

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

FIELD BORDER

(Ac.)

CODE 386

DEFINITION

A strip of permanent vegetation established at the edge or around the perimeter of a field.

PURPOSES

1. Reduce erosion from wind and water
2. Soil and water quality protection
3. Management of harmful insect populations
4. Provide wildlife food and cover

CONDITIONS WHERE PRACTICE APPLIES

At the edges of cropland fields and to connect other buffer practices within the field. May also apply to recreation land or other land uses where agronomic crops are grown.

CRITERIA

General Criteria Applicable To All Purposes

1. Minimum field border widths shall be based on local design criteria specific to the purpose or purposes for installing the practice. The minimum width shall be one rod wide. When the Field Border is used as "turn rows" the width shall be designed wide enough to allow adequate turning room for equipment.
2. The field borders will be established to adapted species of permanent grass, legumes, and/or shrubs. See "Appendix A - Seeding Tables", Section IV, FOTG. Use species identified for filter strips and adapted to the site.
3. Field borders will be established around the field edges to the extent needed to meet the resource needs and producer objectives.
4. Plant material, seedbed preparation, seeding rates, dates, depths, and planting methods will be consistent with approved local criteria. See "Appendix A - Seeding Tables", Section IV, FOTG.
5. Ephemeral gullies and rills present in the planned border area will be smoothed as part of seedbed preparation.

Additional Criteria To Reduce Erosion From Wind And Water

Wind Erosion Reduction

1. Locate borders around the entire perimeter of the field, or as a minimum, provide a stable area on the upwind edge of the field as determined by prevailing wind direction data.
2. Plant stiff-stemmed, upright grasses to trap saltating soil particles.
3. Minimum height of grass shall be one foot during the critical erosion period (April thru Mid June).

Water Erosion Reduction

Locate borders around entire perimeter of the field, or as a minimum, install borders to eliminate sloping end rows, headlands, and other areas where concentrated water flows will enter or exit the field.

Additional Criteria To Protect Soil And Water Quality

1. Reducing Runoff and Increasing Infiltration

Locate borders around entire perimeter of the field, or as a minimum, install borders to eliminate sloping end rows, headlands and other areas where concentrated water flows will enter or exit the field. The minimum width is 33 feet.

2. Maintaining Field Setback Distances For Manure and Chemical Applications

Border widths will be designed to conform to minimum field application setback widths established by state or local regulations. The minimum width is 33 feet.

3. Sediment Trapping

Locate borders around the entire perimeter of the field, or as a minimum, in areas where runoff enters or leaves the field. The minimum width is 25 feet.

4. Reducing Soil Compaction from Equipment Parking and Traffic

Border widths will be designed to accommodate equipment parking, loading/unloading equipment, grain harvest operations, etc.

Additional Criteria For Management Of Harmful Insect Populations.

1. Provide a Harbor For Beneficial Insects

Include herbaceous plants that attract beneficial insects. See planning considerations for including shrubs. Mowing, harvesting, and pesticide applications will be scheduled to accommodate life cycle requirements of the beneficial insects.

or

2. Provide a Habitat to Cause Pest Insects to Congregate

Select plants for the field border that attract pest insects. Use mechanical, cultural, and/or chemical techniques to reduce pest populations when and where they congregate in the field border.

Additional Criteria To Provide Wildlife Food And Cover

1. Plants that provide wildlife food and cover shall be used.
2. Mowing, harvest, and weed control activities within the field border will be scheduled to accommodate reproduction and other requirements of target wildlife species. Avoid mowing or harvest prior to July 15th to protect the nesting wildlife.

PLANNING CONSIDERATIONS

1. Field borders are more effective and provide more environmental benefits when planted around the entire field.
2. Field borders enhance the aesthetics and provide stability around the field edge. They also provide turn and travel areas for equipment and reduce airborne dust
3. To increase trapping efficiency, consider establishing a narrow strip of stiff-stemmed upright grass at the crop/field border interface.

4. Field borders can be used to comply with required field setback distances applicable to manure and chemical applications.
5. Wildlife enhancement and other benefits of native plants should be discussed during planning. Native species should be used when feasible and meet producer objectives.
6. Consider overseeding the border with legumes for plant diversity and wildlife benefits.
7. Schedule mowing, harvesting, and weed control to accommodate wildlife nesting needs and other special requirements or purposes.
8. Waterbars or berms may be needed to breakup or redirect concentrated water flows within the borders.
9. If bank stabilization is a concern, select fibrous deep-rooted plants.
10. Consider plants tolerant to sediment deposition and chemicals planned for application.
11. Rows of shrubs (windbreak/shelterbelt, 380) adjacent to field borders will often enhance field borders ability to harbor beneficial insects, and may also provide additional wildlife benefits.
12. If installation or maintenance of the practice has potential of affecting cultural resources (Archaeological, historic, historic landscape, or traditional cultural properties), follow NRCS state policy for considering cultural resources.

PLANS AND SPECIFICATIONS

Plans and specifications are to be prepared for the practice site. The following items should be specified. A job sheet is available to document these items:

1. Border widths and lengths based on local design criteria
2. Location within the field or farm boundary
3. Vegetation to be used
4. Site preparation
5. Planting method
6. Liming or fertilizer requirements
7. Operation and maintenance requirements

The minimum documentation for this practice is outlined on the last page of this standard.

OPERATION AND MAINTENANCE

1. Field borders require careful management and maintenance for performance and longevity.
2. The following will be planned and applied as needed:
 - Storm damage repair.
 - Sediment removal - when 6 inches of sediment have accumulated at the field border/cropland interface.

REFERENCES

National Standard Field Border (386), March 1999
Jobsheet 386

Practice Documentation For: <i>Field Border - 386</i>
The following documentation must be in the case folder or engineering subfolder.
Practice Planning
<ol style="list-style-type: none"> 1. Is the practice part of a conservation plan? 2. Have the purpose(s) for the practice been identified? 3. Is the location of the practice identified on a map or plan drawing?
Practice Design
<p>Have the following design criteria been addressed?</p> <ol style="list-style-type: none"> 1. Border widths and lengths. 2. Location within the field or farm boundary 3. Vegetation to be used, seeding rate, time, and method of application. 4. Liming or fertilizer requirements
Practice Installation / Application
Does the practice meet the minimum criteria for the planned purpose(s)?
<p>Have the following criteria been documented in the assistance notes or practice jobsheet?</p> <ol style="list-style-type: none"> 1. Type of vegetation established. 2. Quality of vegetation established. 3. Acres established.
Practice Deficiencies
If applicable, have the practice deficiencies been communicated with the decisionmaker?
Practice Maintenance
<p>Have the following maintenance actions been communicated to the decisionmaker?</p> <ol style="list-style-type: none"> 1. Storm damage repair. 2. Sediment removal - when 6 inches of sediment have accumulated at the field border/cropland interface. 3. Shut off sprayers and raise tillage equipment to avoid damage to field borders. 4. Shape and reseeded border areas damaged by chemicals, tillage or equipment traffic. 5. Fertilize, mow, harvest, and control noxious weeds to maintain plant vigor. 6. Ephemeral gullies and rills that develop in the border will be filled and reseeded.
Other Comments: