

**Worksheet**  
**Determination of NEPA Adequacy (DNA)**  
**for**  
**Integrated Weed Management in the Upper Snake Field Office**

U.S. Department of the Interior  
Bureau of Land Management (BLM)

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**BLM Office:** Upper Snake Field Office- Idaho Falls, ID  
**NEPA Number:** DOI-BLM-ID-1101-2014-0027-DNA

**Proposed Action Title/Type:** 2014 Integrated Weed Management in the Upper Snake Field Office.

**Location of Proposed Action:** Individual infestations throughout the Upper Snake Field Office. See attached map titled: *2014 Noxious Weeds in Upper Snake Field Office*, for site-specific locations. The entire inventory may or may not be treated each year, depending on available funding.

**Description of the Proposed Action:** Integrated weed management is proposed by utilizing manual, chemical, and biological treatment methods as individual treatments or in combination with other treatments. Mechanical and fire use treatments are not included in this proposed action or in the development of this DNA. If an infestation warranted these types of treatment, additional analysis would occur and a separate DNA would be developed.

Proposed treatments and description:

- a) Chemical treatment involves the application of herbicides, via spraying from a backpack, all-terrain vehicle (ATV), or truck, at certain plant growth stages to kill weed species. Appropriate buffer zones for each method would be in place. Blue-lined water buffers with no chemical treatments of 100 feet for aerial treatments, 25 feet for vehicle treatments and 10 feet for backpack treatments would be in-place. Dip-n-clip and/or wiping techniques will be used in occupied Ute Ladies' Tresses habitat and under the guidance of the Field Office Botanist. These selective application methods eliminate the potential for herbicide drift. Additionally, only aquatic labeled herbicides would be used in these areas and at the rates proven to be most effective.
- b) Manual treatment involves the use of hand tools to cut or pull/dig plants from the ground and removing top growth and roots. Manual treatments would be used on small isolated infestations, around other sensitive plants locations, or in areas where chemical or biological control is not practical or is restricted.
- c) Biological control involves the intentional use of domestic animals, insects or pathogens that weaken or destroy vegetation. The overall control strategy is to use biological agents for long-term control of established weed populations.

## **B. Conformance with the Land Use Plan (LUP) and Consistency with Related Subordinate Implementation Plans**

LUP Name's:

- *Medicine Lodge Resource Management Plan (RMP)/ Environmental Impact Statement; BLM 1985.*
- *Big Desert Management Framework Plan; BLM 1981a.*
- *Big Lost Management Framework Plan; BLM 1983.*
- *Little Lost-Birch Creek Management Framework Plan; BLM 1981b.*

LUP Amendment: *Fire, Fuels and Related Vegetation Management Direction Plan Amendment (FMDA) May 2008.* The purpose of this plan is to amend 12 existing LUP's, including all four plans within the Upper Snake Field Office to incorporate fire, fuels, and related vegetation management, including noxious weed control.

The proposed action is in conformance with the FMDA which amended all four plans for the Field Office because it is specifically provided for in the following LUP decisions:

Several overarching or broad goals and objectives were identified as a basis for the Plan Amendment. Invasive plant control is consistent with all of the overarching goals and would aid in protecting native plant communities from displacement. These broad goals and objectives are identified as follows:

- Protect and enhance sage-grouse source habitats.
- Protect and enhance key ecological components in plant and animal communities.
- Consider mechanical and/or chemical treatments first where fire is not an appropriate tool due to risk to life, property, or resource impact.
- Move all vegetation types toward Desired Future Condition (DFC).

Other document: *Final EIS Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States and Final Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States Programmatic Environmental Report (PEIS), June 2007.* The PEIS analyzed the broad direct, indirect, and cumulative impacts to various resource elements from vegetation treatment projects including the use of herbicides and biological control agents. The PEIS was developed in accordance with NEPA policy and is incorporated by reference and will be tiered to, as outlined in 40 CFR 1502.20 which encourages agencies to tier environmental documents, eliminating repetitive discussions of the same issue.

Other document: *Upper Snake-Pocatello Integrated Weed Control Program Programmatic Environmental Assessment (EA), January 2009.*

This EA is intended to consider the area-wide environmental impacts of integrated weed management in the USFO planning area and was tiered to the broader analysis in the PEIS. The proposed action is similar in nature or broad in scope to action already

analyzed in the EA. This DNA is tiered to the EA as outlined in 40 CFR 1502.20 and is incorporated by reference and will only need focus on site-specific impacts identified.

