chronicle on July 18, 2004 The end of the official comment period was August 30, 2004. Five comment letters from six different groups were received (available in the project file). These comments were considered and incorporated into the final EIS, Chapter 6.

Of the five comment letters received on the draft EIS, only one was in opposition to the treatment of weeds. State and federal law requires that noxious weeds be controlled and I concluded that ignoring the problem was not a reasonable option.

ALTERNATIVES CONSIDERED BUT NOT STUDIED IN DETAIL

As a result of comments made during the initial scoping period and on the draft EIS, three alternatives were considered but then dismissed from detailed analysis because they are beyond the scope of the EIS or are not substantially different from other alternatives being considered (EIS, page 2-3).

Prohibit all activities that may spread weeds. This was not studied in detail because this decision is focused on treatment options for the control of established weed infestations. Forest management activities (such as travel management, timber harvest, and grazing management) are beyond the scope of this decision. If these type of project proposals involve concern over the potential spread of invasive weeds, appropriate mitigation measures will be proposed and incorporated at such time those decisions are being made. Further more, my decision does not establish programmatic direction (i.e. standards and guidelines) for weed prevention because these measures are already in place and being implemented on the Gallatin Forest (see the EIS, Appendix A, which outlines the weed prevention activities listed in the Forest Service Manual 2080; and the January 2001 Off-Highway Vehicle Record of Decision which limits the use of OHVs). Also, weed spread associated with travel management is being addressed in the Travel Planning EIS.

No Weed Treatment. An alternative that discontinues the current weed management program was considered but eliminated from detailed analysis because it does not meet the project's purpose and

need, does not comply with the Forest Service's Integrated Pest Management program, is inconsistent with Forest Service policy that noxious weeds and their adverse effects be managed on National Forests, and violates federal and state laws and executive orders (EIS, pages 3-2 to 3-3). It also would be unacceptable of the Forest Service to ignore weeds on the Gallatin National Forest due to the potential environmental effects on adjacent private and public lands.

Use herbicide only after other treatment methods failed. Another alternative eliminated from detailed study was to use herbicides only as a last resort and after it was shown that other treatment methods including mechanical, vegetative, and biological control, were unsuccessful. This alternative was eliminated from detailed study due to concern that weed infestations could expand substantially during the time unsuccessful non-herbicidal treatments are being tried. Subsequently, when herbicides are used, more of it would be needed than if it was the selected control method in the beginning. A second reason that this alternative was not studied in detail is that the potential effects of using herbicides is analyzed in Alternative 1 and the potential effects of using only non-herbicidal treatments is analyzed under Alternative 2. For all practical purposes, the analysis for an alternative that uses herbicides only as a last resort would have to be done under the assumption that they ultimately could be used and therefore the projected impacts would not be less than those disclosed for Alternative 1.

BRIEF DESCRIPTION OF ALTERNATIVES STUDIED IN DETAIL

Four alternatives were considered in detail. Alternative 1 would use a combination of biological, cultural and mechanical control agents, and herbicides (both aerial and ground application) for controlling the existing weeds. Currently there are 44 weed species listed as invasive weeds (27 on the state list, 8 on the county lists, and 9 on the Forest list). The alternative analyzed the effect of 12 different herbicides: 2,4-D, chlorsulfuron, clopyralid, dicamba, glyphosate, hexazinone, imazapyr, methsulfuron methyl, picloram, imazapic, sulfometuron methyl, and triclopyr. Also included in Alternative 1 is the use of an adaptive management approach, which would allow for treatment of new infestations, new weed species at newly discovered locations and allow the use of new control methods provided the predicted effects are within the scope of those disclosed in the EIS for Alternative 1.

Alternative 2 is similar to Alternative 1 except herbicides would not be used. Alternative 3 is the same as current management, which is limited to sites identified in previous NEPA decisions, treating only leafy spurge, Dalmatian toadflax, Canada thistle, and spotted knapweed; and is limited to only picloram and 2,4-D. Alternative 4 is similar to Alternative 1, except that aerial applications would not be used. Table 1 shows the number of acres treated for each alternative. Table 2 shows trade-offs between the alternatives.

Table 1 – Acres of treatment type for each alternative.

Alt.	Biological control	Cultural	Mechanical	Herbicide	Aerial	Tall Larkspur	No Treatment
1	4985	2,135	41	5,179	255	665	0
2	7,622	2,017	130	0	0	665	2,826
3	535	0^{+}	281^{+}	346	0	0	11,538
4	5,086	2,135	41	5,179	0	665	153

Table 2. Summary of Trade-Offs and Potential Impacts Between Alternatives.

Issue or Concern	Potential Impacts			
	Alt. 1- Proposed Action	**Alt. 2 – No Herbicides**	**Alt. 3- No Action**	**Alt. 4 – No Aerial**
Impacts of weeds: • Loss of native plant community; • Loss of sensitive plant populations; • Human Health (e.g. allergies, asthma)	- Maximizes protection of native plants -Low risk, effective mitigation - Decrease weed impact	- High loss of native plants -High risk (weeds out compete rare plants) - Increased allergies	- High loss of native plants from weeds -High risk (weeds out compete rare plants) - Increased allergies	- Some loss of native plants in remote areas. -Low risk, effective mitigation - Decrease weed impact
Impacts of using herbicides: • Human health; • Fish and animals; • Non-target plants; • Water quality	-Low risk, effective mitigation -Low risk, effective mitigation -Low risk, effective mitigation -Low risk, effective mitigation	- No risk - No risk - No risk - No risk	-Low risk, effective mitigation -Low risk, effective mitigation -Moderate risk, picloram injury -Low risk, effective mitigation	-Low risk, effective mitigation -Low risk, effective mitigation -Low risk, effective mitigation -Low risk, effective mitigation
Additional risks of aerial spraying: • Human health; • Fish and animals; • Non-target plants.	-Low risk, effective mitigation -Low risk, effective mitigation -Low risk, effective mitigation	N/A – no aerial herbicide application	N/A – no aerial herbicide application	N/A – no aerial herbicide application
Effectiveness of control actions: • Limit spread, or eliminate existing infestations • Percent area treated based on current budget.	Very Effective 23.7%	Not Effective 15.8 %	Effective on limited area 7.0%	Very Effective, except remote areas. 23.7 %
Constraints to users of National Forest	Temporary closure during aerial treatment. Warning signs posted when near developed recreation areas.	No additional constraints required.	No Treatment of weeds in developed recreation areas	Warning signs posted when treating developed recreation areas
Wilderness Character: • Natural Integrity • Solitude and Remoteness	-Maximizes natural integrity -Minor short-term effects when recreational users encounter weed control crews.	- Some loss of natural integrity with increasing weeds -Short-term effects, hand control crews spend more time treating weeds, increased chances for encounters with humans.	- Some loss of natural integrity with increasing weeds -Minor short-term effects when recreational users encounter weed control crews.	-Improves natural integrity on areas accessible by ground crews. -Minor short-term effects when recreational users encounter weed control crews.

DETAILED DESCRIPTION OF THE SELECTED ALTERNATIVE, INCLUDING MITIGATION MEASURES AND MONITORING

Alternative 1, my selected alternative will authorized the treatment of 13,260 acres of weeds with a combination of techniques, including herbicides (5,179 acres of ground application and 255 acres of aerial application); 4,985 acres of biological control agents (herbicides maybe used along the perimeter to contain the weeds); 41 acres of mechanical treatments (again herbicides may be used to decrease weed density prior to pulling); 2,135 acres of cultural treatments such as re-seeding or grazing (herbicides maybe used to reduce the weeds prior to planting desirable plants), and 665 acres of larkspur treatment (herbicide, fertilizer, sheep grazing, and insects). See Figures 2-1, 2-4, 2-7, 2-11, 2-15, and 2-18, at the end of this document for maps with specific treatment type and location.

The current list of invasive species authorized for treatment in this decision includes:

