Natural Resources Conservation Service

CONSERVATION PRACTICE STANDARD

WOODY RESIDUE TREATMENT

CODE 384

(ac)

DEFINITION

The treatment of residual woody material that is created due to management activities or natural disturbances.

PURPOSE

This practice is used to accomplish one or more of the following purposes–

- Reduce hazardous fuels
- Reduce the risk of harmful insects and disease
- Protect/maintain air quality by reducing the risk of wildfire
- To improve access for management purposes
- Improve access to forage for livestock and wildlife
- Develop renewable energy systems
- Enhance aesthetics
- Reduce the risk of harm to humans and livestock
- Improve the soil organic matter
- Improve the site for natural or artificial regeneration

CONDITIONS WHERE PRACTICE APPLIES

On all lands, except active cropland, where woody residue requires treatment.

CRITERIA

General Criteria Applicable to All Purposes

The condition and extent of residual woody material must determine the treatment method selected based on the operator's purpose.

Treatment methods (i.e., piling, burning, chipping/masticating, lop and scatter, offsite removal, crushing) will achieve landowner objectives while adequately protecting land and water resources.

Care must be taken to minimize injury to or function of the residual plant communities.

Timing of treatment must coincide with intended purpose(s) and minimize impact on other resources.

Any broadcast burning activities must comply with the Conservation Practice Standard (CPS) Prescribed Burning (Code 338).

NRCS reviews and periodically updates conservation practice standards. To obtain the current version of this standard, contact your Natural Resources Conservation Service State office or visit the Field Office Technical Guide online by going to the NRCS website at https://www.nrcs.usda.gov/ and type FOTG in the search field.

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Any residual woody material left on the site after treatment will not present an unacceptable fire, safety, environmental, or pest hazard. Such remaining material will not interfere with the intended purpose or other planned management activities.

Additional Criteria Applicable to Reduce Hazardous Fuels

Reduce the amount of fuels to an acceptable level by controlling height, size, amount, and distribution.

Additional Criteria to Reduce the Risk of Harmful Insects and Disease

The degree, intensity, and timing of treatment must consider the characteristics of harmful insects or diseases to enhance the effectiveness of control.

Additional Criteria to Protect/Maintain Air Quality by Reducing the Risk of Wildfire

Activities will be consistent with established regulations and guidelines for particulate matter (PM) 10 and PM2.5 emissions, ozone precursors (nitrogen oxides (NOx) and volatile organic compounds (VOCs), as well as smoke and fugitive dust, and State and local permit requirements.

Additional Criteria to Improve Access to Forage for Livestock and Wildlife

Woody material must be piled, contour windrowed, or removed sufficiently to allow access by livestock and wildlife, and to maximize forage growth.

Additional Criteria for Develop Renewable Energy Systems

Removal of woody material must not be detrimental to the site and will adequately protect soil and water resources. Adequate woody material will be left to maintain or improve nutrient and organic matter cycling.

Additional Criteria to Enhance Aesthetics

Woody material left on the site that is scattered, windrowed or piled will be further treated to meet client objectives and any State or local requirements for aesthetics and visual resources.

Additional Criteria to Reduce the Risk of Harm to Humans and Livestock

Woody material left on the site that is scattered, piled or windrowed will be further treated to meet client objectives and any State or local requirements for safe use of the area.

Additional Criteria to Improve Soil Organic Matter

Woody material will be of a size and closeness to soil to accelerate in decomposition.

Additional Criteria to Improve the Site for Natural or Artifical Regeneration

Woody material will be treated to complement treatments specified in CPS Tree/Shrub Site Preparation (Code 490).

CONSIDERATIONS

When feasible, consider chipping, shredding, offsite disposal, biofuel composting, or other techniques in lieu of burning.

When determining method and timing of woody material treatment, consider air quality regulations, burning regulations, available resources, ability to use woody biomass, and future regeneration needs.

Consider effects on soil carbon when off-site removal of woody material is to occur.

Consider wildlife habitat needs (e.g., large downed wood, snags, brush piles, etc.) when planning the timing of and performing treatment.

Consider establishing artificial habitat (e.g., bat boxes, nesting platforms, rock piles, etc.) where needed.

Consider pollinator needs when planning and performing treatment.

Consider the beneficial and other effects on cultural resources, and threatened and endangered species, natural areas, and wetlands.

PLANS AND SPECIFICATIONS

Specifications for applying this practice must be prepared for each site and recorded using approved specification sheets, job sheets, technical notes and narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

Monitor populations and the potential of damage to site resources by harmful pests and take controlling actions as necessary.

Access by vehicles or people will be controlled during treatment for safety. See CPS Access Control (Code 472).

Monitor vegetation growth. Unwanted vegetation or excessive regrowth may occur, requiring treatment.

REFERENCES

Lowe, K. 2005. Working Paper 13: Treating Slash after Restoration Thinning. Ecological Restoration Institute. Northern Arizona University. Flagstaff, Arizona. https://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/460/rec/1.

Bennett, M., and S. Fitzgerald. 2008. Reducing Hazardous Fuels on Woodland Property: Disposing of Woody Material. Oregon State University Extension publication EC-1574.