**C. Identify the applicable NEPA document(s) and other related documents that cover the proposed action.**

Several statutes, regulations, and relative documents are described in-detail in *Upper Snake-Pocatello Integrated Weed Control Program Programmatic Environmental Assessment (EA)* and *Decision Record (DR)*, January 2009. This tiered section (section 1.7, page 7, Relationship to Statutes, Regulations, or Other Plans) provides a foundation for weed management by the BLM as outlined in various laws, acts, plans, manuals, and policies.

**D. NEPA Adequacy Criteria**

**1. Is the current proposed action substantially the same action (or is a part of that action) as previously analyzed?**

Yes, the *Upper Snake-Pocatello Integrated Weed Control Program Programmatic EA's* proposed action identifies and provides analysis on integrated weed management treatment methods with a goal of maximizing effective control and minimizing negative environmental, economic, and social impacts. Integrated weed management utilizes prevention, detection, and treatment techniques such as, manual, mechanical, biological (bio-agents), and chemical (herbicides) to control and or contain noxious, invasive and/or non-native vegetation (section 2.3, page 11 *Proposed Action Alternative*). This section also provides Standard Operating Procedures (SOP) for herbicide application that would be followed to minimize the impacts to associated elements. The broader level PEIS also establishes SOP's that would be followed while conducting integrated weed management. Further discussions on SOP's are described in section "F" of this document as well as mitigation measures that will be implemented to minimize impacts of the proposed vegetation treatments.

**2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the current proposed action, given current environmental concerns, interests, resource values, and circumstances?**

Yes, section 2, page 10 of the *Upper Snake-Pocatello Integrated Weed Control Program Programmatic EA* describes the alternatives considered for the proposed weed management program for BLM-administered lands within the USFO. The action alternatives are described in detail and alternatives considered but not carried through for full analysis are presented. A description of the No Action Alternative (no change from current management) is also included as required by CEQ regulations (40 CFR 1502.14d). Three alternatives were developed by the Interdisciplinary (ID) team on issues identified during internal scoping. A full analysis of the three alternatives is described in the EA (pages 10-17) including direct, indirect and cumulative impacts (pages 41-67).

**3. Is the existing analysis adequate and are the conclusions adequate in light of any new information or circumstances (including, for example, riparian proper functioning condition [PFC] reports; rangeland health standards assessments; Unified Watershed Assessment categorizations; inventory and monitoring data; most recent Fish and Wildlife Service lists of threatened, endangered, proposed, and candidate species; most recent BLM lists of sensitive species)? Can you reasonably conclude that all new information and all new circumstances are insignificant with regard to analysis of the proposed action?**

Yes, the analysis of the *Upper Snake-Pocatello Integrated Weed Control Program Programmatic EA* is adequate and no new information or circumstances were identified by the USFO ID team during the internal site-specific scoping process.

**4. Do the methodology and analytical approach used in the existing NEPA document(s) continue to be appropriate for the current proposed action?**

The methodology and analytical approach used in the *Upper Snake-Pocatello Integrated Weed Control Program Programmatic EA* continues to be appropriate for the current proposed action. This EA was prepared in accordance with NEPA, CEQ regulations, and under guidance from BLM Handbook H-1970-1 (*National Environmental Policy Act Handbook- January 2008*).

**5. Are the direct and indirect impacts of the current proposed action substantially unchanged from those identified in the existing NEPA document(s)? Does the existing NEPA document sufficiently analyze site-specific impacts related to the current proposed action?**

Direct and indirect impacts of the current proposed action are unchanged from those identified in the existing NEPA documents. Section 3, page 17 of the *Upper Snake-Pocatello Integrated Weed Control Program Programmatic EA* sets the framework for understanding the baseline environment and assists in development of analysis for direct and indirect impacts associated with integrated weed management. The list of resource issues were developed by the ID team during internal project review and included elements of the human and ecological environment. The standard operating procedures (SOP's) specifically pertaining to this proposed action and designed features for protecting effected elements are outlined in section "F" of this document as well as mitigation measures that will be implemented. All botanical and cultural clearances will be conducted in effected environments prior to implementing treatments. No new (not already addressed/analyzed) direct or indirect impacts were identified during site-specific review by the ID team of the proposed actions.

