

**NATURAL RESOURCES CONSERVATION SERVICE
MONTANA CONSERVATION PRACTICE SPECIFICATION/JOB SHEET**

HERBACEOUS WEED CONTROL (ACRE)

CODE 315

LANDOWNER/OPERATOR

FIELD NUMBER

TRACT

CTU

PLANNER

JOB CLASS

DATE

DEFINITION: The removal or control of herbaceous weeds including invasive, noxious and prohibited plants.

PURPOSE: This practice is applied to support one or more of the following purposes (check that apply):

- Enhance accessibility, quantity, and quality of forage
- Restore or release native or create desired plant communities and wildlife habitats consistent with the ecological site
- Protect soils and control erosion
- Reduce fine-fuels fire hazard and improve air quality.

CONDITIONS WHERE PRACTICE APPLIES

On all lands except active cropland where removal, reduction, or manipulation of herbaceous vegetation is desired.

This practice does not apply to removal of herbaceous vegetation by prescribed fire (use Prescribed Burning, Code 338).

This practice can be used wherever rangeland, pastureland, forestland, wildlife lands, and other wildland weeds will be managed. Herbaceous weed control and management is designed to achieve the desired plant community through the utilization of Integrated Pest Management (IPM) principles. All methods of herbaceous weed management must comply with federal, state, tribal, and local regulations.

CRITERIA

General Criteria Applicable to All Purposes

Herbaceous weed control will be applied in a manner to achieve the desired control of the target species and protection of desired species. This will be accomplished by mechanical, chemical, burning or biological methods either alone or in combination. When burning is used as a method, the Prescribed Burning (Code 338) standard will also be applied.

NRCS will not develop biological or chemical treatment recommendations except for biological control utilizing grazing animals. Prescribed Grazing (Code 528) is used to ensure desired results are achieved and maintained.

NRCS may provide clients with acceptable biological and/or chemical control references. For Montana, use the most recent edition of the Montana, Utah, Wyoming Weed Management Handbook, and for noxious weeds, use Invasive Species Technical Notes, found at:

<http://www.mt.nrcs.usda.gov/technical/ecs/invasive/technotes/>

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NRCS may provide clients with current acceptable references to achieve desired management objectives.

When herbicides are used, environmental hazards and site-specific application criteria listed on pesticide labels and contained in extension service and other approved pest management references must be followed.

Herbaceous weed control will include post treatment measures as needed to achieve resource management objectives.

Livestock and human access will be controlled based on management methods applied and restrictions as listed on the chemical labels.

Manage and/or dispose of treated weed species in a manner that will prevent the spread of herbaceous weeds to new sites.

Manage and/or dispose of manure from livestock after consuming forage or hay produced under herbicide management of weeds using products with residual activity in a manner that will prevent non-target effects on other crops or contaminate water resources.

Additional Criteria to Enhance Accessibility, Quantity, and Quality of Forage and/or Browse

Herbaceous weed control will be applied in a manner to minimize negative impact to forage and/or other non targeted plants. Timing and sequence of control shall be planned in coordination with specifications developed for Prescribed Grazing (Code 528) or Forage Harvest Management (Code 511).

Additional Criteria to Restore or Release Native or Create Desired Plant Communities and Wildlife Habitats Consistent with the Ecological Site

Apply herbaceous weed control in a manner to protect the health and vigor of native or desired plant species.

Use applicable Ecological Site Description (ESD) State and Transition models, to develop specifications that are ecologically sound and defensible. Treatments must be congruent with dynamics of the ecological site(s) and keyed to states and plant community phases that have the potential and capability to support the desired plant community. If an ESD is not available, base specifications on the best approximation of the desired plant community composition, structure, and function.

Treatments will be conducted during periods of the year when weed species are most vulnerable and will promote restoration of the native or desired plant communities. Refer to Montana Invasive Species Technical Notes at <http://www.mt.nrcs.usda.gov/technical/ecs/invasive/technotes/> for noxious weed species.

Apply herbaceous weed control in a manner to maintain or enhance important wildlife habitat requirements.

Treatments will be conducted during periods of the year that accommodate reproduction and other life-cycle requirements of target wildlife and pollinator species.

