

**NATURAL RESOURCES CONSERVATION SERVICE**  
**CONSERVATION PRACTICE STANDARD**  
**HERBACEOUS WEED CONTROL**

(Ac.)

**CODE 315**

**DEFINITION**

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

**PURPOSES**

- Enhance accessibility, quantity and quality of forage and/or browse
- 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**

This practice is applicable to the removal, reduction or manipulation of herbaceous vegetation for all land uses except cultivated cropland and horticultural cropland including orchards and vineyards.

This practice does not apply to removal of herbaceous vegetation by prescribed fire (use Prescribed Burning - 338) or removal of herbaceous vegetation to facilitate a land use change (use Land Clearing - 460).

**CRITERIA**

**General Criteria Applicable to All Purposes**

Plan and apply Herbaceous Weed Control to achieve the desired control of the target species and protection of desired species by mechanical, chemical, burning or biological methods either alone or in combination. When burning, plan and apply Prescribed Burning, 338.

NRCS will not develop biological or chemical treatment recommendations except for biological control utilizing grazing animals, in which case plan and apply Prescribed Grazing, 528.

NRCS may provide clients with current acceptable biological and/or chemical control references to achieve desired management objectives.

For herbaceous weed control with herbicides, refer to the corresponding pesticide label environmental hazards statement and site-specific application criteria for application and management restrictions. This includes control of livestock and human access to treated areas.

Herbaceous weed control will include post treatment measures such as vegetation re-establishment, as needed, to achieve resource management objectives.

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

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

Plan and apply Herbaceous Weed Control in a manner to minimize negative impact to forage and/or other non-targeted plants. Plan the timing and sequence of control activities in coordination with specifications developed for Prescribed Grazing (528) or Forage Harvest Management (512).

**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.

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact the Colorado Natural Resources Conservation Service [State Office](#) or visit the Colorado electronic [Field Office Technical Guide](#).

Use applicable Ecological Site Description (ESD) State and Transition models to develop specifications that are ecologically sound and defensible. Treatments must be consistent with the 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.

Apply control treatments during periods of the year when weed species are most vulnerable, and will promote restoration of the native or desired plant communities.

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

Apply control treatments 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.

Apply additional treatments such as reseeding, as needed 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 that decreases the potential for accumulating excessive fuel loads and increased wildfire hazards.

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

#### **CONSIDERATIONS**

A Colorado pesticide applicators license (Private, Certified Operator or Qualified Supervisor) may be required to apply herbicides.

Consider using Integrated Pest Management (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 interval required for effective treatment. Some herbaceous weed control activities can be effective when applied within a single year while 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 for wildlife.

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

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.

Consider adjacent land uses before chemicals are used.

#### **PLANS AND SPECIFICATIONS**

Prepare plans and specifications for each field or treatment unit according to the Criteria and Operation and Maintenance sections of this standard. Specifications shall describe the requirements for applying this practice to meet the intended purpose.

Record practice specifications on a Colorado Herbaceous Weed Control, 315 Job Sheet.

Plans and specifications shall include the following, as a minimum.

1. Goals and objectives statement including the stated purpose for planning and applying the practice
2. A plan map, ecological site map and soil map for the site
3. Pre-treatment cover and production, or density of the target plant(s) and the planned post-treatment cover and production, or density and desired efficacy

4. Maps, drawings, and/or narratives detailing or identifying areas to be treated, pattern of treatment if applicable, and areas that will not be disturbed.
5. A monitoring plan that identifies measurement requirements including timing and frequency, and planned changes in the reference plant community (compare with objectives) that will be achieved

#### **For Mechanical Treatment Methods**

Plans and specifications will include items 1 through 5 above, plus the following, as applicable.

6. Type of equipment to use for treatment
7. Recommended dates of treatment
8. Techniques and operating instructions
9. Mitigation, grazing restrictions or other recommendations

#### **For Chemical Treatment Methods**

Plans and specifications will include items 1 through 5, above, plus the following:

10. Herbicide references from CSU or the CO Dept. of Agriculture for management of the target herbaceous weed species
11. Selected herbicide
12. Application method and timing
13. WIN-PST interaction risk
14. Required mitigation, grazing restrictions, timing considerations or other factors

#### **For Biological Treatment Methods**

Plans and specifications will include items 1 through 5, above, plus the following:

15. Biological treatment references from CSU or the CO Dept. of Agriculture for the selected biological agent used to contain and manage the target species
16. Document release date, kind, and number of agents
17. Timing, frequency, duration and intensity of grazing or browsing
18. Desired degree of grazing or browsing use for effective management of target species
19. Maximum allowable degree of use on desirable non-target species

20. Special mitigation, precautions, or other requirements associated with the selected treatment(s)

### **OPERATION AND MAINTENANCE**

#### **Operation**

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

Rocky Mountain Poison and Drug Center,  
Denver, CO 1-800-222-1222

National Pesticide Information Center  
(NPIC) Corvallis, Oregon (for non-emergency information) 1-800-858-7384,  
Mon-Fri, 6:30 a.m. to 4:30 p.m. PST

National Chemical Transportation  
Emergency Center (CHEMTRAC): 1-800-424-9300

Follow herbicide 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.greenbook.net/>

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**

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