

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

CONSERVATION COVER

(Acre)
CODE 327

DEFINITIONS

Establishing and maintaining permanent vegetative cover.

PURPOSE

This practice may be applied to accomplish one or more of the following:

- Reduce soil erosion and sedimentation,
- Improve water quality
- Improve air quality
- Enhance wildlife habitat
- Improve soil quality
- Manage plant pests

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on lands needing permanent vegetative cover. This practice does not apply to plantings for forage production or to critical area plantings.

CRITERIA

General Criteria Applicable to all Purposes

Species shall be adapted to soil, ecological sites, and climatic conditions.

Species planted shall be suitable for the planned purpose and site conditions.

Seeding rates and methods shall be adequate to accomplish the planned purpose. Seeding mixtures and rates of seeding or planting will be selected from the tables and charts in the specifications for this standard. Certified seed shall be used.

Planting dates, planting methods and care in handling and planting of the seed or planting stock shall ensure that planted materials have an acceptable rate of survival. See the attached specifications for planting dates.

Only adapted seed or planting stock shall be used. Vegetative planting material (e.g. sprigs, rhizomes, bulbs) shall be from a reliable supplier.

Site preparation shall be sufficiently adequate to eliminate weeds for establishment and growth of selected species.

Timing and use of equipment shall be appropriate for the site and soil conditions.

All nutrients shall be applied following the nutrient management requirements in the Field Office Technical Guide (FOTG).

No plants listed on the noxious weed list of the state will be established in this practice.

Additional Criteria to Reduce Soil Erosion and Sedimentation

The amount of plant biomass and cover needed to reduce wind and water erosion to the planned soil loss objective shall be determined using the current approved wind and/or water erosion prediction technology.

Additional Criteria for Improving Air Quality

In perennial crop systems such as orchards, vineyards, berries and nursery stock, vegetation established shall provide full ground coverage in the alleyway during mowing and harvest operations.

To sequester carbon, plant cover established will result in a positive CO₂ equivalent value when determined by the current approved carbon prediction technology.

Additional Criteria for Enhancing Wildlife Habitat

Grasses, forbs, shrubs and/or legumes shall be planted in a diverse mix to promote bio-diversity and meet the needs of the targeted species of wildlife.

Maintenance practices and activities shall not disturb cover from May 1 – August 1, the reproductive period for grassland wildlife species.

To benefit insect food sources for grassland nesting birds, spraying or other control of noxious weeds shall be done on a “spot” basis to protect forbs and legumes that benefit native pollinators and other wildlife.

Refer to Practice Standard Upland Wildlife Habitat Management (645) for management criteria and specifications.

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Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact the MN Natural Resources Conservation Service in your area, or download it from the electronic Field Office Technical Guide for Minnesota.

Refer to Biology Job Sheet #8 – “Establishment of Introduced Grasses and Legumes for Wildlife” and, #9 – “Establishment of Native Grasses and Forbs for Wildlife” for additional establishment criteria and specifications.

Additional Criteria for Enhancing Native Habitat for Pollinators

To attract native pollinators, an area must have adequate sources of food, shelter, water, and nesting sites. A variety of wildflowers and grasses will provide native pollinators with food (nectar, pollen, and /or larval host plants). Optional shrubs can provide important shelter, nesting, and over wintering areas for pollinators.

Establish and/or manage sites >1/2 ac. in size that contain a diversity of native grasses, wildflowers, and shrubs.

Plantings shall contain species from each flowering group – early, mid and late flowering season. Plant must remain undisturbed, and be available throughout the growing season.

Refer to Biology Job Sheet #16 – “Native Habitat Development for Pollinators” for additional criteria and specifications.

Additional Criteria to Improve Soil Quality

Plants will be selected on the basis of producing high volumes of organic material to maintain or improve soil organic matter. The amount of biomass needed will be determined using the current soil condition index procedure.

