

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

STRIPCROPPING, FIELD

(acre)
CODE 586

DEFINITION

Growing crops in a systematic arrangement of strips or bands across the general slope (not on the contour) to reduce water erosion. The crops are arranged so that a strip of grass or a close-growing crop is alternated with a clean-tilled crop or fallow.

PURPOSES

To help control erosion and runoff on sloping cropland where contour stripcropping is not practical.

CONDITIONS WHERE PRACTICE APPLIES

On sloping cropland and on certain recreation and wildlife land.

CRITERIA

Parallel field strips will be laid out across the general slope in a manner that reduces row gradients but does not qualify as stripcropping contour.

Maximum width of strips will be 200 feet on slopes up to 10 percent and 100 feet on slopes exceeding 10 percent.

CONSIDERATIONS

In grain-fallow systems, fallowed strips will usually need straw residue cover for the practice to provide effective erosion control.

The effect of strips is a reduction of the support practice factor "P" when using the USLE or RUSLE.

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 gravels 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 reduce the volume and rate of surface runoff, by increasing the amount of water that infiltrates into the soil. Base flow in nearby channels may be extended. When the quantity of surface water is reduced, there is a potential for more percolation increasing the quantity of ground water.

1. Effects on the water budget, especially on volumes and rates of runoff, infiltration, evaporation,

transpiration, deep percolation and ground-water recharge.

2. Variability of practice's effects caused by seasonal weather variations.
3. Potential for a change in plant growth and transpiration because of changes in the volume of soil water.

Water Quality

This practice may reduce erosion and the delivery of sediment and related substances to the surface waters. The practice may increase infiltration and, when there is sufficient water available, may increase the amount of leachable pollutants moved toward the ground water.

Since this practice is not on the contour, there will be areas of concentrated flow, from which detached sediment, adsorbed chemicals and dissolved substances will be delivered more rapidly to the receiving waters. The sod strips will not be efficient filter areas in these areas of concentrated flow.

1. Filtering effects of vegetation on movement of sediment and dissolved and sediment-attached substances.
2. Effects on erosion and the movement of sediment, pathogens, and soluble and sediment-attached substances carried by runoff.
3. Potential for development of saline seeps or other salinity problems resulting from increased infiltration near restrictive layers
4. Effects on the visual quality of downstream water resources.

PLANS AND SPECIFICATIONS

Specify width of strips for different crops, percentage of slopes, and soils.

Specifications must be supported by drawings giving steepness of slope, strip widths, and crops to be grown.

OPERATION AND MAINTENANCE

Maintenance needed for this practice includes protecting the permanent guide rows for each strip, periodic inspection and repairs to runoff water outlets, and protecting up and down hill farm roads from erosion.