Apply treatments that maintain or enhance plant community composition and structure to meet the requirements of target wildlife species.

Additional Criteria to Protect Soils and Control Erosion

Apply herbaceous weed control to minimize soil disturbance and soil erosion.

Additional treatment will be applied to protect soils and prevent erosion.

Additional Criteria to Reduce Fine-Fuels Fire Hazard and Improve Air Quality

Treat weed species in a manner that creates a native or desired plant community which reduces the potential for accumulating excessive fuel loads and increased wildfire hazards.

Apply treatment methods in a manner that minimize the potential for unintended impacts to air resources, e.g., smoke, chemical drift, etc.

CONSIDERATIONS

Consider using Integrated Pest Management (Code 595) in support of herbaceous weed control. Consider soil erosion potential and difficulty of vegetation establishment when choosing a method of control that causes soil disturbance.

Consider the appropriate time period for treatment. Some herbaceous weed control activities can be effective when applied within a single year; others may require multiple years of treatment(s) to achieve desired objectives.

Consider impacts to wildlife species, in general, treatments that create a mosaic pattern may be the most desirable.

Consider impacts to wildlife food supplies, space, and cover availability when planning the method and amount of herbaceous weed control.

State issued licenses may be required when using chemical pesticide treatments.

For air quality purposes, consider using chemical methods of herbaceous weed control that minimize chemical drift and excessive chemical usage and consider mechanical methods of herbaceous weed control that minimize the entrainment of particulate matter.

Adjacent land uses must be considered before chemicals are used.

WEED MANAGEMENT PLANS

Prepare plans for each field or treatment unit according to the criteria included in this specification. The following must be included in the plans:

1. Landowner's goals and objectives by management unit (e.g., pasture or rangeland forage, timber, wildlife habitat, erosion control, fuel reduction):

2. Attach a plan map and soil map for all sites. Include Ecological Site Description(s) (ESD) and narrative of the current ecological state and potential transitions (if applicable). Include a description of the soil texture below:

3. Pre-treatment cover or density of the target weed(s) determined from field monitoring and the planned post-treatment cover or density and desired efficacy.

Pretreatment cover or density and date of monitoring below:

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Planned post-treatment cover or density and desired percent control below:

4. Attach maps, drawings, and/or narratives detailing or identifying areas to be treated, pattern of treatment (if applicable), areas that will not be disturbed, and adjacent land uses.
5. Attach a monitoring plan that identifies what shall be measured (including timing and frequency) and the changes in the plant community (compare with objectives) that will be achieved.

If Mechanical Treatment Methods Are Planned (These include mowing, tilling, hand pulling, prescribed burning, and screens placed in irrigation ditches to reduce weed seed movement):

1. Type of equipment to use for management:

Planned _____ as applied _____

2. Dates of treatment for effective management:

Planned _____ as applied _____

3. Operating instructions (if applicable):

Planned _____ as applied _____

4. Techniques and procedures to be followed:

Planned _____ as applied _____

5. Additional treatments to protect soil and prevent and prevent erosion (if applicable).

Planned _____ as applied _____

If Chemical Treatment Methods Are Planned:

1. Recommended herbicide product planned, rate per acre, method and date of application and source of recommendation:

Planned (explain) _____

2. As applied (include source of recommendation if different than planned) _____

3. Attach evaluation and interpretation of herbicide risks associated with each selected herbicide product using WIN-PST or other approved tools. If the identified final hazard rating is intermediate or greater than include the IPM specification and job sheet with the weed management plan or consider using an alternative herbicide.

4. Attach any special mitigation, timing considerations or other factors (such as soil texture, pH, and organic matter content) that must be considered to ensure the safest, most effective application of the herbicide (if not applicable, indicate below)
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5. Reference to product label instructions – Attach herbicide application report.

6. Include Prescribed Grazing (Code 528) or Forage Harvest Management (Code 511) job sheets if planned to minimize vegetative impact to forage and/or other non-target plants.

