

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

DIVIDED SLOPE FARMING

(acre)

CODE 196 CA INTERIM

DEFINITION

Farming sloping land in such a way that a portion of the slope is in a condition to resist water erosion with vegetation and/or residue during the critical erosion period.

PURPOSES

To reduce water erosion on cropland.

CONDITIONS WHERE PRACTICE APPLIES

On eroding cropland where short slopes on irregular, complex topography make stripcropping impractical. This practice is not a substitute for stripcropping. If it is physically possible to strip, then divided slope farming is not applicable.

CRITERIA

The overall width of the two divides or halves shall not exceed 600 feet unless part of the slope is in grass. Class II soils on less than 7 percent slopes are excluded from the width limitation.

Locate the dividing line to dissect the steepest portion of the slope. Lay out the division line as close to the contour as practical. See Contour Farming practice 330 for contouring guidelines.

Crop the divided slope in such a manner that one of the portions provides good water intake and erosion protection during the critical period with one of the following:

Standing grain stubble over winter.

Chiseled grain stubble over winter.

Fall no-till after small grain.

Fall recrop with surface residues providing greater than 30 percent cover after seeding.

Rough uphill Fall plow after low residue crops if held for spring seeding.

Early Fall seeding after fallow with 50 percent or more green cover by December 1 if residue cover is less than 30 percent after seeding.

Grass Strip

Minimum width of the grass strip is 12 feet but can be expanded to 66 feet (one chain) or more where person desires to use the grass for set aside purposes.

At least 60 percent ground cover of desirable and/or planted species must be maintained during the critical erosion period.

On sites judged to contain a good stand of desirable species, do not specify any seeding mixture. Seeding mixtures and rates shall be in conformance with the respective MLRA Vegetative Guide in the Field Office Technical Guide. When coated seed is used, adjust seeding rates to compensate for the weight of coating.

After considering any fertilizer carry over from the previous crop and the amount needed for stand establishment, specify any fertilizer required. Nitrogen at the rate of 40 pounds per acre is needed to establish grasses. Phosphorus at the rate of 22 pounds per acre is needed to establish legumes. When strips will be planted to commercial crops, base fertilizer use on local usage for that crop.

CONSIDERATIONS

Some fields may lend themselves to strips on some portion of the field and divided slopes on the rest. The correct practice should be used in each case and then reported separately.

Provide access to each part of the field and locate travel lanes on the flattest slopes where ever possible.

Balance crop acreage to fit the crop rotation. Locate the division line to reduce the amount of point rows with the key equipment.

Consider grassed access areas. Consider a permanent grass filter strip on the division line between the upper and lower half of the slope. Where grass strips will be used, select species that will be compatible with the crop cultural operations.

When soils are coarse sandy, gravelly or granitic, fertilizer rates can be reduced 50 percent. When planting perennial grasses alone, do not fertilize at planting time. When planting a mixture of perennial and annual grasses, reduce the fertilizer rate by 50 percent. When fertilizer rates are reduced or when perennials are not fertilized, the balance of the fertilizer needs to be applied at the beginning of the next growing season.

On land where crop residues are present or will result from the existing or planned crop, minimize seedbed operations to maintain adequate residues on the surface to protect the new seedlings. When available, also specify a no-till drill or similar seed drill be used.

Endangered Species Considerations

Determine if installation of this practice with any others proposed will have any effect on any federal or state listed Rare, Threatened or Endangered species or their habitat. NRCS's objective is to benefit these species and others of concern or at least not have any adverse effect on a listed species. If the Environmental Evaluation indicates the action may adversely affect a listed species or result in adverse modification of habitat of listed species which has been determined to be critical habitat, NRCS will advise the land user of the requirements of the Endangered Species Act and recommend alternative conservation treatments that avoid the adverse effects. Further assistance will be provided only if the landowner selects one of the alternative conservation treatments for installation; or at the request of the landowners, NRCS may initiate consultation with the Fish and Wildlife Service, National Marine Fisheries Service and/or California Department of Fish and Game. If the Environmental Evaluation indicates the action will not affect a listed species or result in adverse modification of critical habitat, consultation generally will not apply and usually would not be initiated. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Some species are year-round residents in some streams, such as, freshwater shrimp. Other species, such as steelhead and salmon, utilize streams during various seasons. Be aware that during critical periods, such as spawning, eggs in gravel's, and rearing of young may preclude activities in the stream that may directly affect the stream habitat during those periods. For example there should be no disturbance of stream gravel beds that may have eggs in them. That could include any equipment in the stream or even walking in the stream or work upstream that may result in sediment depositing in the gravel beds. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Water Quantity

This practice may have a minor effect on the quantity of surface and ground water. If there are large areas involved, there may be a reduction of surface runoff and increased infiltration and percolation.

Water Quality

This practice may reduce soil erosion and sediment delivery to surface waters. Plants may take up more of the nutrients in the soil, reducing the amount that can be washed into surface waters or leached into ground water.

PLANS AND SPECIFICATIONS

Plans and specifications are to be prepared for each field including drawings showing the approximate location of the division line and any grass strip.

Identify the planned species and the critical water erosion period on the Practice Requirement sheet.

OPERATION AND MAINTENANCE

Maintenance needed for this practice includes periodic fertilization of the grass strip, control of noxious weeds and other objectional weeds in the grass strip, and replanting the grass strip when ground cover falls below 60 percent. Periodically move the division line a few feet up the slope and down the slope to avoid ridging and undercutting.

EXAMPLE LAYOUT