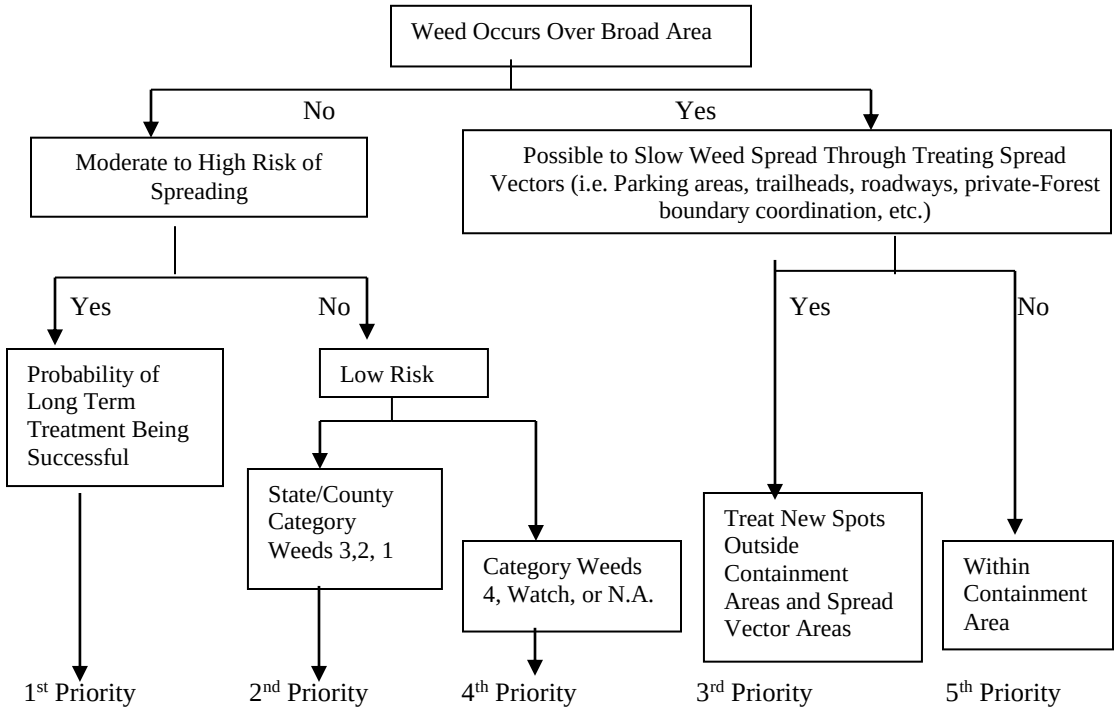
Montana State Noxious Weed List -2003		**County Noxious Weeds (combines Carbon, Gallatin, Madison, Meagher, Park, and Sweet Grass Counties) and additional invasive plants for the Gallatin National Forest**	
Common Name	**Scientific Name**	**Common Name**	**Scientific Name**
Category 1*			
Canada thistle	*Cirsium arvense*	common burdock	*Arctium minus*
common tansy	*Tanacetum vulgare*	common cocklebur	*Xanthium strumarium*
Dalmatian toadflax	*Linaria dalmatica*	black henbane	*Hyoscyamus niger*
diffuse knapweed	*Centaurea diffusa*	field scabious	*Knautia arvensis*
field bindweed	*Convolvulus arvensis*	meadow knapweed	*Centaurea pratensis*
hounds-tongue	*Cynoglossum officinale*	mullien	*Verbascum thapsus*
leafy spurge+	*Euphorbia esula*	musk thistle	*Carduus nutans*
ox-eye daisy	*Chrysathemum leucanthemum or Leucanthemum vulgaris*	poison hemlock	*Conium vulgare*
St Johnswort (goatweed)	*Hypericum perforatum*		
Spotted knapweed+	*Centaurea maculosa or C. biebersteinii*	absinth wormwood	*Artemisia absinthium*
sulfur cinquefoil	*Potentilla recta*	bull thistle	*Cirsium vulgare*
Russian knapweed	*Acroptilon repens or Centaurea repens*	cheat grass	*Bromus tectorum*
yellow toadflax (butter and eggs)	*Linaria vulgaris*	golden chamomile	*Anthemis tinctoria*
white top (hoary cress)	*Cardaria draba*	perennial sowthistle	*Sonchus arvensis*
		plumeless thistle	*Caruus acanthoides*
Category 2 *		scentless chamomile	*Anthemis arvensis*
dyer's woad	*Isatis tinctoria*	white bryony	*Bryonie albas*
meadow hawkweed complex	*Hieracium pratense, H.floribu*	tall larkspur	*Delphinium occidentale*
orange hawkweed	*Hieracium aurantiacum*		
perennial pepperweed	*Lepidium latifolium*		
purple loosestrife	*Lythrum salicaria or L. virgatum*		
tall buttercup	*Ranunculus acris*		
tamarisk	*Tamarix spp*		
tansy ragwort	*Senecio jacobaea*		
Category 3*			
common crupina	*Crupina vulgaris*		
Eurasian milfoil	*Myiophyllum sibiricum*		
yellow flag iris	*Iris pseudacorus*		
yellow starthistle	*Centaurea solstitialis*		
rush skeletonweed	*Chondrilla juncea*		

The herbicides analyzed in Alternative 1 and authorized for use under this decision includes:

Chemical Name	Trade Name	Target Species
2,4-D*	Hi-Dep®, Weedar 64®, Weed RHAP®, Amine 4®, Aqua-Kleen	thistles, sulfur cinquefoil, dyers woad, knapweeds, purple loosestrife, tall buttercup, whitetop knapweeds
Chlorsulfuron	Telar®	dyer's woad, thistles, common tansy, houndstongue, whitetop, tall buttercup
clopyralid	Stringer®, Curtail®, Transline®, Redeem®	thistles, yellow starthistle, hawkweeds, knapweeds, rush skeletonweed, oxeye daisy
dicamba	Banvel®, Clarity®, others	houndstongue, yellow starthistle, common crupina, hawkweed, oxeye daisy, tall buttercup, blueweed, leafy spurge, tansy ragwort, knapweeds,
glyphosate	Roundup®, Rodeo®, Accord®, Glyphomate®	purple loosestrife, field bindweed, yellow starthistle, thistles, cheatgrass, common crupina, toadflax,
Hexazinone	Velpar®, Pronone 10G®	cheatgrass, oxeye daisy, yellow starthistle, thistles
Imazapyr	Arsenal®, Chopper®	dyers woad, field bindweed
Methsulfuron methyl	Escort, Ally	houndstongue, thistle, sulfur cinquefoil, common crupina, dyers woad, purple loosestrife, common tansy, whitetop, blueweed
Picloram*	Tordon®, Grazon®, Pathway®	thistles, yellow starthistle, common crupina, hawkweeds, knapweeds, rush skeleton weed, common tansy, toadflax, leafy spurge
Imazapic	Plateau®	cheatgrass, leafy spurge, toadflax
Sulfometuron methyl	Oust®	cheatgrass, whitetop, oxeye daisy, tansy ragwort, musk thistle
Triclopyr	Garlon®, Redeem®, Remedy®	hawkweed, sulfur cinquefoil, purple loosestrife, knapweed, oxeye daisy, thistle

This project will be implemented over the next 10 to 15 years. Not every acre will be treated every year. Many areas will need to be treated repeatedly for 5 to 15 years to reduce the amount of viable seed that is currently in the soil. The density of weeds will decrease over time because of repeated treatments; consequently, less herbicide will be applied on a specific site in subsequent years. Determining which area will receive treatment will depend on availability of funding and on a priority rating system as described in Table 3.

Table 3. Gallatin National Forest Weed Treatment Priority Rating System.



Additionally, Alternative 1 allows for: treatment of new invasive weed species, new locations (up to a 25 percent increase in total number of treatment acres), new biological control agents (if approved by Animal Protection and Health Inspection Service), and new herbicides (provided they are approved by EPA and do not cause adverse effects as determined by a risk assessment) (EIS, page 2-12). All treatments need to adhere to the environmental protection measure (Table 4, below), adhere to the maximum amount of active ingredient for 12 herbicide per year for all 6th level Hydrologic Unit Code (Table 5) and adhere to the decision tree for new weed locations (Table 6).

ENVIRONMENTAL PROTECTION MEASURES

Table 4 lists the environmental protection measures, the objective and the effectiveness for each of the mitigation measures. The following definitions were used for rating effectiveness.
High effectiveness: This mitigation measure is very effective (estimated to be at least 90 percent effective). Determination of effectiveness is based on literature; professional judgment from previous experience; or logical deduction.
Moderate: Mitigation measure is reasonably effect (estimated between 40 to 89 percent effective). Determination of effectiveness is based on literature; professional judgment from previous experience; or logical deduction. Monitor the mitigation measures effectiveness.
Low: Mitigation measure is somewhat effective (estimated at less than 40 percent). Determination of effectiveness is unavailable or professional judgment indicates that success is uncertain. Monitor the mitigation measure for effectiveness is recommended.
Unknown: Effectiveness is unknown or unverified; there is little or no documentation, or applied logic is uncertain. Monitor the mitigation measure for effectiveness.

Table 4. Environmental Protection Measures.

Protection Measure	Objective, Effectiveness
Aerial Application	
(1.) On each side of streams and wetlands, a 300-foot buffer will be established where aerial applications will not be allowed.	Prevent high concentration of drift from reaching wetlands; High effectiveness (USFS. 2001b. page I-8)
(2.) Within 300-foot aerial spray buffers, spot ground-application of herbicides may occur. Herbicide selection will be based on product label restrictions and site characteristics (such as soil type, distance to water, and weed species present). Less persistent herbicides will be used within 50 feet of streams or wetlands, and will also be based on herbicide label restrictions.	Treat weeds in buffer area while protecting resources; High effectiveness (USFS. 2001b. page I-8)
(3.) Aerial spray units will be ground-verified, flagged, and marked using GPS prior to spraying to ensure only appropriate portions of the unit are aerially treated. A GPS system will be used in spray helicopters and each treatment unit mapped before the flight to ensure that only areas marked for treatment are treated. Prior to treatment, the pilot and project manager will fly the treatment area to confirm locations.	Ensure accurate location of treatment; High effectiveness (Kulla, A. 2003. pages 11-13)
(4.) No aerial spraying will be allowed within Zones I and II (800 meters) of an active bald eagle nest, from February 1 to August 15.	Minimize impact to nesting eagles; High effectiveness; (MT Bald Eagle. 1994. page 24)
(5.) No aerial spraying will be allowed within 400 meters of an active goshawk nest from April 1-August 15.	Minimize impact to nest; High effectiveness (Reynald. 1992. page 13)
(6.) No aerial spraying will be allowed within 1 mile of an active peregrine falcon nest from April 1 to August 15.	Minimize impact to nesting peregrine; Highly effective (US Fish and Wildlife. 1984. page 34)

