

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE SPECIFICATION GUIDE SHEET**

FILTER STRIP

(Ac.)
CODE 393

GENERAL CRITERIA APPLICABLE TO ALL PURPOSES:

Criteria for establishment of vegetation (plant suitability, seeding rates, seedbed preparation, seeding depth, weed control, etc.) will be consistent with South Dakota (SD) Range Technical Note No. 4. Refer to Table 4 of SD Range Technical Note No. 4 for species adaptability and Table 2 for growth characteristics and seeding rates.

- A. A minimum of two rhizomatous grass species must be used with the exception of Reed canarygrass or Creeping foxtail which may be seeded as a single species on appropriate sites.
- B. The seeding composition will consist of a minimum of **ninety percent** rhizomatous grass species with the **exception** of tall wheatgrass which can occupy up to fifty percent of the of the seed mixture on saline areas. Each rhizomatous grass used to meet the 2 species minimum will not be less than **10 percent** of the seeding composition. Refer to Table 4 of SD Range Technical Note No. 4 for appropriate species selection with the **exception** of Smooth brome grass which will **not be allowed** as a major component of the seed mixture.
- C. Legumes and/or bunch grass species can be included, but will not occupy more than **10 percent** of the total seeding composition. Smooth brome grass excluded under item B. above may also be included in this minor component on the seed mixture (Refer to Table 2 of SD Range Technical Note No. 4 for growth characteristics and seeding rates).

Plant species must be selected according to the type and quantity of pollutant contained in the run-on and to the growth condition during the time of the year that the pollutant can be expected to move as overland flow. (An example of proper species selection would be to select atrazine tolerant species if atrazine is applied to the contributing watershed.)

Salt tolerant perennial vegetation will be planted in areas with occurrences of soils with limitations due to saline, saline-sodic, or sodic conditions.

Filter strip size should be adjusted to a greater flow length to accommodate the turning of planting and harvesting equipment.

Filter strips will be placed in areas receiving primarily overland sheet flow.

Plants selected for filter strips should be actively growing during the expected run-on period.

The selected plant species must be compatible with other objectives of the land user.

**ADDITIONAL CRITERIA TO REDUCE SEDIMENT, PARTICULATE ORGANICS, AND
SEDIMENT-ADSORBED CONTAMINANT LOADINGS IN RUNOFF**

The length of flow through vigorous vegetation for trapping sediment shall be at least 20 feet for slopes of less than three percent, and 25 feet for slopes 3 to 10 percent. Filter strips will not be established on slopes greater than 10 percent for this purpose.

ADDITIONAL CRITERIA TO REDUCE DISSOLVED CONTAMINANTS IN RUNOFF

The length of flow through vigorous vegetation to remove pollutants such as nutrients and pesticides shall be at least 30 feet for slopes of less than three percent, and increase 10 ft./1 percent slope above 3 percent up to 10 percent (30-100 feet for slopes 3-10 percent). Filter strips will not be established on slopes greater than 10 percent for this purpose.

GUIDELINES FOR OPERATION AND MAINTENANCE

Development of rills and small channels within filter areas must be minimized. Needed repairs must be made immediately to reestablish sheet flow. Remove unevenly deposited sediment accumulation that will disrupt sheet flow, reseed disturbed areas and take other measures to prevent concentrated flow through the filter strip. A shallow furrow on the contour across the filter can be used to reestablish sheet flow. Vegetation must be maintained in a vigorous condition. If livestock have access to the filter area, it must be fenced to control grazing.

Producers should avoid filter strips when applying herbicides that will damage established vegetation or hinder establishment of vegetation. Any damage to vegetation caused by herbicides must be promptly repaired.

Filter areas should be mowed or grazed periodically (every two to five years) to maintain plant vigor. Mowing or grazing should be done during the growing season when traffic will not damage the filter and the likelihood of an erosive rainfall is low. If livestock have access to the filter area, it must be fenced to control grazing. Where grazing is used for maintenance, grazing will be done with high animal densities for a short period of time, i.e., 5 to 6 AU's/acre, for 3 to 5 days.