**6. Can you conclude without additional analysis or information that the cumulative impacts that would result from implementation of the current proposed action are substantially unchanged from those analyzed in the existing NEPA document(s)?**

The current proposed treatment locations fall within the scope of the cumulative impacts analyzed in the existing NEPA document. Section 4, page 41 of the *Upper Snake-Pocatello Integrated Weed Control Program Programmatic EA* discusses the environmental consequences of implementing integrated weed management. For each alternative, the environmental effects are analyzed for the resource topics carried forward for analysis. No new impacts from the proposed action when added to other past, present and reasonably foreseeable future actions were identified during the internal scoping review.

**7. Are the public involvement and interagency review associated with existing NEPA document(s) adequately for the current proposed action?**

Yes, section 5, page 68 of the *Upper Snake-Pocatello Integrated Weed Control Program Programmatic EA* lists the individual resource specialists who participated in the preparation of the EA. Additionally, public involvement during the broader PEIS process was extensive and in accordance with NEPA timelines. The final EA was published on the internet for a thirty day comment period and no comments were received either positive or negative from any constituents or members of the public. The Shoshone-Bannock Tribes were consulted during the process and did not provide comments related to the EA.

**E. Interdisciplinary Analysis**

<b>Name</b>	<b>Title</b>	<b>Resource</b>
Arn Berglund	Fisheries Biologist	T&E Fish
Dan Kotansky	Sup. Hydrologist/ Haz-mat Coordinator	Hydrology/Haz-mat
Marissa Guenther	Archaeologist	Cultural Resources
Devin Englestead	Wildlife Biologist	T&E/Wildlife Resources
Justin Frye	Wildlife Biologist	T&E/Wildlife Resources
Scott Minnie	Rangeland Management Specialist	Veg/NEPA Review
Jordan Hennefer	Rangeland Management Specialist	Livestock Grazing
Shannon Bassista	Outdoor Recreation Planner	WSA/Visitor Services
Deena Teel	Sup. Natural Resource Specialist	ACEC/ Riparian
Glen Guenther	Sup. Natural Resource Specialist	T&E/Special Status Plants
Brandy Janzen	Natural Resource Specialist	Soils

**F. Mitigation Measures**

Standard Operating Procedures (SOPs) are the management controls and performance standards intended to protect and enhance natural resources that could be affected by vegetation treatments including the use of herbicides. The BLM will follow SOPs to ensure that risks to human health and the environment from herbicide treatment actions and other vegetation treatments are kept to a minimum. Herbicide treatment SOPs are described in Table 2-8, pages 2-30 to 2-35 and Appendix B of the ROD to the PEIS (BLM 2007a).

Specific noxious weed control standards and project criteria including mitigation measures are detailed in Appendix "C" of the *Upper Snake-Pocatello Integrated Weed Control Program Programmatic EA*, (pages 81-88). These practices will be incorporated with project specification materials (work-orders) and implemented to the highest standards.

## **CONCLUSION**

Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the existing NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of NEPA.

X

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Scott Minnie  
Range Management Specialist- NEPA Review

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X

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Jeremy Casterson  
Upper Snake Field Office Manager

## **Standard Operating Procedures and Design Features Noxious Weed Control Program Upper Snake Field Office**

### **Herbicide Application**

- Review, understand, and conform to the “Environmental Hazards” section on the herbicide label. This section warns of known pesticide risks to the environment and provides practical ways to avoid harm to organisms or to the environment.
- Avoid accidental direct spray and spill conditions to reduce the largest potential impacts.
- Use the typical application rate, rather than the maximum application rate, to reduce potential risk to most species for most herbicides.
- Minimize application areas where possible.
- Include pre-treatment surveys for sensitive habitat and species listed under the ESA within or adjacent to proposed treatment areas.
- Notify adjacent landowner(s) prior to treatment.
- Clean equipment, vehicles, and clothing of personnel to remove weed seeds/materials.
- Emphasize the use of native or sterile species for revegetation and restoration projects.
- Use weed-free feed for horses and pack animals involved in weed control efforts and weed-free straw and mulch for stabilization and rehabilitation activities.
- Only those herbicides officially approved for use on BLM lands in Idaho (2007 PEIS for Vegetation Treatment on BLM Lands and later departmental approvals) and labeled for application on rangelands would be utilized.
- All approved herbicides would be handled and applied in strict accordance with all label restrictions and precautions, as well as applicable BLM Policy. In instances where herbicide labels, federal, or state stipulations overlap, the more restrictive criteria would be adhered to. Selection of an herbicide for site-specific weed control would depend on its effectiveness on a particular weed species, success in previous similar applications, habitat types, soil types, and nearness of water and private property.
- Application of any herbicide to treat weeds would be performed by or directly supervised by a state or federal licensed applicator. These applicators are responsible for complying with all applicable Federal, State, and county laws, codes, and regulations connected with the use of weed control herbicides. This includes BLM, County, or State personnel or their contractors.
- All applicators would comply with safety requirements, including personal protective equipment, spray equipment, herbicide labels and rates, and environmental concerns. All contractors and county agreement applicators are responsible for the cleanup of hazardous materials released on public lands, if they are at fault. All weed control efforts done by BLM personnel or their authorized agents would be done in accordance with the applicable Safety Plan and the Storage, Transportation and Spill Contingency Plans. Emergency response kits and trained personnel would be available and on-site whenever herbicides are transported or stored.
- Only the quantity of herbicides needed for each day’s operation would be transported from storage/mixing areas to application sites.
- No spraying of any herbicide would occur when wind velocity exceeds 10 mph, as per State of Idaho Department of Agriculture standards, or as indicated in the

Special Design Features listed below. No aerial application of herbicides would be applied when wind velocities exceed 5 mph.

- All aerial herbicide applications would be conducted in a manner that avoids application overlap and drift.
- Aerial herbicide application would be used to control or eradicate large infestation of weeds or in areas that have steep slopes, rock soils, and are difficult to access.
- Dyes may be used to obtain uniform coverage. This would help prevent under or over treatment/application and help with detection of drift. It would also reduce the risk of treating non-target species.
- Herbicide applications would be implemented in a manner to avoid off site movement of herbicides either through the air, through soil, or along the soil surface. Project site terrain, soil type, and vegetation would be taken into consideration when selecting herbicide type, application method, and application timing.
- Areas that pose exposure risk would be posted to warn the public of herbicide use and hazards.
- Ground-based herbicide application would include broadcast “block” spraying or spot spraying with backpack pumps, spraying from a pumper unit on the back of a pickup truck or an OHV, or pack animals to transport and apply herbicides in more rugged terrain. Ground based application would occur in smaller, fragmented patches of weeds where herbicide treatment is the most effective means of controlling or eradicating weeds.
- A combination of herbicides may be used when it is determined that this is the most effective way to control multiple weed species, or when mixing of herbicides are more effective on weed species. All herbicide combinations would conform to label guidelines for mixing.
- Carry bear-spray specifically designed for protection against wild animal attacks when conducting treatments in known grizzly bear habitat. Bear spray should be no more than 3-4 years old and should be replaced regularly. Bear spray should be carried on hip or in a holster for easy accessibility and not inside a backpack or other enclosed device. Employees will receive annual training in the proper use of bear spray. Expired or used canisters shall be disposed of properly.
- In known grizzly bear habitat food must be stored in a bear-resistant container certified through the Interagency Grizzly Bear Committee Courtesy Inspection Program or within a closed vehicle where the storage compartment is constructed of solid, non-pliable material that, when secured, will have no openings, hinges, lids, or coverings that would allow a bear to gain entry by breaking, bending, tearing, biting, or pulling with its claws (any windows in the vehicle must be closed),

### **Using Biological Agents**

The use of biological control agents would be conducted in accordance with BLM procedures outlined in The Use of Biological Control Agents of Pests on Public Lands (BLM 1990). Only those biological agents that have been tested and approved by the USDA-APHIS would be released on public lands.

Biological control using cattle, sheep or goats would be applied to treatment areas for short periods experimentally and only allowed for 3 years. When considering the use of grazing animals as an effective biological control measure, several factors will be taken into consideration including:

- Target weed species present
- Size of the infestation of target weed species
- Other plant species present
- Stage of growth of both target and other plant species present
- Palatability of all plant species present
- Selectivity of all plant species present by the grazing animals species that is being considered for use as a biological control agent
- The availability of that grazing animal within the treatment site area
- Type of management program that is logical and realistic for the specific treatment site
- Grazing animal's potential to spread seed.
- Weed control by livestock would be done in a manner that prevents contact between bighorn sheep and domestic sheep and goats.