Protection Measure	Objective, Effectiveness
(7.) Only 8 hours of aerial spraying will be allowed in grizzly bear core habitat within a given Bear Management Subunit each year. Aerial spraying will be coordinated with other administrative uses to prevent recurring helicopter flight within secure habitat.	Retain function of secure habitat; High effectiveness (IGBC. 2003. page 46)
(8.) Aerial applications will be excluded from Research Natural Areas, Special Interest Areas, designated Wilderness, and near campgrounds or residential areas.	Avoid conflict; High effectiveness (Logical - avoids area)
(9.) Signing and on-site layout will be preformed one to two weeks prior to actual aerial treatment. Temporary area and road/trail closure will ensure public safety during aerial treatment.	Provide public notification and safety; High effectiveness (Logical – limits exposure to spray)
(10.) To reduce risk of acute effects on aquatic species, aerial spray operations will be closely monitored. Field inspectors will provide on-site monitoring for drift and label compliance. Inspectors will be trained and wearing personal protective equipment.	Ensure implementation of protective measures; High effectiveness (USFS. 2001b. page I-8)
(11.) Communications will be maintained between the helicopter and project leader during spraying operations. Ground observers will maintain communication with the project leader. Observers will be located at various locations adjacent to the treatment area, to monitor wind direction and speed, as well as to visually monitor drift and deposition of herbicide.	Ensure implementation of protective measures; Moderate to High effectiveness (Logical – communication improves compliance)
(12.) Spray cards will be placed out to 350 feet perpendicular to perennial creeks (if close by) to monitor herbicide presence.	Document herbicide disposition; High effectiveness (Kulla, A. 2003. page 10)
Drift Reduction	
(13.) Drift control agents may be used in aerial spraying during low humidity to reduce drift into non-target areas. Products that reduce volatility, have been shown to keep droplet sizes larger, and are appropriate adjuvant for the herbicide (as specified by labeling of both the herbicide and the drift agent, in consultation with the herbicide manufacturer) will be used. Use appropriate nozzle, spray pressure, nozzle orientation to reduce drift.	Control drift; Moderate to High effectiveness (EIS pages 4-72 to 4-73); Monitor with drift cards
(14.) Aerial application of herbicides will occur when wind speeds are less than 6 mph and blowing away from sensitive areas, but not during weather inversions.	Protect sensitive area; Moderate to High effectiveness; Logical – limits drift; Monitor with drift cards
(15.) Weather conditions will be monitored on-site (temperature, humidity, wind speed and direction), and spot forecasts will be reviewed for adverse weather conditions.	Control drift; Moderate to High effectiveness (Logical –limits drift); Monitor with drift cards
Herbicide Use	
(16.) Operators should calibrate spray equipment at regular intervals (approximately after every 80 to 160 hours of use) to ensure proper rates of herbicide applications.	Control Application Rates; Moderate effectiveness (Logical –check equipment); Monitor – equipment for wear.
(17.) Herbicides will be used in accordance with label instructions and restrictions. Herbicides will not be applied to open water. In areas at risk to groundwater contamination use herbicides with low leachability or hand pull them (see EIS, Appendix E). Maximum amount of herbicide that could be applied in a watershed is listed in Appendix D and Table 5. Application will be done or supervised by licensed applicators.	Ensure responsible application of herbicide; Moderate effectiveness (EIS pages 4-19, 4-22, & 4-23); Monitor – document herbicide use with the Daily Pesticide Application Record or similar database
(18.) Procedures for mixing, loading, and disposal of pesticides and a spill plan will be followed. All herbicide storage, mixing, and post-application equipment cleaning is completed in such a manner as to prevent the potential contamination of any perennial or intermittent waterway, unprotected ephemeral waterway or wetland. These procedures are outlined in Appendix B. Herbicide applicators shall carry	Ensure responsible application of herbicide; High effectiveness (Professional experience)

Protection Measure	Objective, Effectiveness
spill containment equipment, be familiar with and carry an Herbicide Emergency Spill Plan.	
(19.) Treatment sites will be evaluated for sensitive plants habitat suitability and suitable habitats will be surveyed as necessary before treatment. If sensitive plant surveys find invasive plants in the area, a weed control plan will be developed to help protect the sensitive plant. Provide the weed crew with maps of all known sensitive plants so that these sites can be identified and protected. Train the weed crew to identify sensitive plants so that new sites can be identified and protected. Broadcast spraying is not allowed within 100 feet of sensitive plants. Weeds within 50 feet of sensitive plants shall be treated with one of the following methods (a) Hand pulling if the resultant ground disturbance will not harm the sensitive plant. (b) Use a herbicides that do not leach into the soil (e.g., glyphosate). (c) Use herbicides when the sensitive plant is senescent; or by protecting the sensitive plant from herbicide drift by placing a physical barrier (e.g., a plastic bag) over the plant; or by using a wick applicator (wiping herbicide only on the weeds).	Avoid impact to sensitive plants; Moderate effectiveness (EIS, page 4-14); Monitor - audit treatments next to sensitive plants for impacts to sensitive plants
(20.) In public recreation areas (such as campgrounds, and trailheads) post treated area until the area is safe to re-enter.	Inform public and reduce exposure; High effectiveness (Logical – prevent exposure)
Surfactants	
(21.) Surfactants are proposed for use with the same mitigation as picloram (see mitigation number 32). Only those labeled for use in and around water will be used within 50 feet of water, or the edge of subirrigated land, whichever distance is greater, or on high run-off areas. Some surfactants are labeled for use in and around water: Activate Plus ®, LI-700 ®, Preference ®, R-11 ®, Widespread® and X-77®.	Protect Aquatic Resources; High effectiveness (EIS, page 4-23).
Dyes	
(22.) Water-soluble colorants, such as Hi-Light® blue dye, will be used in some situations to enable applicators and inspectors to better see where herbicides has been applied.	Safe handling of herbicide; High effectiveness (Logical – visible)
Biological Controls	
(23.) Biological agents will not be released until screened for host specificity and approved by the USDA Animal Plant Health Inspection Service.	Minimize injury to non-target species; Highly effective (Logical – tested prior to approval)
Cultural Treatments	
(24.) Mitigation measures that pertain to grazing with sheep and goats are addressed in the Wildlife section below.	See wildlife section
(25.) The timing of herbicide treatment will avoid conflict with grazing livestock as required by the herbicide label	Prevent livestock from ingesting herbicide; High effectiveness (Logical - required by herbicide label)
Adjacent Land	
(26.) In cooperation with federal, state, county agencies and private landowners, weeds on non-Forest Service land may be treated when adjacent to the Gallatin National Forest boundary. Decisions regarding the treatment methods will be negotiated between the Forest Service and the other owner/agency.	Prevent weeds from spreading onto FS land; Moderate effectiveness (Professional experience); Monitor results in weeds database
Research Natural Areas/Wilderness Areas	
(27.) If any treatment with herbicide is planned within a Research Natural Area (RNA) or a Special Interest Area (SIA) boundaries, then concurrence must be obtained through the Research Station Director and Forest Supervisor. This includes all future treatments of newly identified infestations.	Avoid conflict with protected area; High effectiveness (EIS, page 4-59)

Protection Measure	Objective, Effectiveness
(28.) With the exception of roads and trails within Research Natural Areas (RNAs) or Special Interest Areas (SIAs), motorized vehicles will not be used for herbicide treatments in designated Wilderness, RNAs and SIAs.	Avoid conflict with protected area; High effectiveness (EIS, page 4-59)
(29.) Wilderness area management will take precedence over Research Natural Area (RNA) or Special Interest Area (SIA) direction when proposed weed control activities are identified for a RNA or SIA within designated wilderness boundaries.	Avoid conflict with protected area; High effectiveness (EIS, page 4-59)
Historical Resources	
(30.) All historical sites will be avoided in mechanical treatments. Significant sites that could be damaged by multiple off-road travel or equipment will be mapped and provided to weed treatment coordinators in order to avoid any damages.	Protect Cultural Resource sites; High effectiveness (Logical – avoids impact to area)
Aquatic	
(31.) Herbicide will not be used to control weeds within a 100-foot radius of any potable water spring development on the Forest. Do not use herbicides 1/2mile (100 feet each side) upstream from municipal water divergent point.	Protect aquatic resources and ground water; High effectiveness (EIS, page 4-23)
(32.) Picloram will not be used within 50 feet of water bodies, or the edge of subirrigated land, whichever is greater. In watersheds where picloram delivery modeling indicated possible concerns (see Table 5 below) use one or more of the following strategies: • Treat some infestations with another appropriate herbicide (see Appendix D and Appendix E), • Postpone treatment of some infestations for at least 10 to 12 months; and /or • Use biological control as appropriate.	Protect aquatic resources and ground water; High effectiveness (EIS, page 4-23)
(33.) INFISH standard FA-4 prohibits storage of fuels and other toxicants within Riparian Habitat Conservation Areas (RHCAs) and refueling within these areas unless there is no other alternative. **Category 1 – Fish bearing streams:** RHCAs consist of the stream and the area on either side of the stream extending from the edges of the active channel to the top of the inner gorge, or to the outer edges of the 100 year floodplain, or to the outer edges of the riparian vegetation, or 300 feet slope distance (600 feet, including both sides of the stream channel), whichever is greatest. **Category 2 – Permanently flowing non-fish bearing streams:** RHCAs consist of the stream and the area on either side of the stream extending from the edges of the active channel to the top of the inner gorge, or to the outer edges of the 100 year floodplain, or to the outer edges of the riparian vegetation, or 150 feet slope distance (300 feet, including both sides of the stream channel), whichever is greatest. **Category 3 - Ponds, lakes, reservoirs and wetlands greater than 1 acre:** RHCAs consist of the body of water or wetland and the area to the outer edges of the riparian vegetation, or to the extent of the seasonally saturated soil, to the extent of moderately and highly unstable areas, or 150 feet slope distance from the edge of the maximum pool elevation of constructed ponds and reservoirs or from the edge of the wetland, pond or lake, whichever is greatest. **Category 4 – Seasonally flowing or intermittent streams, wetlands less that 1 acre, landslides, and landslide-prone areas:** This category includes features with high variability in size and site-specific characteristics. At a minimum the interim RHCAs must include:	Protect aquatic resources; High efficiency (EIS, page 4-23)

