

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

FILTER STRIP

(ac.)
CODE 393

GENERAL CRITERIA APPLICABLE TO ALL PURPOSES:

Criteria for establishment (plant suitability, seedbed preparation, seeding depth, weed control, etc.) of vegetation will be consistent with South Dakota Range Technical Note No. 4 (refer to Table 4 for species adaptability and Table 2 -Full Seeding Rates -South Dakota Range Technical Note No. 4) The species composition (minimum of two grass species) and seeding rates will be selected from Table 1 of this specification guide sheet.

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.

TABLE 1
393 – FILTER STRIP
SEEDING COMPOSITION AND RATES ^{1/}

	Number of seeds per PLS Pound
Native Grasses	
Big bluestem	176,000
Indiangrass	193,000
Reed canarygrass	530,000
Sand bluestem	113,000
Switchgrass	390,000
Western wheatgrass	112,000
Prairie cordgrass	224,000
Native Legumes	
Illinois Bundleflower	60,000
Purple prairieclover	290,000
White prairieclover	278,000
Canada milkvetch	266,000
Introduced Grasses	
Creeping foxtail	750,000
Intermediate wheatgrass	88,000
Pubescent wheatgrass	88,000
Tall wheatgrass	79,000
Introduced Legumes	
Alfalfa	210,000
Alsike clover	680,000
Birdsfoot Trefoil	418,000
Cicer milkvetch	134,000
Sainfoin	22,000

^{1/}The composition of a seeding will be at a minimum of two grass species with the exception of Reed canarygrass or Creeping foxtail which may be seeded as a single species.

The minimum amount of a grass species in any mix is 10 percent.

Legumes will not occupy more than ten percent in any mix.

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.

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.