### **Design Features to Protect Cultural Resources**

- The USFO or PFO Archaeologist or his/her qualified representative would assess and record cultural sites to determine appropriate and immediate protective measures prior to weed treatment measures that would affect cultural resources.
- A Class III Cultural Resources inventory would be completed prior to any weed treatment activities that would *affect* cultural resources. If sites are discovered they would be avoided as stipulated by the USFO or PFO Archaeologist.
- If weed treatment measures cannot avoid cultural resource sites, the USFO or PFO Archaeologist would develop and complete appropriate mitigation measures prior to planned surface disturbing activities. These plans would be developed and executed in cooperation with SHPO and appropriate Native American groups and interested individuals.
- The following provisions would be included in weed treatment actions that affect cultural resources: "If undocumented cultural and/or paleontological resources are discovered during treatment activities, all work would be suspended, and the Field Office Manager would be notified. Work would not resume until the discovery has been recorded, evaluated and protected. The Field Office Archaeologist would recommend, develop, and execute appropriate mitigating measures. Work would not resume without written authorization from the Field Office Manager."
- Treatment methods and appropriate mitigation measures would be made and supervised by the USFO Archaeologist or his/her qualified representative prior to manual and herbicide spot spraying treatment in cultural/historical ACECs.

### **Design Features to Protect Special Status Wildlife/Fish Species**

- Aerial application of herbicides within 0.5 mile of an active bald eagle nest during nesting season (February 1 through August 15) would be avoided.
- If annual surveys (conducted between the end of May to the end of August) show that yellow-billed cuckoos are present, treatment activities would take into account yellow-billed cuckoo presence and modify actions accordingly:  
Ground-based chemical treatments would not occur from May 1 through August 31 within 200 feet of occupied yellow-billed cuckoo habitat. Aerial application of chemicals would not occur from May 1 through August 31 within 0.5 miles of occupied yellow-billed cuckoo habitat. Entry of personnel and equipment into occupied yellow-billed cuckoo habitat would be limited to a three hour time period or less.
- Treatment activities would be designed and implemented to minimize noise disturbance within 1 mile of an identified active gray wolf rendezvous site from April 15 thru June 30.
- Treatment activities would be designed and implemented to minimize noise disturbance within 0.6 miles of occupied sage-grouse leks from 6:00pm to 9:00am from March 15 through May 1 in lower elevation habitats and March 25 through May 15 in higher elevation habitats (Idaho Sage-grouse Advisory Committee 2006.)
- Herbicide application restrictions associated with aquatic habitats, riparian areas, and wetlands are listed in the table under Design Features for Protecting Riparian Areas. Herbicide use within 0.5 mile of occupied special status species habitat would be limited to ground based spot treatment of weed populations and implemented in accordance to the herbicide use restrictions, also listed in the table of Design Features for Protecting Riparian Areas.
- Based on its unknown risk to aquatic species, use of the surfactant R-900 would be avoided within or adjacent to riparian habitats.
- Use techniques to selectively target weed species when applying herbicides in sagebrush communities (spot treatments). Avoid chemical treatments along intermittent and ephemeral drainages where basin big sagebrush communities are present.
- Herbicide applications would not occur within 100 feet of any bull trout inhabited stream.

### **Design Features to Protect Sensitive Plants**

- Surveys for sensitive plants would be conducted prior to herbicide broadcast and ground disturbing mechanical treatments to determine the presence or absence of sensitive plants.
- Herbicide broadcast and ground disturbing mechanical activities treatments would not be allowed in sensitive plant habitat.
- Selective treatment methods and appropriate mitigation measures would be made and supervised by a qualified field office biologist prior to manual, herbicide, and/or biological agent treatments in sensitive plant habitat.

- Individual sensitive plant species needs would be addressed by incorporating protective and/or beneficially designed features into treatment actions in or near (within 0.5 miles) sensitive plant habitat.
- Individual sensitive plant species needs would be considered when selecting herbicides and application methods.
- Designate buffer zones around special status plants.
- Manage herbicide drift especially to nearby blooming plants.
- Use typical rather than maximum rates of herbicides in areas with rare plants.
- Choose herbicide formulations that are not easily carried by social insects to hives, hills, nests and other “homes” in areas with rare plants.
- Choose herbicides that degrade quickly in the environment when herbicides must be used in rare plant habitat.
- Time the herbicide applications when pollinators are least active, such as in the evenings or after blooming has occurred for the day in rare plant habitat, and if necessary divide the rare plant habitat into several treatments rather than one large treatment to keep from treating all blooming species at one time.