Protection Measure	Objective, Effectiveness
a. the extent of landslides and landslide-prone areas; b. the intermittent stream channel and the top of the inner gorge; c. the intermittent stream channel or wetland and outer edges of the riparian vegetation d. the area from the edges of the stream channel, wetland, landslide, or landslide prone area to a distance of 100 feet slope distance.	
(34.) No ester formulations of herbicides will be used. Fish toxicity is the concern.	Protect aquatic resources; High efficiency (EIS, page 4-23)
(35.) Herbicides sprayed within 50 feet of water, or the edge of sub-irrigated land (whichever is greater) will be approved for this use as stated on the herbicide label. Herbicide application within this zone will occur when winds are less than 10 mph and blowing away from these areas. Apply spray pointed away from the water, not towards the water.	Protect aquatic resources and ground water; High efficiency (EIS, page 4-23).
(36.) Western Toads and Leopard Frogs (or any species listed as threatened or sensitive) - When ground application of herbicide is necessary within 50 feet of a water body; surveys of the treatment area will be required. If adult northern leopard frogs or western toads, are identified, the extent of distribution within the proposed treatment area will be marked on the ground and reported to the district amphibian specialist (fisheries or wildlife biologist) and weed coordinator within two days. If treatment is not possible without directly spraying individuals then hand pulling or wick application will be employed. If tadpoles or metamorphs of either species are identified, the location will be reported to the district amphibian specialist (fisheries or wildlife biologist) and weed coordinator within two days, and application of herbicides will be delayed until metamorphs disperse.	Protect aquatic resources and ground water; High efficiency (EIS, page 4-26)
Wildlife	
(37.) No human activities associated with weed control will be allowed within zone I (<400 meters) of an active bald eagle nest from February 1-August 15, except within 20' of roads that are open for public motorized use.	Minimize impact to nesting eagles; High effectiveness (MT Bald Eagle Working Group. 1994. page 24)
(38.) Sheep and Goat Grazing – Sheep and goat grazing for weed control purposes will not be used on Gallatin National Forest lands within the Grizzly Bear Recovery Zone (Primary Conservation Area). Outside of the Primary Conservation Area a herder and guard dogs will be present to monitor sheep and goats used for weed control purposes at all times. The herder will be required to notify the local District Ranger within 24 hours of any loss of sheep or goats being used for weed control purposes on the Gallatin National Forest. Sheep and goats being used for weed control purposes will be removed from the Gallatin National Forest within 24 hours of any grizzly bear or wolf depredations. The herder will be required to comply with the Gallatin National Forest food storage order so that human and livestock/pet foods, refuse, and other attractants are made unavailable to bears. The carcasses of sheep or goats that died while being used for weed control will be removed from the Gallatin National Forest within 24 hours to avoid habituation of grizzly bears or wolves to livestock as carrion. Sheep and goats used for weed control will be contained each night within the perimeter of an electric fence. Herders of sheep and goats used for weed control purposed will be required to receive training from the U.S. Fish & Wildlife Service or other authorized organization in the use of hazing techniques to prevent depredations by wolves. Herders will be required to implement those techniques when wolves are known to be in proximity to domestic sheep or goats.	Minimize mortality to bears and wolves from sheep depredation; High effectiveness (Meets and exceeds Conservation Strategy and Gallatin Forest Plan)

Protection Measure	Objective, Effectiveness
(39.) Proposals for goat or sheep grazing for weed control purposes will be coordinated with the appropriate MT FWP wildlife biologist to determine if bighorn sheep may occur in the area. At least 9 miles of separation will be maintained between bighorn sheep and domestic sheep or goats being used for weed control purposes.	Prevent transmitting disease to bighorn sheep; High Effectiveness (Aune, 2004)
(40.) Herbicides will only be applied using concentrations and techniques that will minimize mortality of native trees and shrubs to protect habitat for bald eagles, lynx, and other species.	Protect wildlife habitat; High effectiveness (Logical –no injury to trees/shrubs)
(41.) District/Forest wildlife biologists will review and coordinate weed management projects with the District/Forest weed coordinators to identify current raptor nesting areas, grizzly bear core habitat, wolf territories, or other critical wildlife areas that may be affected by weed control activities, to ensure the mitigation measures described in this report are implemented properly.	Ensure weed staff have current wildlife information; Moderate Effectiveness (Professional experience); Monitor – document meeting

MONITORING

A monitoring program will be incorporated as part of the adaptive management approach to controlling weeds. Monitoring is the collection of data to determine the effectiveness of management actions in meeting prescribed objectives. Monitoring will focus on the: 1) density and rate of spread, and the effect these aggressive plants have on natural resources; 2) effects of herbicides on noxious weeds; 3) establishment and effectiveness of biological control agents; and 4) presence of herbicide in surface or ground water in high risk areas (accidental spills, aerial application, or areas with westslope cutthroat trout and sizable acres of weed treatment adjacent to water).

The monitoring program includes annual survey and mapping of weed populations. The maps and associated data are kept in GIS (Geographic Information System) and are consistent with the national Forest Service standards. Also, long-term growth rate plots containing yellow toadflax are established for the purpose of measuring rate of weed spread and change in plant composition over time. In addition, long-term herbicide test plots and long term biological control plots are established for the purpose of tracking the effectiveness of control.

Monitoring of aerial applications of herbicides and drift detection will include the following activities. The first aerial herbicide application for each season that has sites adjacent to sensitive resources (streams, lakes, wetlands, sensitive plants) will be monitored to determine the amount and distribution of spray drift. Spray detection cards will be placed along the perimeter of the treatment area and inside the buffer around sensitive areas. The cards will be visual examined immediately after spraying and photographed. A written summary of the drift pattern as interpreted from the detection cards and the photos will be used to document the result. If necessary, aerial application methodology will be modified (buffer size, droplet size, different weather parameters) to reduce the amount of drift.

For water quality monitoring, the Forest hydrologist or fish biologist will review the program of work and select sensitive water resources areas to monitor. Water samples will be collected immediately after spraying whenever there is reason to suspect that herbicides may have entered the stream during the spraying operation (such as herbicides detected on drift cards, or if a spill occurred). Laboratory analysis, by an independent lab, will test the water samples for herbicides.

Water samples will also be collected after the first substantial rain to detect herbicides that could possibly enter surface water through leaching or runoff. Detection of any herbicide will trigger an immediate verification sampling. The use of herbicides in excess of limits defined by Montana Department of Environmental Quality (Montana Numeric Water Quality Standards, Circular WQB-7, see Table 3 for a summary table of limits set for herbicides) will be discontinued. Monitoring will continue (sampling intensity will be adjusted for individual site characteristics) until herbicides are no longer detected.

The following Table 5 shows the maximum amount of herbicide (in pounds of active ingredients) that can be treated within any watershed per year. If more than one chemical is used within a drainage, for any given year, then use the amount for the most restrictive herbicide. For example, in the Upper Madison watershed when using picloram in combination with any other herbicide, limit the total amount of herbicide to 90 pounds of active ingredient. Watersheds in bold were identified as being at risk because they currently contain a high quantity of existing weed patches. Maps with watershed boundaries and Hydrologic Unit Codes are in the EIS, Appendix D, pages 10 to 13.

Table 5. Maximum amount of active ingredient for 12 herbicides per year for all of the 6th order Hydrologic Units Codes on the Gallatin National Forest

HUC6 Watershed Number	Watershed Name	Maximum lbs of Picloram per huc (Tolerance 0.07[1])	Maximum lbs of 2,4-D amine per huc (Tolerance 42)	Maximum lbs of Chlorsulfuron per huc (Tolerance 25)	Maximum lbs of Clopryralid per huc (Tolerance 10.3)	Maximum lbs of Dicamba per huc (Tolerance 2.8)	Maximum lbs of Glyphsphate per huc (Tolerance 14.0)	Maximum lbs of Hexazinone per huc (Tolerance 25.7)	Maximum lbs of Imazapic per huc (Tolerance 10)	Maximum lbs of Imazapyr per huc (Tolerance 10)	Maximum lbs of Metsulfuron Methyl per huc (Tolerance 15)	Maximum lbs of Sulfometuron methyl per huc (Tolerance 15)	Maximum lbs of Triclopyr per huc (Tolerance 0.11)
100200070202	**Upper Madison**	**90**	**50655**	**30152**	**12423**	**3377**	**16885**	**30996**	**12061**	**12061**	**18091**	**18091**	**133**
100200070203	Dry Canyon	51	28324	16859	6946	1888	9441	17331	6744	6744	10116	10116	74
100200070204	**S. Fk.Madison**	**30**	**16522**	**9834**	**4052**	**1101**	**5507**	**10110**	**3934**	**3934**	**5901**	**5901**	**43**
100200070205	**Denny**	**81**	**45212**	**26912**	**11088**	**3014**	**15071**	**27665**	**10765**	**10765**	**16147**	**16147**	**118**
100200070304	**Duck Red Canyon**	**46**	**25662**	**15275**	**6293**	**1711**	**8554**	**15703**	**6110**	**6110**	**9165**	**9165**	**67**
100200070305	Grayling	62	34522	20549	8466	2301	11507	21124	8219	8219	12329	12329	90
100200070306	Tepee	22	12373	7365	3034	825	4124	7571	2946	2946	4419	4419	32
100200070505	**Hebgan Lake**	**69**	**38781**	**23084**	**9511**	**2585**	**12927**	**23730**	**9234**	**9234**	**13850**	**13850**	**102**
100200070601	Upper Beaver	34	19200	11428	4708	1280	6400	11748	4571	4571	6857	6857	50
100200070602	Cabin	24	13712	8162	3363	914	4571	8390	3265	3265	4897	4897	36
100200070603	**Lower Beaver**	**36**	**19889**	**11839**	**4878**	**1326**	**6630**	**12170**	**4735**	**4735**	**7103**	**7103**	**52**
100200070801	**Sheep**	**15**	**8398**	**4999**	**2060**	**560**	**2799**	**5139**	**2000**	**2000**	**2999**	**2999**	**22**
100200070802	Mile	24	13486	8027	3307	899	4495	8252	3211	3211	4816	4816	35
100200071601	Cherry	33	18344	10919	4499	1223	6115	11225	4368	4368	6551	6551	48
100200080103	Gallatin	75	41901	24941	10276	2793	13967	25639	9976	9976	14965	14965	110
100200080107	Upper Taylor	50	27811	16554	6820	1854	9270	17018	6622	6622	9933	9933	73
100200080108	Wapiti	40	22342	13299	5479	1489	7447	13671	5320	5320	7979	7979	59
100200080303	West FK West Gallatin	19	10730	6387	2631	715	3577	6566	2555	2555	3832	3832	28
100200080402	Elkhorn	16	8847	5266	2170	590	2949	5414	2107	2107	3160	3160	23
100200080403	Buck	26	14522	8644	3561	968	4841	8886	3458	3458	5187	5187	38

