

**NATURAL RESOURCES CONSERVATION SERVICE
MONTANA CONSERVATION PRACTICE STANDARD**

CONSERVATION COVER (ACRE)

CODE 327

DEFINITION

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 and pollinator habitat
- Improve soil quality
- Manage plant pests

CONDITION WHERE PRACTICE APPLIES

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

CRITERA

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. Certified seed shall be used. **Calculate seeding rates based on Pure Live Seed (PLS). Seed shall meet all provisions of Federal and State seed law (See**

FOTG, Section I–State/Local laws, Ordinances, Regulations).

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. 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), **Section IV, Practice Standard, Nutrient Management (Code 590).**

Seedbed preparation, seeding rates, dates, depths, fertility requirements, and planting methods will be consistent with the seeding rates published in the Montana Plant Materials Technical Note MT-46 and methods described in Montana Plant Materials Technical Note MT-58.

Species that have dormant seed or hard seed, such as green needlegrass or Indian Ricegrass must calculate PLS based on a tetrazolium test (reported as total viability germination +tz) results rather than on direct germination.

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.

**NRCS, MT
October 2011**

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard contact the Natural Resources Conservation Service.

NOTE: This type of font (**AaBbCcDdEe 123..**) indicates NRCS National Standards.
This type of font (**AaBbCcDdEe 123..**) indicates Montana Supplement.

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 and Pollinator 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 or pollinator.

Determine appropriate food and cover requirements from the FOTG, Section IV, Practice Standard, Upland Habitat Management (Code 645).

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 (SCI)** 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 (see **FOTG, Section IV, Practice Standard, Pest Management (Code 595)**).

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.

Inoculating legume seed with the proper Rhizobium 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.

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.

Seeding mixtures should consist of at least one tall growing and one short growing species.

Consider establishing patches of shrubs and trees to add wildlife habitat diversity.

Where pollinator and wildlife habitat are primary purposes consider less dense seeding rates as long as soil loss is within tolerable soil loss limits.

Use 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.

If a native cover (other than what was planted) establishes, and this cover meets the intended purpose and the landowner's objectives, the cover should be considered adequate.

PLANS AND SPECIFICATIONS

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

- **Location map. Field numbers and a map or sketch of the area to be established**
- **Planning soil map unit**
- **Measured acres**

- **Date practice is scheduled and applied**
- **Date and signature of producer and planner**
- **Operation and maintenance requirements**
- **Documentation of benchmark condition and condition after implementation, i.e., erosion prediction, wildlife enhancement, SCI, etc.**
- **Conservation Cover (Code 327) specification**
- recommended species
- seeding rates and dates
- establishment procedures
- other management actions needed to insure and adequate stand.

Specifications shall be recorded using approved specifications sheets, job sheets, narrative statements in the conservation plan, or other acceptable documentation.

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

Renard, K.G., G.R. Foster, G.A. Weesies, 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.

Revised Universal Soil Loss Equation Version 2 (RUSLE2) website (checked September 2010): http://fargo.nserl.purdue.edu/rusle2_dataweb/

USDA, Natural Resources Conservation Service, FOTG, Section IV, Practice Standard and Specification, Wildlife Upland Habitat Management (Code 645).

USDA, Natural Resources Conservation Service, FOTG, Section IV, Practice Standard and Specification, Nutrient Management (Code 590).