

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

CONTOUR FARMING

(Acre)

CODE 330

DEFINITION

Tillage, planting, and other farming operations performed on or near the contour of the field slope.

PURPOSES

- ◆ To reduce sheet and rill erosion.
- ◆ To reduce transport of sediment and other water-borne contaminants.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on sloping land where crops are grown.

Contour farming is most effective on slopes between 2 and 10 percent. The practice is not well suited to rolling topography having a high degree of slope irregularity because of the difficulty meeting row grade criteria.

CRITERIA

General Criteria Applicable to All Purposes

Minimum Row Grade

Row grades for soils with slow to very slow infiltration rates (soil hydrologic groups C or D), or for crops sensitive to ponded water shall be designed with positive row drainage of not less than 0.2 percent on slopes where ponding is a concern.

Maximum Row Grade

The row grade shall be aligned as closely as possible to the contour to achieve the greatest erosion reduction. The maximum grade of rows shall not exceed 2 percent. Up to 3 percent row grade may be permitted within 150 feet of the approach to a *grassed waterway*, *field border* or other stable outlet.

When the row grade reaches the maximum allowable design grade, a new baseline shall be established up or down slope from the last contour line and used for layout of the next contour pattern. All tillage and planting operations will follow the contour line established.

Headlands or End Rows

Keep headlands or end rows in permanent sod where their slope is steeper than 2 percent.

Minimum Ridge Height

The ridge height shall be designed to achieve a minimum of 0.5-2 inch ridge height during the summer.

The minimum ridge height criteria is not required for close-grown crops, such as small grains or the minimum ridge height criteria is not required where the practice *residue management*, *no-till/strip-till* is used on the contour if at least 50 percent surface residue is present between the rows after planting.

Critical Slope Length

A contour farming layout shall not occur on a hill slope that is longer than the critical slope

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| Conservation practice standards are reviewed periodically, and updated if needed. To obtain the most current version of this standard, contact the Natural Resources Conservation Service. |
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length as determined using approved erosion prediction technology by other practices (e.g., *terraces*, *diversions*) that either reduce slope length below the critical length or reduce overland flow velocities are required on these slopes.

Stable Outlets

All runoff from contouring shall be delivered to stable outlets.

CONSIDERATIONS

Increasing residue cover and roughness will change the vegetative cover-management conditions and decrease overland flow velocities.

Prior to design and layout, obstruction removal and changes in field boundaries or shape should be considered, where feasible, to improve the effectiveness of the practice and the ease of performing farming operations.

If using *residue management*, *ridge-till* on the contour, avoid crossing over ridged rows at correction areas. Consider sod turn strips if correction areas are unavoidable.

The width of correction areas, and the distance between baselines, should be adjusted for equipment operation widths.

Grassed waterways or other suitable practices should be used to protect areas of existing or potential concentrated flow erosion.

Contour farming may need to be used in combination with other conservation practices to meet the goals of the conservation management system.

PLANS AND SPECIFICATIONS

The following specifications will be provided to the client and documented in the conservation plan.

- Location of contour marker(s)
- Location of sod turn strips, grass waterway, diversion or other supporting practices
- Tillage and planting operations direction

- Obstruction removal (if applicable)
- Crop rotation
- Percent of crop residue present after planting

OPERATION AND MAINTENANCE

Perform all tillage and planting operations parallel to contour baselines, *diversions*, or *contour buffer strip* boundaries where these practices are used, provided the applicable row grade criteria are met.

Where *diversions*, or *contour buffer strips* are not present, maintain contour markers on grades that, when followed during establishment of each crop, will maintain crop rows at designed grades. Contour markers may be field boundaries, a crop row left untilled near or on an original contour baseline, or other readily identifiable, continuous, lasting marker. All tillage and planting operations shall be parallel to the established marker. If a marker is lost, re-establish a contour baseline within the applicable criteria set forth by this standard prior to seedbed preparation for the next crop.

Farming operations should begin on the contour baselines and proceed both up and down the slope in a parallel pattern until patterns meet. Where field operations begin to converge between two non-parallel contour baselines, establish a correction area that is permanently in sod.

Where contour row curvature becomes too sharp to keep machinery aligned with rows during field operations, establish sod turn strips on sharp ridge points or other odd areas as needed.

Renovate *field borders* as needed to maintain at least 70 percent ground cover. Maintain adequate field border width to allow farm implements room to turn.