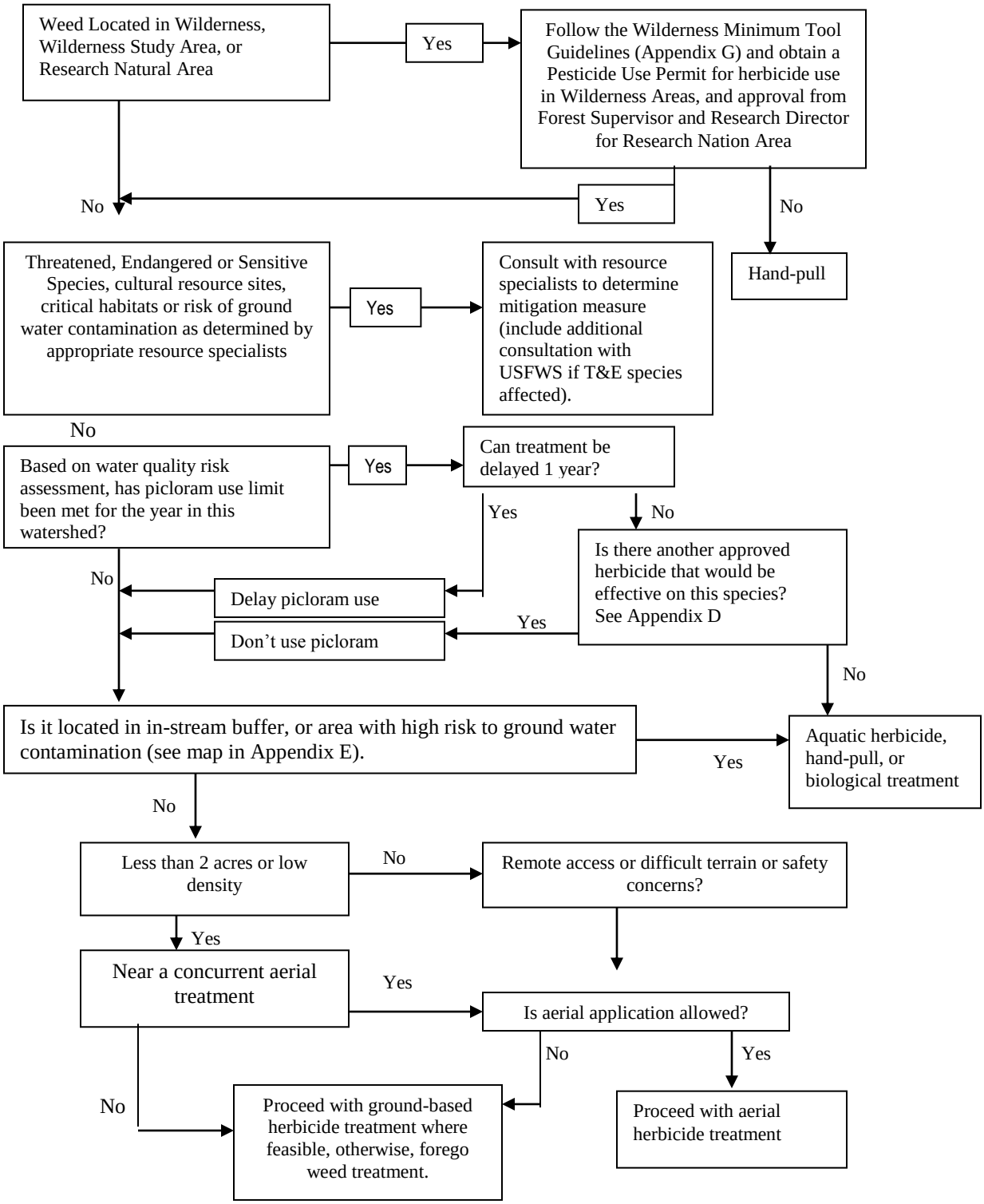
HUC6 Watershed Number	Watershed Name	Maximum lbs of Picloram per huc (Tolerance 0.07[1])	Maximum lbs of 2,4-D amine per huc (Tolerance 42)	Maximum lbs of Chlorsulfuron per huc (Tolerance 25)	Maximum lbs of Clopyralid per huc (Tolerance 10.3)	Maximum lbs of Dicamba per huc (Tolerance 2.8)	Maximum lbs of Glyphsphate per huc (Tolerance 14.0)	Maximum lbs of Hexazinone per huc (Tolerance 25.7)	Maximum lbs of Imazapic per huc (Tolerance 10)	Maximum lbs of Imazapyr per huc (Tolerance 10)	Maximum lbs of Metsulfuron Methyl per huc (Tolerance 15)	Maximum lbs of Sulfometuron methyl per huc (Tolerance 15)	Maximum lbs of Triclopyr per huc (Tolerance 0.11)
100200080404	Beaver	23	12908	7683	3166	861	4303	7898	3073	3073	4610	4610	34
100200080405	Porcupine	21	11517	6856	2825	768	3839	7048	2742	2742	4113	4113	30
100200080406	Dudley Levinski	22	12082	7192	2963	805	4027	7393	2877	2877	4315	4315	32
100200080407	Deer Aspestos	19	10555	6283	2589	704	3518	6459	2513	2513	3770	3770	28
100200080501	SF Spanish	18	9975	5937	2446	665	3325	6103	2375	2375	3562	3562	26
100200080504	Twin	16	9204	5478	2257	614	3068	5632	2191	2191	3287	3287	24
100200080601	Portal	16	8788	5231	2155	586	2929	5377	2092	2092	3139	3139	23
100200080602	**Moose Tamphery**	**22**	**12580**	**7488**	**3085**	**839**	**4193**	**7698**	**2995**	**2995**	**4493**	**4493**	**33**
100200080603	Swan	27	14987	8921	3675	999	4996	9171	3568	3568	5353	5353	39
100200080604	Squaw	44	24775	14747	6076	1652	8258	15160	5899	5899	8848	8848	65
100200080605	Cascade	23	12838	7642	3148	856	4279	7856	3057	3057	4585	4585	34
100200080607	**Logger**	**22**	**12042**	**7168**	**2953**	**803**	**4014**	**7369**	**2867**	**2867**	**4301**	**4301**	**32**
100200080701	Yankee Wilson	17	9690	5768	2376	646	3230	5929	2307	2307	3461	3461	25
100200080702	Big Bear	27	15354	9140	3765	1024	5118	9395	3656	3656	5484	5484	40
100200080703	S Cottonwood	41	23145	13777	5676	1543	7715	14163	5511	5511	8266	8266	61
100200080801	Jackson Meadow	56	31179	18559	7646	2079	10393	19078	7424	7424	11135	11135	82
100200080802	Bear Canyon	27	15202	9049	3728	1013	5067	9302	3619	3619	5429	5429	40
100200080803	**Bozeman**	**63**	**35253**	**20984**	**8645**	**2350**	**11751**	**21571**	**8393**	**8393**	**12590**	**12590**	**92**
100200080804	Bridger Canyon	54	30143	17942	7392	2010	10048	18445	7177	7177	10765	10765	79
100200080805	**Beasley M**	**30**	**16795**	**9997**	**4119**	**1120**	**5598**	**10277**	**3999**	**3999**	**5998**	**5998**	**44**
100200080901	Hyalite	54	30317	18046	7435	2021	10106	18551	7218	7218	10827	10827	79
100200081002	Pass Mill	26	14616	8700	3584	974	4872	8944	3480	3480	5220	5220	38

