United States Department of Agriculture

Conservation Enhancement Activity

CONSERVATION STEWARDSHIP PROGRAM

E386A

Enhanced field borders to reduce soil erosion 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: Soil

ENHANCEMENT LIFE SPAN: 10 years

Enhancement Description:

Enhance existing field borders to a width of at least 30 feet and establish a single species or mixture of species that provide a dense ground cover along the edge(s) of the field.

Criteria:

- Field borders shall be established at selected field edges at a width of at least 30 feet.
- Locate borders to eliminate sloping end rows, headlands, and other areas where concentrated water flows will enter or exit the field.
- Orient plant rows as closely as possible to perpendicular to sheet flow direction (water erosion) or most erosion wind directions (wind erosion).
- Field borders shall be established to adapted species of permanent grass, forbs and/or shrubs that accomplish the design objective.
- Plants selected for field borders will have the physical characteristics necessary to control wind and water erosion to tolerable levels on the field border area. No plant listed by the state as a noxious or invasive species shall be established in the field border.
- Seedbed preparation, seeding rates, dates, depths, fertility requirements, and planting methods will be consistent with approved local criteria and site conditions.

- 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.
- Field border establishment, in conjunction with other practices, will be timed so that the soil will be adequately protected during the critical erosion period(s).
- Establish stiff-stemmed, upright grasses, grass/legumes or forbs to trap water- borne soil particles.
- The amount of surface and/or canopy cover needed from the field border shall be determined using current approved water and wind erosion prediction technology. Soil erosion estimates shall account for the effects of other practices in the management system.
- 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.
  - 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.
  - Minimally invasive vertical tillage (e.g. paraplowing) may be performed in rare cases where compaction and vehicle traffic have degraded the field border function. The

purpose of the tillage is strictly to relieve soil compaction and increase infiltration rates to provide a better media for reestablishment of vegetation and field border function.

- 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.

CONSERVATION STEWARDSHIP PROGRAM

Documentation and Implementation Requirements:

Participant will:

☐ Prior to implementation, prepare the planned area 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, 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 Required	

☐ 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.

☐ After implementation, verify the total amount of field border implemented. Total implemented amount of field border extension = _____feet

CONSERVATION STEWARDSHIP PROGRAM

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:
    - o Planning site preparation meeting NRCS Conservation Practice Standard Field Border (Code 386).
    - o Selecting the adapted species of permanent grass, forbs and/or shrubs that accomplish the design objective and are best suited to site conditions.
    - o Selecting planting techniques and timing appropriate for the site and soil conditions.
    - o Planning the use of additional erosion control, as needed for the site.
    - o 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.
- ☐ 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

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

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

386 - Field Border
Implementation Requirements

Producer: _____ **Project or Contract:** _____

Location: _____ **County:** _____

Farm Name: _____ **Tract Number:** _____

Practice Location Map

(showing detailed aerial view of where practice is to be installed on farm/site, showing all major components, stationing, relative location to any landmarks, and survey benchmarks)

Index

Description of work:

NRCS Review Only

Designed By: _____ **Date:** _____

Checked By: _____ **Date:** _____

Approved By: _____ **Date:** _____

386 – Field Border
Implementation Requirements

The Practice Purpose(s):

___ Reduce erosion from wind and water
___ Protect soil and water quality
___ Provide wildlife food and cover and pollinator habitat
___ Increase carbon storage
___ Improve air quality

Field Number/Location: _____ **Acres Installed:** _____ **Seeding Date:** _____

Average Width: _____ **Minimum Width:** _____ **Field Border Length:** _____

Site Preparation: _____

Planting Method: _____

Planting Description (*e.g.* shrubs established on outside edge of area, *etc.*):

_____

SEEDING RATES AND SPECIES (woody species units are plants/linear ft)

Plant species	Lbs/acre of seed (PLS)	Total lbs of seed for planned acreage
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
TOTALS =>	0.00	0.00

FERTILIZERS AND AMENDMENTS

Fertilizer Element	Fertilizer Form	Fertilizer Amount (lbs/acre)
N	*e.g. DAP*	as N
P	*e.g. DAP*	as P_2O_5
K	*e.g. K_2SO_4*	as K_2O
S	*e.g. K_2SO_4*	as S
Lime		
Gypsum		

Operation and Maintenance: (check all that apply)

_____ Repair storm damage.

_____ Remove sediment from above or within the field border when accumulated sediment either alters the function of the field border or threatens the degradation of the planted species' survival.

_____ 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.

_____ Maintain desired vegetative communities and plant vigor by liming, fertilizing, mowing, disking, or burning and controlling noxious weeds to sustain effectiveness of the border.

_____ Repair and reseed ephemeral gullies and rills that develop in the border.

_____ Minimally invasive tillage (e.g. paraplowing) may be performed in rare cases where compaction and vehicle traffic have degraded the field border function. The purpose of the tillage is strictly to decrease bulk density and increase infiltration rates so as to provide a better media for reestablishment of vegetation and field border function.

_____ Maintenance activities that result in disturbance of vegetation should not be conducted during the nesting season of grass nesting birds.

_____ Avoid vehicle traffic when soil moisture conditions are saturated.