If Biological Treatment Methods (insect, pathogen, or grazing) are planned:

1. List acceptable biological treatment references for the selected biological agent used to contain and manage the target species (MT Invasive Species technical notes are acceptable).
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2. Release date, kind, and number of agents applied (N/A if not applied):
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3. Timing, frequency, duration and intensity of grazing or browsing applied (N/A if not applied). Include Prescribed Grazing (Code 528) Job Sheet.
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- a. Desired degree of grazing or browsing use for effective management of target species (N/A if not applied)
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- b. Maximum allowable degree of use on desirable non-target species.
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4. Special mitigation, precautions, or requirements associated with the selected treatment(s) (N/A if not applicable)
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OPERATION AND MAINTENANCE

Operation. Herbaceous weed control practices shall be applied using approved materials and procedures. Operations will comply with all local, state, tribal, and federal laws and ordinances.

Success of the practice shall be determined by evaluating regrowth or reoccurrence of target species after sufficient time has passed to monitor the situation and gather reliable data. Length of evaluation periods will depend on the herbaceous weeds species being monitored, proximity of propagules (seeds, plant materials and roots) to the site, transport mode of seeds (wind or animals) and methods and materials used.

The operator will develop a safety plan for individuals exposed to chemicals, including telephone numbers and addresses of emergency treatment centers and the telephone number for the nearest poison control center. The National Pesticide Information Center (NPIC) telephone number in Corvallis, Oregon, may also be given for non-emergency information: **1-800-858-7384**.

Monday to Friday

6:30 a.m. to 4:30 p.m. Pacific Time

For incidents involving hazardous material call the National Chemical Transportation Emergency Center (CHEMTRAC) telephone number is: 1-800-262-8200 (Monday-Friday, 8:30-5:00 p.m. Eastern Time).

For a poison emergency in Montana, call Rocky Mountain Poison and Drug Center: 1-800-222-1222.

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For advice and assistance with emergency spills that involve agrichemicals in Montana, phone calls in the following order should be made:

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|----------------------|---|
| 1st responder | – 911 |
| 2nd responder | – local sheriff or police |
| 3rd responder | – County D.E.S. (Disaster Emergency Services) |
| 4th responder | – Montana Department of Agriculture – (406) 444-5400
Pesticide Program Technical Services Bureau |

- Follow label requirements for mixing/loading setbacks from wells, intermittent streams and rivers, natural or impounded ponds and lakes, and reservoirs.
- Post signs, according to label directions and/or federal, state, tribal, and local laws, around fields that have been treated. Follow restricted entry intervals.
- Dispose of herbicide and herbicide containers in accordance with label directions and adhere to federal, state, tribal, and local regulations.
- Read and follow label directions and maintain appropriate Material Safety Data Sheets (MSDS). MSDS and herbicide labels may be accessed on the Internet at: <http://www.cdms.net/LabelsMsd/LMDefault.aspx?t=>
- Calibrate application equipment according to recommendations before each seasonal use and with each major chemical and site change.
- Replace worn nozzle tips, cracked hoses, and faulty gauges on spray equipment.
- Maintain records of plant management for at least two years. Herbicide application records shall be in accordance with USDA Agricultural Marketing Service's Pesticide Recordkeeping Program and state-specific requirements.

Maintenance. Following initial application, some regrowth, resprouting, or reoccurrence of herbaceous weeds may be expected. Spot treatment of individual plants or areas needing re-treatment should be completed as needed when weed vegetation is most vulnerable to desired treatment procedures.

Review and update the plan periodically in order to incorporate new IPM technology; response to grazing management and complex weed population changes; and avoid the development of weed resistance to herbicide chemicals.

REFERENCES

Montana-Utah-Wyoming 2006-2007 Weed Management Handbook. Cooperative Extension Service. EB0023. Montana State University Extension Publications. Bozeman, Montana. 267 pages.

Montana Noxious Weed Technical Notes. Montana USDA-NRCS internet publications, Bozeman, Montana. <http://www.mt.nrcs.usda.gov/technical/ecs/invasive/>.

APPROVALS:

NRCS Conservationist

JOB APPROVAL AUTHORITY

Date

Producer

Date

CERTIFICATION STATEMENT:

I hereby certify that this practice has been installed in accordance with NRCS standards and specifications.

NRCS Conservationist

JOB APPROVAL AUTHORITY

Date

Date