HUC6 Watershed Number	Watershed Name	Maximum lbs of Picloram per huc (Tolerance 0.07[1])	Maximum lbs of 2,4-D amine per huc (Tolerance 42)	Maximum lbs of Chlorsulfuron per huc (Tolerance 25)	Maximum lbs of Clopyralid per huc (Tolerance 10.3)	Maximum lbs of Dicamba per huc (Tolerance 2.8)	Maximum lbs of Glyphsphate per huc (Tolerance 14.0)	Maximum lbs of Hexazinone per huc (Tolerance 25.7)	Maximum lbs of Imazapic per huc (Tolerance 10)	Maximum lbs of Imazapyr per huc (Tolerance 10)	Maximum lbs of Metsulfuron Methyl per huc (Tolerance 15)	Maximum lbs of Sulfometuron methyl per huc (Tolerance 15)	Maximum lbs of Triclopyr per huc (Tolerance 0.11)
100200081003	Reese	58	32713	19472	8023	2181	10904	20017	7789	7789	11683	11683	86
100200081103	Sypes	33	18506	11016	4538	1234	6169	11324	4406	4406	6609	6609	48
100301010302	**S FK Sixteenmile**	**55**	**30933**	**18413**	**7586**	**2062**	**10311**	**18928**	**7365**	**7365**	**11048**	**11048**	**81**
100301010303	Sixteenmile	17	9474	5639	2323	632	3158	5797	2256	2256	3384	3384	25
100700010806	Crevice	61	34064	20276	8354	2271	11355	20844	8111	8111	12166	12166	89
100700010901	Bear	53	29672	17662	7277	1978	9891	18157	7065	7065	10597	10597	78
100700010902	**Eagle Reese**	**57**	**31846**	**18956**	**7810**	**2123**	**10615**	**19487**	**7582**	**7582**	**11374**	**11374**	**83**
100700020101	Cinnebar	18	10118	6022	2481	675	3373	6191	2409	2409	3613	3613	26
100700020102	Mulherin	29	16058	9558	3938	1071	5353	9826	3823	3823	5735	5735	42
100700020103	Basset	35	19602	11668	4807	1307	6534	11995	4667	4667	7001	7001	51
100700020104	Cedar	17	9572	5698	2347	638	3191	5857	2279	2279	3419	3419	25
100700020105	Upper Tom Miner	22	12046	7170	2954	803	4015	7371	2868	2868	4302	4302	32
100700020107	Lower Tom Minor	40	22498	13392	5517	1500	7499	13767	5357	5357	8035	8035	59
100700020108	**Sphinx Slip and Slide**	**30**	**16559**	**9856**	**4061**	**1104**	**5520**	**10132**	**3943**	**3943**	**5914**	**5914**	**43**
100700020301a	Upper Mill	33	18587	11064	4558	1239	6196	11373	4425	4425	6638	6638	49
100700020301b	Rock	2	1175	699	288	78	392	719	280	280	420	420	3
100700020302b	Passage	29	16518	9832	4051	1101	5506	10108	3933	3933	5899	5899	43
100700020303a	Lower Big	26	14477	8617	3550	965	4826	8859	3447	3447	5170	5170	38
100700020303b	West Fork Mill	42	23508	13993	5765	1567	7836	14385	5597	5597	8396	8396	62
100700020304a	**Donahue Daily**	**32**	**17953**	**10686**	**4403**	**1197**	**5984**	**10986**	**4275**	**4275**	**6412**	**6412**	**47**
100700020304b	East Fork Mill	71	39945	23777	9796	2663	13315	24443	9511	9511	14266	14266	105
100700020305a	**Lower Mill**	**46**	**25789**	**15351**	**6324**	**1719**	**8596**	**15781**	**6140**	**6140**	**9210**	**9210**	**68**

HUC6 Watershed Number	Watershed Name	Maximum lbs of Picloram per huc (Tolerance 0.07[1])	Maximum lbs of 2,4-D amine per huc (Tolerance 42)	Maximum lbs of Chlorsulfuron per huc (Tolerance 25)	Maximum lbs of Clopyralid per huc (Tolerance 10.3)	Maximum lbs of Dicamba per huc (Tolerance 2.8)	Maximum lbs of Glyphsphate per huc (Tolerance 14.0)	Maximum lbs of Hexazinone per huc (Tolerance 25.7)	Maximum lbs of Imazapic per huc (Tolerance 10)	Maximum lbs of Imazapyr per huc (Tolerance 10)	Maximum lbs of Metsulfuron Methyl per huc (Tolerance 15)	Maximum lbs of Sulfometuron methyl per huc (Tolerance 15)	Maximum lbs of Triclopyr per huc (Tolerance 0.11)
100700020305b	Sixmile	41	22726	13528	5573	1515	7575	13906	5411	5411	8117	8117	60
100700020306	Emigrant	40	22582	13442	5538	1505	7527	13818	5377	5377	8065	8065	59
100700020308	Eightmile	43	24010	14292	5888	1601	8003	14692	5717	5717	8575	8575	63
100700020309	Pole Conlin	83	46375	27604	11373	3092	15458	28377	11042	11042	16563	16563	121
100700020402	Trail	61	34103	20299	8363	2274	11368	20868	8120	8120	12180	12180	89
100700020403	Pine West	39	21866	13015	5362	1458	7289	13380	5206	5206	7809	7809	57
100700020404	Pine East	57	32080	19095	7867	2139	10693	19630	7638	7638	11457	11457	84
100700020405	**Deep**	**36**	**20252**	**12055**	**4966**	**1350**	**6751**	**12392**	**4822**	**4822**	**7233**	**7233**	**53**
100700020406	Suce Strickland	58	32391	19280	7943	2159	10797	19820	7712	7712	11568	11568	85
100700020502	Dry	30	16635	9902	4079	1109	5545	10179	3961	3961	5941	5941	44
100700020505	Mission	65	36651	21816	8988	2443	12217	22427	8726	8726	13090	13090	96
100700020801	Rainbow	47	26557	15808	6513	1770	8852	16250	6323	6323	9485	9485	70
100700020802	Upper Boulder	22	12219	7273	2996	815	4073	7477	2909	2909	4364	4364	32
100700020803	Meatrack	28	15582	9275	3821	1039	5194	9535	3710	3710	5565	5565	41
100700020804	Upsidedown Bridge	40	22220	13226	5449	1481	7407	13597	5291	5291	7936	7936	58
100700020806	West Chippy	8	4724	2812	1158	315	1575	2890	1125	1125	1687	1687	12
100700020807	Shorty	22	12410	7387	3043	827	4137	7594	2955	2955	4432	4432	33
100700020808	Middle Boulder	51	28337	16867	6949	1889	9446	17340	6747	6747	10120	10120	74
100700020809	Upper East Boulder	55	30831	18352	7561	2055	10277	18865	7341	7341	11011	11011	81
100700020811	Lower Boulder	42	23700	14107	5812	1580	7900	14502	5643	5643	8464	8464	62
100700020903	Blacktail	21	11648	6933	2856	777	3883	7127	2773	2773	4160	4160	31
100700020904	Middle West Boulder	28	15860	9441	3890	1057	5287	9705	3776	3776	5664	5664	42
100700020905	Lower West Boulder	58	32426	19301	7952	2162	10809	19842	7720	7720	11581	11581	85

HUC6 Watershed Number	Watershed Name	Maximum lbs of Picloram per huc (Tolerance 0.07[1])	Maximum lbs of 2,4-D amine per huc (Tolerance 42)	Maximum lbs of Chlorsulfuron per huc (Tolerance 25)	Maximum lbs of Clopyralid per huc (Tolerance 10.3)	Maximum lbs of Dicamba per huc (Tolerance 2.8)	Maximum lbs of Glyphsphate per huc (Tolerance 14.0)	Maximum lbs of Hexazinone per huc (Tolerance 25.7)	Maximum lbs of Imazapic per huc (Tolerance 10)	Maximum lbs of Imazapyr per huc (Tolerance 10)	Maximum lbs of Metsulfuron Methyl per huc (Tolerance 15)	Maximum lbs of Sulfometuron methyl per huc (Tolerance 15)	Maximum lbs of Triclopyr per huc (Tolerance 0.11)
100700020906	Boulder	72	40551	24137	9945	2703	13517	24813	9655	9655	14482	14482	106
100700021102	E FK Upper Deer	38	21326	12694	5230	1422	7109	13050	5078	5078	7617	7617	56
100700021103	Upper Deer	42	23524	14003	5769	1568	7841	14395	5601	5601	8402	8402	62
100700021104	Lower r Deer	42	23734	14128	5821	1582	7911	14523	5651	5651	8477	8477	62
100700021302	West Bridger	23	12640	7524	3100	843	4213	7734	3009	3009	4514	4514	33
100700030101	Fairy Carrol	34	18796	11188	4610	1253	6265	11501	4475	4475	6713	6713	49
100700030102	Upper Flathead	32	17900	10655	4390	1193	5967	10953	4262	4262	6393	6393	47
100700030201	Shields	59	33299	19821	8166	2220	11100	20376	7928	7928	11892	11892	87
100700030202	Smith	35	19737	11748	4840	1316	6579	12077	4699	4699	7049	7049	52
100700030207	Horse	57	31736	18891	7783	2116	10579	19420	7556	7556	11334	11334	83
100700030301	Brackett	49	27485	16360	6740	1832	9162	16818	6544	6544	9816	9816	72
100700030402	Cottonwood	55	30695	18271	7528	2046	10232	18783	7308	7308	10963	10963	80
100700030403	Rock	54	30117	17927	7386	2008	10039	18429	7171	7171	10756	10756	79
100700030405	Canyon	22	12541	7465	3076	836	4180	7674	2986	2986	4479	4479	33
100700030406	Bangtail	18	9927	5909	2434	662	3309	6074	2363	2363	3545	3545	26
100700030408	Willow	25	13939	8297	3418	929	4646	8529	3319	3319	4978	4978	37

Table 6: Decision Tree for New Weed Locations.