### **Design Features for Protecting Riparian Areas**

- Treatment activities including spraying, manual, or biological treatments may occur within designated Riparian Habitat Conservation Areas as defined by INFISH.
- Disking, plowing, or blading would not occur within appropriate buffer zones surrounding riparian areas as decided by an ID Team. Distances identified for INFISH would be followed when determining buffer zone width.
- Soils that are fully saturated would not be disturbed or only minimally disturbed.
- In locations adjacent to streams where sediment has been identified, through the Total Maximum Daily Load (TMDL) process, as an instream pollutant, an ID Team would determine whether additional BMPs for erosion control would be required.
- Off road vehicle use for treatments such as herbicide use within riparian areas would be limited to non-ground disturbing actions.
- Non-target plant mortality in riparian areas would be monitored to determine if mortality of non-target plants is affecting riparian functions.
- Utilization limits on non-target vegetation and monitoring protocols would be developed for biological treatments utilizing domestic grazing animals in riparian areas.

### **Buffers for Riparian Habitat Conservation Areas**

- 300 feet on each side of the stream channel for fish-bearing streams
- 150 feet on each side of the stream channel for permanently flowing non-fish-bearing streams
- 150 feet from the edge of water body for ponds, lakes, reservoirs, and wetlands >1 acre; key watersheds: 100 feet from the edge of RHCA feature; other watersheds:

50 feet from the edge of RHCA feature for seasonally flowing or intermittent streams, wetlands <1 acre, landslides, and landslide-prone areas.

Herbicide Application Method	Maximum Wind Speed	Riparian Area of Influence	Aquatic Level of Concern for Authorized Herbicides
Aerial	5 mph	>0.5 mile from all water bodies and springs containing bull trout species.	Low and Moderate
Aerial	5 mph	>150 feet from outer edge of riparian areas associated with perennial water (includes both fish bearing and non-fish bearing streams) that contain or are upstream of reaches inhabited by special status aquatic species.	Low and Moderate
Aerial	5 mph	>150 feet from outer edge of riparian areas for intermittent streams that are upstream of reaches containing special status aquatic species.	Low and Moderate
No application of picloram would be authorized. No use of surfactant R-11 would be authorized.	N/A	100 feet from live waters or shallow water tables.	N/A
Ground/spot spraying, wicking, wiping, dipping, painting, injecting. No broadcast boom spraying. Selective spraying of target species only (e.g., spot treatment of individual plants).	8 mph	15-100 feet from live waters or shallow water tables; or within riparian areas.	Low
Backpack sprayer, hand sprayer, wicking, wiping, dipping, painting, and injecting. Selective spraying/treatment of target species only (e.g., spot treatment of individual plants).	5 mph	<15 feet from live water or shallow water tables.	Only approved aquatic herbicides. No surfactant use authorized.

**Design Features to Protect Special Management Areas**

Herbicide Application Method	Maximum Wind	Area of Influence
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	<b>Speed</b>	
Aerial application not allowed within ACECs. May be used on adjacent lands (>0.5 miles away).	5 mph	>0.5 miles away from RNA boundary
Backpack sprayer, hand sprayer, wicking, wiping, dipping, painting, and injecting. Selective treatment of target species only (e.g., spot treatment of individual plants).	5 mph	ACECs, RNAs, WSAs
Biological agents would not be allowed.	N/A	RNAs
Stabilization and rehabilitation measures identified in the 2005 NFRP would not be allowed.	N/A	RNAs
Mechanical treatment would not be allowed	N/A	WSAs
Vegetative manipulation by herbicide, mechanical, or biological means would not be permitted except when there is no effective alternative to control weeds and when control is needed to maintain the natural ecological balance.	5 mph	WSAs

**SOP's and Protective Measures from the Endangered Species Act Section 7  
Consultation Biological Opinion**

This section identifies the standard operating procedures (SOPs) and protective measures that BLM would follow to minimize risks from vegetation treatment methods to the environment including threatened and endangered species and their habitats.

