



Contour Buffer Strips

Conservation Practice Job Sheet

332

Natural Resources Conservation Service (NRCS)

April 1997

Landowner _____



Definition

Contour buffer strips are strips of perennial vegetation alternated with wider cultivated strips that are farmed on the contour.

Purpose

The benefits of farming on the contour and practicing crop residue management make contour buffer strips an effective conservation practice. This practice is further enhanced when used with other conservation practices, such as conservation tillage and crop rotation.

Contour buffer strips slow runoff and trap sediment. Grass strips established on the contour can significantly reduce sheet and rill erosion. Sediment, nutrients, pesticides, and other contaminants are removed from the runoff as they pass through the buffer strip. Grass strips also provide food and nesting cover for wildlife.

Where used

- On cropland where sheet and rill erosion are problems. Contour buffer strips are an excellent filter for runoff and will improve surface water quality.
- Where contouring is practical. Contour buffer strips are unsuitable in fields with irregular, rolling topography where contouring is impractical.

Requirements for establishing contour buffer strips

Contour buffer strip layout

Recommendations for establishing contour buffer strips include a minimum buffer strip width, with strips placed along the contour and farming operations that follow the approximate contour grade. Cultivated strip widths are determined by variables, such as slope, soil type, field conditions, climate, and erosion potential.

Other considerations in layout of contour buffer strips include:

- Cultivated strip widths may be adjusted, generally downward, to accommodate machinery widths.
- Cropping between the buffers strips, including tillage, rotation, and crop residue use, should be acceptable to the soil and site conditions.
- Buffer strips can be used as turn areas if care is taken to minimize disturbance to soil and vegetation.
- Waterways or diversions are needed where runoff concentrates and erosion is a problem.
- Contour buffer strips may be part of a wildlife habitat program.
- Contour buffer strips can be established between terraces to enhance treatment of the hill slope.
- A ratio of cultivated to buffer strip width of between 9:1 and 4:1 is desirable.

Wildlife

When planning for wildlife, adjust buffer width and plant species to meet the needs of the target wildlife species. Avoid mowing during the nesting period.

Specifications

Site-specific requirements are listed on the specifications sheet. Additional provisions are entered on the job sketch sheet. Specifications are prepared in accordance with the NRCS Field Office Technical Guide. See practice standard Contour Buffer Strips (332).

Operation and maintenance

- Mow buffer strips to maintain appropriate vegetative density and height for trapping sediment.
- Fertilize buffer strips according to soil test recommendations.
- Spot seed or renovate buffer strip area damaged by herbicides, equipment, or unusual rainfall events.
- Redistribute sediment accumulations as needed to maintain uniform sheet flow along the crop/buffer boundary.

Contour Buffer Strips – Specifications Sheet

Landowner _____ Field number _____

Purpose (check all that apply)	
<input type="checkbox"/> Reduce sheet and rill erosion	<input type="checkbox"/> Provide wildlife habitat
<input type="checkbox"/> Reduce pollution from runoff	<input type="checkbox"/> Other (specify)

Location and Layout	Strip 1	Strip 2	Strip 3	Strip 4
Cultivated width (ft)				
Buffer strip width (ft)				
Buffer strip length (ft)				
Acres in buffer strip				

Plant Materials Information				
Species/cultivar <i>Strip #1</i>	Seeding rate (lb/acre)	Seeding date	Recommend lime (tons/acre)	Recommend fertilizer N-P ₂ O ₅ -K ₂ O (lb/acre)
1				
2				
3				
4				
<i>Strip #2</i>				
1				
2				
3				
4				
<i>Strip #3</i>				
1				
2				
3				
4				
<i>Strip #4</i>				
1				
2				
3				
4				

Site Preparation
Prepare firm seedbed. Apply lime and fertilizer according to recommendations.
Planting Method(s)
Drill grass and legume seed _____ inches deep uniformly over area. Establish stand of vegetation according to recommended seeding rate. If necessary, mulch newly seeded area with _____ tons per acre of mulch material. May seed small grain as a companion crop at the rate of _____ pounds per acre, but clip or harvest before it heads out.
Maintenance
Buffer strips must be inspected periodically and protected from damage so proper function is maintained. Damaged areas should be repaired and/or revegetated. Sediment accumulations should be redistributed as needed to maintain uniform sheet flow along the crop/buffer boundary.