REASONS FOR MY DECISION

I have reviewed all discussions on the current environmental conditions particular to this project, and the direct, indirect and cumulative effects analyses for all actions proposed in each of the alternatives. I have met with various interdisciplinary team members on the status of various analyses and information pertinent to this project. I have also considered comments received from the public and other agencies.

Discussions regarding the management activities to be implemented in Alternative 1 and my rationale for choosing them are presented in the following sections. The criteria I used in comparing the alternatives were:

- The degree to which each alternative met the purpose and need for action;
- The degree to which each alternative resolves significant issues; and,
- The degree to which the alternative is responsive to concerns raised by the public and other agencies.

Relationship to the Purpose and Need

The primary purpose for this project is to minimize the loss of native plant communities resulting from invasive weeds. Alternative 1 best meets this goal because it allows for a wide variety of control methods, including treatment in remote areas with the use of aerial application techniques, a variety of herbicides and biological control agents, along with the use of cultural, and mechanical techniques. This variety of treatment options will allow for better weed control with less impact on other resources. For example, using aquatically approved herbicides within riparian areas will allow for weed control along rivers while having a minimal impact on aquatic species.

I did not select Alternative 2 because it relies heavily on the use of biological control agents that have not been proven to be very effective at reducing plant density. Of the 44 invasive plants targeted for control, only six species have approved biological control agents and only leafy spurge flea beetles have been effective on the Gallatin Forest. Clearly, this alternative will not reduce infestations of many of the existing invasive weeds.

I did not select Alternative 3 because it would only treat a few weed species (spotted knapweed, Dalmatian toadflax, Canada thistle and leafy spurge) and only treat 1,162 acres of noxious weeds per year. On the Gallatin National Forest there are currently 44 species of invasive weeds covering more than 13,000 acres. Most of these species would not be controlled under Alternative 3. Also, Alternative 3 allows for only the use of two herbicides; picloram and 2,4-D. The variety of herbicides that would be available under Alternative 1 will prevent the development of herbicide resistance in weed species, will allow for the use of more selective herbicides that cause less impact to non-target plant species, will allow for the use of less toxic herbicides for workers, and will allow for the use of aquatically approved herbicides within riparian areas.

I did not select Alternative 4 (no aerial treatment) because it would be heavily dependent on using biological control methods in remote areas. These methods have not proven effective on the Gallatin National Forest. I believe that having the option of aerial herbicide application is necessary for effective weed control and that the mitigation measures included with my decision adequately responds to any risk of environmental effects.

Ability To Resolve Significant Issues

An important issue that I considered in my decision is the risk of using herbicides on human health. Alternatives 1, 3 and 4 would use herbicides to control invasive weeds. The final EIS tiers to the risk assessments completed by Syracuse Environmental Research Associated (SERA) under a Forest Service contract (http://www.fs.fed.us/foresthealth/pesticide/risk.shtml). The SERA risk assessment used the best available literature (including peer-reviewed articles from the open scientific literature and current EPA documents including Confidential Business Information) to assess the toxicity of the herbicides and level of exposure for the general public and the workers. The public will not be exposed to herbicide concentrations that exceed safe levels (EIS page 4-65). The workers may be exposed to concentration levels that slightly exceed safe levels if they fail to wear protective equipment, if they use contaminated gloves, or if they are involved in an accidental exposure. All workers will be required to wear clean personal protective equipment and will be trained in safe handling of herbicides, along with emergency response to accidental exposure.

The impact of herbicides on non-target species, such as plants, animals and aquatic resources, was also analyzed in the EIS. Mitigation measures were developed to reduce the risk of herbicides impacting these resource areas and were incorporated into all alternatives that used herbicide. Alternatives 1 and 4 have a low risk of impacting these resource areas because the mitigation measures were designed to reduce the impact of herbicide on other resources. Alternative 3 would only use picloram and 2,4-D, and since conifers are very susceptible to picloram, there is a moderate risk of injury to non-target plants.

The EIS also addressed the concern that aerial spraying might increase the risk of herbicide exposure to people, wildlife, aquatic resources and non-target plants. Alternative 1 has an extensive list of mitigation measures that are specific to aerial spraying and drift reduction. These mitigation measures have been successfully implemented on the Lolo National Forest, and on the Beaverhead-Deerlodge National Forest. Monitoring results have shown that drift is minimal, and no measurable impacts to other resources were detected. I believe that aerial spraying, along with the mitigation measures, can be used safely and with minimal impact to other resources.

To ensure that the public is not exposed to herbicides, Alternative 1 would temporarily close areas that are being aerially treated with herbicides. In addition, all developed recreation sites would be posted stating that the area has been treated and stating when the area is safe to enter (usually within a few hours of treatment). While this may pose a short-term inconvenience to the public these mitigation measures will reduce the risk of exposure.

Consideration of Public Comments in the Rationale for the Decision

In reviewing the comments received on the Draft EIS, I believe that Alternative 1 addresses the concerns raised by the public. Most people were in support of some type of weed control program but expressed concern about chemical toxicity, about the level of monitoring, about drift from aerial application, and that prevention of weeds was not seriously considered as a tool to control weeds. These concerns are addressed in more detail in the final EIS, Chapter 6.

Chemical Toxicity -

Most of the comment letters expressed concern that herbicides be used safely and with caution, to prevent unintended impacts. One letter expressed concern regarding the quality of data used in the evaluation of herbicide toxicity, that data gaps prevented a complete understanding of the

risks involved with herbicides, and that the data used in risk assessments failed to consider independent peer-reviewed literature.

All of the herbicides proposed for use in Alternative 1 have been approved by the EPA and by the Montana Department of Agriculture, which requires a review of scientific information (using both independent peer-reviewed and industry funded research) regarding chemical toxicity. While all herbicides have a low to moderate level of toxicity, no adverse health effects are anticipated because the public will not be exposed to herbicides at levels considered to be toxic. Public areas will be posted or temporarily closed. Most treatment sites are in remote locations. Herbicides are very dilute when applied to vegetation and after it dries it is difficult to transfer to people or animals. Also, most sites are treated with a spot application, which limits the amounts of herbicides present in any one location. The potential for workers to be exposed to herbicides can be mitigated with the use of personal protective equipment as listed in Appendix B.

Nevertheless, there are many reports in scientific literature and sections of the EIS that document associations between herbicide exposure and alteration of the immune system, autoimmune disorder and increases in cancer. Moreover, there is a body of literature on herbicide effects that raises concerns about: the additive and synergistic effects of exposure to more than one herbicide; unstudied or unknown consequences of low-level chronic exposures; toxicity of inert ingredients; by-products or contaminants of herbicides; and, uncertainties about the health effects to people who may be sensitive to various chemicals.

I share a concern with many about the human health impacts of these treatments. While we have conducted an in depth analysis of the human health impacts and potential effects of aerial spraying, I also recognize that there will always be data gaps and some degree of uncertainty with any course of action I select. I do not take this responsibility lightly. I directed the planning team to include mitigation measures that ensure the highest possible level of caution based not only on literature, models and research, but also on carefully reviewed actual on the ground projects. While some degree of uncertainty will always exist, I feel that by being careful and using the mitigation measures I've included in my decision (see Table 4 above), there will be no significant effect to public health from the use of herbicides in this project. I am more certain of the risks and damage caused from invasive weeds than I am uncertain of the risks posed by herbicides or aerial application.

Level of Monitoring -

Some comments on the draft EIS indicated concerns about the quality of the monitoring program. This project includes a monitoring plan that documents existing weed populations, the treatments, and the effectiveness of the treatment. The monitoring plan also documents how to measure drift from aerial application, and how to measure water samples whenever there is reason to suspect herbicide contamination. I believe these will be more than adequate for the purpose of measuring the effectiveness of this project and measuring unintended impacts.

Drift from Aerial Application -

Many of the comment letters indicated concern about herbicide drift impacting non-target areas. Two comment letters considered the mitigation measures and monitoring program adequate for reducing the risk of herbicide drift. One comment letter expressed concern that herbicide would drift farther than indicated in the EIS.

While we agree that herbicides will drift, there is a sizeable body of literature that documents medium to coarse droplet size will fall quickly (herbicide aerial treatments are medium to coarse 240 to 400 microns, and drop 10 feet in 2 to 6 seconds, with a lateral movement of 8 to 28 feet in 3 mph wind, as stated in the EIS, pages 4-77 and 6-24). Approximately 10 percent of the spray volume will be small droplet size and may drift further off-site. However the rate would be very dilute. The monitoring plan requires the use of spray detection cards around the perimeter of the treatment area and inside the buffer around sensitive areas. If necessary the aerial application methodology will be modified to reduce the amount of drift. Also, the treatment area will be closed to the public during treatment until the herbicide label says it is safe to re-enter. I believe that the risk of drift from aerial spraying is very small and that not using this tool for weed control will severely limit the effectiveness of the program in remote areas on the Forest.

Weed Prevention –

One comment letter expressed concern that the draft EIS failed to seriously address weed prevention as a tool for controlling weeds. On the contrary, this EIS included a comprehensive guide to weed prevention practices that are applicable to all alternatives (FEIS, Appendix A). As stated earlier, the scope of my decision here is limited to the treatment of weed infestations. It does not prescribe broad programmatic standards and guidelines applicable to other project decisions such as grazing, timber harvest, fuels reduction, or travel management. Appropriate mitigation measures would be addressed in the analysis conducted for those activities.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

Alternative 1 is the environmentally preferred alternative because it allows for the use of all available tools for weed control. Consequently, it best protects native species and habitat diversity while having a minimal negative impact on other resources. Concerns of herbicide impacts on aquatic resources, wildlife and humans have been minimized through effective mitigation measures and monitoring.

