



CONSERVATION ENHANCEMENT ACTIVITY

E386128Z - Colorado

CONSERVATION STEWARDSHIP PROGRAM

Enhanced field borders to decrease particulate emissions along the edge(s) of a field

Conservation Practice 386: Field Border

APPLICABLE LAND USE: Crop (Annual & Mixed); Crop (Perennial); Associated Ag Land

RESOURCE CONCERN ADDRESSED: Air Quality Impacts

ENHANCEMENT LIFE SPAN: 10 years

Enhancement Description:

Enhance existing field borders to a width of at least 40 feet and establish a mixture of species that decrease the particulate emissions along the edge(s) of the field.

Criteria:

- Field borders shall be established along selected field edges at a width of at least 40 feet.
- Locate borders to eliminate sloping end rows, headlands, and other areas where concentrated water flows will enter or exit the field.
- Plants selected for field borders will have the physical characteristics to optimize the interception and adhesion of airborne particles (species with a mature height of at least 2 feet). No plant listed by the state as a noxious or invasive species shall be established in the field border ([CO Noxious Weed List A,B,C](#)).
- Seedbed preparation, seeding rates, dates, depths, fertility requirements, and planting methods will be consistent with approved local criteria and site conditions.



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- Ephemeral gullies and rills present in the planned border area will be eliminated as part of seedbed preparation. If present, ephemeral gullies and rills located immediately upslope from the planned border area need to be treated to ensure more of a sheet flow into the planned border area.
- Do not burn the field border.
- Establish plant species with morphological characteristics that optimize interception and adhesion of airborne particulates. Select plants with persistent roots and residue that stabilize soil aggregates and mitigate the generation of airborne particulates.
- Operation and maintenance requirements.
 - Repair storm damage.
 - Remove sediment from above, within and along the leading edge of the field border when accumulated sediment either alters the function of the field border or threatens the degradation of the planted species.
 - Shut off sprayers and raise tillage equipment to avoid damage to field borders.
 - Shape and reseed border areas damaged by animals, chemicals, tillage, or equipment traffic.
 - Do not use the field border as a hay yard or machinery parking lot for any extended period of time, especially if doing so will damage or impair the function of the field border.
 - Schedule mowing, harvest, weed control, and other management activities within the field border to accommodate the plants ability to intercept particulate emissions. Vehicle traffic should be avoided in the field border area.
 - Maintain desired vegetative communities and plant vigor by liming, fertilizing, mowing, disking, or burning and controlling noxious and invasive weeds to sustain effectiveness of the border.
 - Repair and reseed ephemeral gullies and rills that develop in the border.
 - When managing for wildlife, maintenance activities that result in disturbance of vegetation should not be conducted during the primary nesting, fawning and calving seasons. Activities should be timed to allow for regrowth before the growing season ends whenever possible.
 - Periodic removal of some products such as medicinal herbs, nuts, and fruits is permitted provided the conservation purpose is not compromised by the loss of vegetation or harvesting disturbance.



- Avoid vehicle traffic when soil moisture conditions are saturated.
- Maintain records of the field border maintenance as needed by the land user.

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Documentation and Implementation Requirements:

Participant will:

- Prior to implementation, prepare the planned acres for vegetation establishment. Refer to NRCS Conservation Practice Standard Field Border (Code 386). (NRCS will provide technical assistance, as needed.) Total planned amount of field border extension = _____ feet

- Prior to implementation, select adapted species of permanent grass, forbs and/or shrubs that accomplish the design objective and are best suited to site conditions. (NRCS will provide technical assistance, as needed.)

Species	Seeding Rate (lb/ac pure live seed)	Note specific species characteristic(s)

- Prior to implementation, determine liming and fertilizer requirements, select planting technique and timing appropriate for the site and soil conditions. (NRCS will provide technical assistance, as needed.)

Planting Date	
Planting Technique	
Lime and Fertilizer Requirements	

- During implementation, install and maintain erosion control measures as needed for the site. (NRCS will provide technical assistance, as needed.)
- During implementation, notify NRCS of any planned changes to verify changes meet NRCS enhancement criteria.
- During implementation, protect the planting from plant and animal pests and fire.
- After implementation, maintain and protect the planting from plant and animal pests and fire.



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- After implementation, verify the total amount of field border implemented. Total implemented amount of field border extension = _____ feet

NRCS will:

- Prior to implementation, verify the enhancement is planned within the field(s) or farm boundary.
- Prior to implementation, provide and explain NRCS Conservation Practice Field Border (Code 386) as it relates to implementing this enhancement.
- Prior to implementation, verify the enhancement is planned for acres that have been appropriately prepared for vegetation establishment. Total planned amount of field border extension = _____ feet
- Prior to implementation, verify no plants on the Federal or state noxious weeds list are included.
- As needed, prior to implementation, NRCS will provide technical assistance:
 - Planning site preparation meeting NRCS Conservation Practice Standard Field Border (Code 386).
 - Selecting the adapted species of permanent grass, forbs and/or shrubs that accomplish the design objective and are best suited to site conditions.
 - Selecting planting techniques and timing appropriate for the site and soil conditions.
 - Planning the use of additional erosion control, as needed for the site.
 - Preparing specifications for applying this enhancement for each site using approved state implementation requirements, national technical notes, appropriate state technical notes, and narrative statements in the conservation plan, or other acceptable documentation.
- During implementation, evaluate any planned changes to verify they meet the enhancement criteria.



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- After implementation, verify the vegetation was established to specifications developed for the site.
- After implementation, verify the planting is protected from pests and fire.
- After implementation, verify all erosion control needed for the site is functioning and is maintained to specifications developed for the site.
- After implementation, verify the total amount of field border implemented. Total implemented amount of field border extension = _____feet

Colorado Documentation Requirements

Complete practice specifications on the Field Border (386) Implementation Requirements document for the planned purpose of enhancing field borders to decrease particulate emissions along the edges of the field.

The following components shall be included for recording this specification:

- o Field Border widths (minimum 30 feet wide) and lengths based on local design criteria.
- o Field Border location(s) within the field(s) or farm boundary.
- o Species to be used and the location and planting density of the species used.
- o Site preparation requirements.
- o Timing of planting and planting method.
- o Liming or fertilizer requirements.

NRCS Documentation Review:

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name _____ Contract Number _____

Total Amount Applied _____ Fiscal Year Completed _____

NRCS Technical Adequacy Signature Date

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