NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

CONSERVATION COVER

(Ac.)

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
When planting or maintaining existing cover, species shall be adapted to soil, ecological sites, and climatic conditions.

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

Species selected will be based on Conservation Practice Standards 550, Range Planting; 512, Pasture Planting; and/or 645, Upland Wildlife Habitat Management.

Seeding rates and methods shall be adequate to accomplish the planned purpose. 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. 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).

Refer to the Herbaceous Design Procedure (550DP) for additional requirements.

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 to Control Classic and Ephemeral Gully Erosion
When converting perennial vegetation to cropland, perennial vegetation within concentrated flow areas shall be preserved or maintained for the purpose of controlling gully erosion assuming that the existing vegetation is adequate for that purpose and the shape of the concentrated flow area will allow for agricultural crop production. Minor shaping is acceptable and should be done in accordance with the Ephemeral Shaping section of the Grassed Waterway (412) standard. Critical Areas where crop production is not feasible due to excessive slope and/or slope length, as indicated by RUSLE2 Erosion prediction results, shall also be protected by preserving existing perennial vegetation. Refer to Critical Area Planting standard (342). Refer also to FOTG Section I:

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact your Natural Resources Conservation Service State Office or visit the Field Office Technical Guide.

**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**

Conservation Cover will be planned and applied in a manner to meet the habitat requirements for wildlife species of concern as determined by an approved habitat evaluation procedure.


Conservation Cover will be planned in a manner that it will not adversely affect threatened or endangered species (plant or animal) or their habitats.

Refer to Upland Wildlife Habitat Management – Upland Game Bird Habitat Design Procedure (645DP) for criteria to establish herbaceous seedings, shrub thickets or brush piles.

**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 (RUSLE2).

**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.

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.

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:

- recommended species,
- seeding rates and dates,
- establishment procedures,
- appropriate job sheets including NE-CPA-8 for grass seeding,
- erosion prediction results,
- other management actions needed to insure and adequate stand

Refer to the seeding requirements in Pasture and Hayland Planting Standard (512), Range Planting Standard (550), or Upland Wildlife Habitat Management Standard (645).

Refer to FOTG Section IV – Range Planting (550) - Herbaceous Vegetation Design Procedures (550DP) for guidance on establishment of vegetation.

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.

Where conservation cover has been maintained in concentrated flow areas for the purpose of controlling gully erosion, it should be inspected at least annually to ensure that it is functioning adequately and to determine if additional conservation treatment is required.

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

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