FINDINGS OF CONSISTENCY WITH LAWS, REGULATIONS AND POLICY

Numerous laws, regulations and agency directives require that my decision be consistent with their provisions. My decision is consistent with all laws, regulations and agency policy relevant to this project. The following discussion is intended to provide information on the regulations that apply to areas raised as issues or comments by the public or other agencies.

National Forest Noxious Weed Management Policy (FSM 2080-2083)
Alternative 1 is consistent with the National Forest Noxious Weed Management Policy, which requires district rangers to prevent the introduction and establishment of weeds, along with providing for the containment and suppression, of noxious weeds.

Endangered Species Act (ESA)
The Gallatin National Forest wildlife biologist, fisheries biologist, and botany coordinator evaluated Alternative 1 with regard to threatened and endangered animal and plant species. Findings are summarized in Chapter 4 of the EIS and in the Biological Assessment (EIS Appendix F). The conclusions of the Biological Assessment were that Alternative 1 was not likely to adversely affect the endangered gray wolf (*Canis lupus*), the threatened grizzly bear (*Ursus arctos horribilis*), the threatened bald eagle (*Haliaeetus leucocephalus*) or the threatened Canada lynx (*Lynx canadensis*). The Biological Assessment also concluded that the actions were not likely to jeopardize the continued existence of the nonessential experimental population of

gray wolves. Concurrence with these conclusions was received from US Fish and Wildlife Service on February 4, 2005 and is included in Appendix F of the final EIS.

Sensitive Species
Federal law and direction applicable to sensitive species include the National Forest Management Act and the Forest Service Manual (FSM) 2670. Those plants and animals, for which population viability is a concern, are periodically identified by the Regional Forester (EIS, Chapter 3 and Appendix F). In making my decision, I have reviewed the analysis of projected effects on all sensitive species listed as occurring or possibly occurring on the Gallatin National Forest (EIS Appendix F). Based on this discussion I have concluded that Alternative 1 will have no adverse impacts on sensitive species.

Clean Water Act
Based on the measures outlined in the EIS to protect soil and water resources (EIS, pages 2-18 through 2-22) and the Soil and Ground Water, and the Water Quality analysis in Chapter 4, I have concluded that Alternative 1 is consistent with the Clean Water Act. Mitigation measures listed in the Table 4 of this decision document, also in the EIS (pages 2-18 through 2-22, Appendices D and E), which I have adopted as part of my decision, are designed to prevent contamination of surface and ground water.

Montana Clean Water Act: Regulatory Framework
Section 313 of the Montana Clean Water Act requires Federal Agencies to comply with all substantive and procedural requirements related to water quality. This decision complies with those requirements as addressed in the EIS, page 4-26.

The National Forest Management Act of 1976 (PL-94-588)
The National Forest Management Act and accompanying regulations require that several other specific findings be documented:

Forest Plan Consistency
Management activities are to be consistent with the Forest Plan [p16 USC 1604 (i)]. The Forest Plan guides management activities [36 CFR 219.1(b)]. Based on the discussion provided in Chapter 4 of the EIS, I have concluded that my decision is consistent with the Gallatin Forest Plan. More specifically, the Forest Plan directs resource managers to implement an integrated weed management control program that included the use of chemical, biological and mechanical methods. Spot herbicide treatment of identified weeds will be emphasized; and, biological control methods will be considered as they become available (USFS 1987, page II-28). Alternative 1 is compatible with this direction.

The Federal Land Policy Management Act of 1976 (PL 94-579)
This act authorizes control of weeds on rangeland. Most of the weeds that will be treated are located on rangelands.

Environmental Justice and Civil Rights
Executive Order 12898, issued in 1994 ordered Federal Agencies to identify and address any adverse human health and environmental effects of agency programs that disproportionately impact minority and low-income populations. At this time, no minority or low-income communities have been identified in south central Montana. This project does not disproportionately impact any human populations. The Civil Rights Act of 1964 provides for nondiscrimination in voting, public accommodations, public facilities, public education, federally assisted programs, and equal employment opportunity. Title VI of the Act, Nondiscrimination in

Federally Assisted Programs, as amended (42 US. C. 2000d through 2000-d6) prohibits discrimination based on race, color or national origin.

While the alternatives may have differing effects on wildlife and fish, as described in Chapter 3, none of the alternatives would alter opportunities for subsistence hunting and fishing by Native American tribes. Tribes holding treaty rights on the Gallatin National Forest have had the opportunity to provide comments on this project but did not raise any concerns.

The National Historic Preservation Act of 1966
Alternative 1 would result in the lowest loss of biotic heritage resources. Aerial spraying poses no impact to archeological or historic sites and mechanical treatment (mostly hand pulling of weeds) is limited to 41 acres. Of the known historic sites on the Gallatin National Forest, none are located in areas of weed infestation proposed for mechanical treatment. Mechanical and chemical treatments would have no effect on the qualities that make the sites eligible for the National Register of Historic Places.

Executive Order 13112, Invasive Species, February 3, 1999
This Executive Order directs Federal Agencies, whose actions may affect the status of invasive species, to (i) prevent the introduction of invasive species, (ii) detect and respond rapidly to, and control, populations of such species in a cost-effective and environmentally sound manner, as appropriations allow. My decision complies with this order.

Compatibility With Law, Policy, Other Agency, And Tribal Goals
Coordination with the BLM, Park Service, State, county weed boards, Montana Weed Control Association, and others has been in place for years. This decision will allow the Gallatin National Forest to control more acres of the existing weeds in a manner that will compliment weed control efforts by adjacent land managers and owners, and fully meet obligations under laws listed in the EIS page 3-2

Consistency With Forest Service Natural Resource Agenda
My decision furthers the USDA Forest Service Natural Resource Agenda by providing for healthy watersheds and promoting vegetative conditions that maintain biodiversity and sustainable forest ecosystems.

Consistency With Montana Weed Management Plan
The purpose of the Montana Weed Management Plan is to coordinate private, county, state, and federal weed management efforts in the state; and promote the implementation of ecologically based integrated weed management programs. The plan provides guidelines for private county state and federal land managers to develop goals and plans consistent with state and national strategies; and provide methods for prioritizing management strategies. The Gallatin Forest Invasive Weed Control project prioritized management strategies in a manner that is consistent with the Montana Weed Management Plan (2004).

IMPLEMENTATION AND APPEAL PROCEDURES

The responsible official is Rebecca Heath, Forest Supervisor on the Gallatin National Forest. Copies of the Record of Decision and Final Environmental Impact Statement are available on the internet <http://www.fs.fed.us/r1/gallatin/?page=projects/weed_control > or a paper copy will be mailed to those who request a copy. Should you desire a copy of the final EIS and the Record of Decision please contact the Hebgen Lake Ranger District, PO Box 520, West Yellowstone, MT 59758, or phone (406) 823-6976.

This decision is subject to appeal pursuant to 36 CFR 215.11. Only individuals or organizations that submitted substantive comments during the comment period may appeal. A written appeal must be submitted within 45 days following the publication date of the legal notice of this decision in the Bozeman Chronicle, Bozeman, Montana. It is the responsibility of the appellant to ensure their appeal is received in a timely manner. The publication date of the legal notice of the decision in the newspaper of record is the *exclusive* means for calculating the time to file an appeal. Appellants should not rely on date or timeframe information provided by any other source.

Paper appeals must be submitted to: USDA Forest Service, Northern Region, ATTN: Appeal Deciding Officer, P.O. Box 7669, Missoula, MT 59807; or USDA Forest Service, Northern Region, ATTN: Appeal Deciding Officer, 200 East Broadway, Missoula, MT 59802. Office hours: 7:30 a.m. to 4:00 p.m. Fax (406) 329- 3411.

Electronic appeals must be submitted to: <appeals-northern-regional-office@fs.fed.us>. In electronic appeals, the subject line should contain the name of the project being appealed. An automated response will confirm your electronic appeal has been received. Electronic appeals must be submitted in MS Word, Word Perfect, or Rich Text Format (RTF).

It is the appellant's responsibility to provide sufficient project- or activity-specific evidence and rationale, focusing on the decision, to show why the decision should be reversed. The appeal must be filed with the Appeal Deciding Officer in writing. At a minimum, the appeal must meet the content requirements of 36 CFR 215.14, and include the following information: The appellant's name and address, with a telephone number, if available; A signature, or other verification of authorship upon request (a scanned signature for electronic mail may be filed with the appeal); When multiple names are listed on an appeal, identification of the lead appellant and verification of the identity of the lead appellant upon request; The name of the project or activity for which the decision was made, the name and title of the Responsible Official, and the date of the decision; The regulation under which the appeal is being filed, when there is an option to appeal under either 36 CFR 215 or 36 CFR 251, subpart C; Any specific change(s) in the decision that the appellant seeks and rationale for those changes; Any portion(s) of the decision with which the appellant disagrees, and explanation for the disagreement; Why the appellant believes the Responsible Official's decision failed to consider the substantive comments; and, How the appellant believes the decision specifically violates law, regulation, or policy.

If no appeal is received, implementation of this decision may occur on, but not before, five business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 days following the date of appeal disposition.

CONTACT FOR FURTHER INFORMATION

For further information regarding this project contact Susan LaMont, Interdisciplinary Team Leader, Hebgen Lake Ranger District, PO Box 520, West Yellowstone, MT 59758, phone (406) 823-6976.

_/s/ Rebecca Heath_____ Date__June 7, 2005_____
Rebecca Heath
Gallatin National Forest Supervisor