NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

CONSERVATION COVER

(Acre)

CODE 327

DEFINITION

Establishing and maintaining permanent vegetative cover.

PURPOSES

- Reduce sheet, rill, and wind erosion and sedimentation.
- Reduce ground and surface water quality degradation by nutrients and surface water quality degradation by sediment.
- Reduce emissions of particulate matter (PM), PM precursors, and greenhouse gases.)
- Improve soil health.
- Enhance wildlife, pollinator and beneficial organism habitat.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on land needing perennial herbaceous vegetative cover. This practice does not apply to plantings for forage production or to critical area plantings. This practice can be applied on a portion of the field.

CRITERIA

General Criteria Applicable to All Purposes

Use of this standard requires compliance with all applicable federal, state, and local laws and regulations.

Only certified seed and planting stock (bulbs, sprigs, plugs) will be used. Certified

seed is cleaned, tested and labeled according to Indiana Seed Law (IC 15-15-1).

Periodic removal of some products such as high value trees, medicinal herbs, nuts, and fruits is permitted provided the conservation purpose is not compromised by the loss of vegetation or harvesting disturbance.

Inoculate legumes at planting time.

Seedbed preparation, species selection, seeding mixes, seeding rates, dates, depths, fertility requirements, site adaptation and planting methods will be consistent with the requirements in the Indiana (IN) Natural Resources Conservation Service (NRCS) Seeding Tool - Calculators, Guidelines and/or Tables found in Section IV of the IN Field Office Technical Guide (FOTG).

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

Additional Criteria to Reduce ground and surface water quality degradation by nutrients and surface water quality degradation by sediment

Species, planting extent/width, and planned management and harvest of vegetation will be suitable to reduce sediment and nutrient losses based on approved processes.

Additional Criteria to Reduce Sheet, Rill, and Wind Erosion and Sedimentation

Determine and maintain the amount of plant biomass and cover needed to reduce wind and water erosion to the planned soil loss

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

objective by using the current approved wind and/or water erosion prediction technology.

Additional Criteria to Reduce Emissions of Particulate Matter (PM), PM Precursors, and greenhouse gases

In perennial crop systems such as orchards, vineyards, berries and nursery stock, establish vegetation to provide full ground coverage in the alleyway during mowing and harvest operations to minimize generation of particulate matter.

Additional Criteria to Enhance Wildlife, Pollinator and Beneficial Organism Habitat

Plant a diverse mixture grasses and forbs species to promote bio-diversity and meet the needs of the targeted species.

When enhancement of wildlife habitat is the primary purpose, IN FOTG Standard (645) Upland Wildlife Habitat Management or (644) Wetland Wildlife Habitat Management will also be used.

Management practices and activities will not disturb cover for grassland species during the primary nesting period of April 1 through August 1.

When disturbance management is necessary to maintain the health of the plant community or habitat needs, see IN FOTG Standard (647) Early Successional Habitat Development/ Management.

When enhancement of pollinator habitat is a purpose, three (3) species of flowering broadleaf plants such as legumes will be planted, one per blooming period.

Locate habitat plantings to reduce pesticide exposures that could harm wildlife, pollinators, and other beneficial organisms.

Rare and Declining Habitat: When the purpose is to restore herbaceous rare and declining habitat such as prairie, sedge meadow, etc., refer to IN FOTG Standard (643) Restoration and Management of Rare and Declining Habitats.

Additional Criteria to Improve Soil Health

To maintain or improve soil organic matter, select plants that will produce high volumes

of above and below ground vegetation to maintain or improve soil organic matter. The amount of biomass needed will be determined using the current soil conditioning index procedure.

CONSIDERATIONS

The considerations section contains information that is optional to the planner.

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

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.

Consider contacting a wildlife biologist for assistance in developing a plan to enhance the acreage for wildlife habitat.

Use native species when available to reestablish the native plant community for the site.

Use native species that are appropriate for the identified resource concern and management objective. Consider reestablishing the native plant community from local sources for the site where possible.

Encouraging plant species diversity and establishing plantings that result in multiple structural levels of vegetation within the conservation cover will maximize wildlife use.

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

To provide habitat for natural enemies of crop pests, select a mix of plant species that provide year round habitat and food (accessible pollen or nectar) for the desired beneficial species. Consider habitat requirements of predatory and parasitic insects, spiders, insectivorous birds and

bats, raptors, and terrestrial rodent predators. Consult Land Grant University Integrated Pest Management recommendations for beneficial habitat plantings to manage the target pest species.

Use a diverse mix of cover plant species that come into bloom at different times and provide a sequence of bloom throughout the year (e.g., plant at least three flowering species from each of the three bloom periods (spring, summer, and fall).

Where practical, 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.

During vegetation establishment, natural mulches, such as wood products or hay, can be used to conserve soil moisture, support beneficial soil life, and suppress competing vegetation.

PLANS AND SPECIFICATIONS

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

- recommended species,
- seeding rates and dates,
- establishment procedures,
- other management actions needed to insure an adequate stand.

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

Where use of grazing livestock is permissible, a grazing plan will be written.

Where use of harvested forage is permissible, a forage harvest management plan will be written.

OPERATION AND MAINTENANCE

Mowing and harvest operations in perennial crop systems such as orchards, vineyards, berries, nursery stock or areas sensitive to air quality, will be completed in a manner

which minimizes the generation of particulate matter.

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

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

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

Annual mowing of the conservation cover stand for general weed control, or cosmetic purposes is not recommended.

Any use of fertilizers, pesticides and other chemicals will not compromise the intended purpose.

Where use of grazing livestock is permissible, a prescribed grazing plan will be followed.

Where use of harvested forage is permissible, a forage harvest management plan will be followed.

Re-vegetate bare spots.

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: http://www.nrcs.usda.gov/wps/portal/nrcs/m ain/national/technical/

Wind Erosion Prediction System (WEPS)

http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/

Preventing or mitigating potential negative impacts of pesticides on pollinators using IPM and other conservation practices. Nat. Agron. Tech Note 9. Washington, DC. http://directives.sc.egov.usda.gov/