### **Measures for Site Access and Fueling/Equipment Maintenance for Treatments Occurring in Watersheds with Listed Species and/or Designated Critical Habitat:**

- Where feasible, access work site only on existing roads, and limit all travel on roads when damage to the road surface will result or is occurring.
- Where listed species occur, consider ground-disturbing activities on a case by case basis, and implement SOPs to ensure minimal erosion or impact to the aquatic habitat.
- Within riparian areas, use vehicle equipment only on established roads.
- Outside of riparian areas, driving off established roads is allowed only on slopes of 20% or less.
- Except in emergencies, land helicopters outside of riparian areas.
- Within 150 feet of wetlands or riparian areas, do not fuel/refuel equipment, store fuel, or perform equipment maintenance (locate all fueling and fuel storage areas, as well as service landings outside of protected riparian areas).
- Prior to helicopter fueling operations prepare a transportation, storage, and emergency spill plan and obtain the appropriate approvals; for other heavy equipment fueling operations use a slip-tank not greater than 250 gallons. Prepare spill containment and cleanup provisions for maintenance operations.

### **Measures Related to Herbicide Treatments**

- Maintain equipment used for transportation, storage, or application of chemicals in a leak proof condition.
- Do not store or mix herbicides, or conduct post-application cleaning within riparian areas.
- Ensure that trained personnel monitor weather conditions at spray times during application.
- Strictly enforce all herbicide labels.
- Do not broadcast spray within 100 feet of open water when wind velocity exceeds 5 mph.
- Do not broadcast spray when wind velocity exceeds 10 mph.
- Do not spray if precipitation is occurring or is imminent (within 24 hours).
- Do not spray if air turbulence is sufficient to affect the normal spray pattern.
- Do not broadcast spray herbicides in riparian areas that provide habitat for listed species.
- Do not use diquat, fluridone, terrestrial formulations of glyphosate, or triclopyr BEE, to treat aquatic vegetation in habitats where listed species occur or may potentially occur.
- Avoid using glyphosate formulations that include R-11, and either avoid using any formulations with POEA, or seek to use the formulation with the lowest amount of POEA available, to reduce risks to aquatic organisms.

- Follow all instructions and SOPs to avoid spill and direct spray scenarios into aquatic habitats. Special care should be followed when transporting and applying 2,4-D, bromacil, clopyralid, diuron, glyphosate, hexazinone, imazapyr, metsulfuron methyl, picloram, tebuthiuron, and triclopyr.
- Do not broadcast spray diuron, glyphosate, picloram, or triclopyr BEE in upland habitats adjacent to aquatic habitats that support (or may potentially support) listed species under conditions that would likely result in off-site drift.
- In watersheds that support listed species or their habitat, do not apply bromacil, diuron, tebuthiuron, or triclopyr BEE in upland habitats within ½ mile upslope of aquatic habitats that support aquatic listed species under conditions that would likely result in surface runoff.
- Avoid accidental direct spray and spill conditions to reduce the largest potential impacts. Use the typical application rate, rather than the maximum application rate, to reduce risk for most herbicides, where practical.
- Reduce the size of the application area, when possible.
- Establish appropriate (herbicide specific) buffer zones to downstream waterbodies, habitats, or species/populations of interest. Buffer distances presented in Table 4 below should be consulted as guidance for all site-specific treatments. Local BLM field offices will have to determine buffer zones for active ingredients not listed below in Table 4 (2,4-D, clopyralid, glyphosate, hexazinone, imazapyr, metsulfuron methyl, picloram and triclopyr) on a site-specific basis.
- Outside riparian areas in watersheds with listed species or their habitats: Conduct soil-disturbing treatments only on slopes of 20% or less, where feasible.

**Within Riparian Areas with Listed Species or their Habitat:**

- Do not use vehicles or heavy equipment, except when crossing at established crossings.
- Do not remove large woody debris or snags during mechanical treatment activities.
- Do not conduct ground disturbing activities (e.g., disking, drilling, chaining, and plowing).
- Ensure that all mowing follows guidance to avoid negative effects to streambanks and riparian vegetation and major effects to streamside shade.
- Do not use equipment in perennial channels or in intermittent channels with water, except at crossings that already exist.
- Leave suitable quantities (to be determined at the local level) of excess vegetation and slash on site.
- Do not apply fertilizers or seed mixtures that contain chemicals by aerial methods.
- Do not completely remove trees and shrubs.