Additional Criteria to Manage Plant Pests

In perennial crop systems such as orchards, vineyards, berries and nursery stock, permanent vegetative cover shall be established and managed according to Land Grant University Integrated Pest Management (IPM) recommendations for the target pest species.

CONSIDERATIONS

This practice may be used to promote the conservation of wildlife species in general, including threatened and endangered species.

Certified seed and planting stock that is adapted to the site should be used when it is available.

In selection and management of plant species, consider long-term land use objectives of the landowner and habitat needs of target wildlife species.

Select plant species best adapted to the soils in the field. Consider the use of sod forming grasses where soil erosion is a concern.

Inoculating legume seed with the proper Rhizobia bacteria should be considered on sites where the legumes to be planted have not been previously grown.

Mowing may be needed during the establishment period to reduce competition from broadleaf annual weeds.

On sites where annual grasses are an expected weed problem it may be necessary to postpone nitrogen fertilizer application until the planted species are well established.

Where applicable this practice may be used to conserve and stabilize archeological and historic sites.

Other conservation practices, such as grassed waterways, terraces, etc. may be needed to complete the erosion control plan.

Consider using native species that are appropriate for the identified resource concern and management objective. Consider trying to re-establish the native plant community for the site.

When new native grass and forb plantings are located within one mile of existing high quality prairie remnants, local ecotypes are preferred for use in the new planting.

Native plant species usually benefit from periodic burning. Burning can stimulate growth by reducing unwanted competition from weedy plants and removing excessive plant residue, therefore helping to maintain plant community diversity. Refer to Prescribed Burning, Practice Code 338, for recommendations.

Consider rotating management and maintenance activities (e.g. mow only one-fourth or one-third of the area each year) throughout the managed area to maximize spatial and temporal diversity.

Where wildlife management is an objective, the food and cover value of the planting can be enhanced by using a habitat evaluation procedure to aid in selecting plant species and providing or managing for other habitat requirements necessary to achieve the objective.

PLANS AND SPECIFICATIONS

Specifications for this practice shall be prepared for each site. They shall include, but are not limited to:

- Recommended species
- Seeding rates and dates
- Establishment procedures
- Other management actions needed to insure an adequate stand

Specifications shall be recorded using approved job sheets, narrative statements in the conservation plan or other acceptable documentation. All specifications shall be consistent with Federal, State and Local regulations.

OPERATION AND MAINTENANCE

Mowing and harvest operations in perennial crop systems such as orchards, vineyards, berries and nursery stock shall be done in a manner which minimizes the generation of particulate matter.

If wildlife habitat enhancement is a purpose, maintenance practices and activities shall not disturb cover during the reproductive period for the desired species. Exceptions should be considered for periodic burning or mowing when necessary to maintain the health of the plant community.

Maintenance measures must be adequate to control noxious weeds and other invasive species.

To benefit insect food sources for grassland nesting birds, spraying or other control of noxious weeds shall be done on a "spot" basis to protect forbs and legumes that benefit native pollinators and other wildlife.

REFERENCES

Establishing and Maintaining Nesting Cover for Wildlife, MDNR Section of Wildlife, 1987.

K.G. Renard, G.R. Foster, G.A. Weesies, K.D.K. McCool and D.C. Yoder. 1997. Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE). Agricultural Handbook Number 703.

Revegetating with Native Grasses, Ducks Unlimited, 1996.

Revised Universal Soil Loss Equation Version 2 (RUSLE@) website:

http://fargo.nserl.purdue.edu/rusle2_dataweb/

USDA–NRCS. MN Biology Job Sheets. EFOTG, Section IV.

<http://efotg.sc.egov.usda.gov/treemenuFS.aspx>

#8 Establishment of Introduced Grasses and Legumes

#9 Establishment of Native Grasses and Forbs

#16 Native Pollinator Habitat Establishment

USDA–NRCS. MN Biology Technical Notes.

<http://www.mn.nrcs.usda.gov/technical/ecs/TechNotes/Biology/biology.html>