

4.2 Contour Farming

Applicability

This Best Management Practice applies to agricultural users whose crops are irrigated on moderately sloping lands.

Description

Contour farming is the practice of tillage, planting, and other farming operations performed on or near the contour of the field slope. This method is most effective on slopes between two (2) and ten (10) percent. Tillage and planting operations follow the contour line to promote positive row drainage and reduce ponding.

Implementation

The steps necessary for implementing contour farming are

1. Topographic survey of field.
2. Layout of a baseline contour with markers, an untilled crop row paralleling the contour, or other method of marking a baseline contour.
3. Prepare field borders to allow room for farm implements to turn.
4. Perform all farming activities parallel to baseline contour(s).

Scope and Schedule

Minimum and maximum row grade, ridge height, slope lengths, and stable outlets must be determined. Obstruction removal and changes in field boundaries and shape should be considered to improve the effectiveness of the practice and ease of farming operations. Agricultural operations with slopes exceeding 10 percent will find this practice less effective. Rolling topography with a high degree of slope irregularity is not well suited to contour farming.

Contour farming can be implemented simultaneously as the field is prepared for farming.

Measuring Implementation and Determining of Water Savings

Specifications for this Best Management Practice shall be recorded using specification sheets, job sheets, narrative statements, or other acceptable documentation.

The amount of water savings resulting from implementing contour farming is site specific and dependent on how the field was previously farmed and irrigated.

Cost-Effectiveness Considerations

The cost for preparing contour rows as compared to conventional rows is minimal. The primary cost per acre for contour farming relates to the field layout and surveying of the contours. The cost for surveying varies from \$5 to \$10 per acre. Secondary costs for contour farming may include additional farming and harvesting costs for small row lengths in corners and ends of the field.

References for Additional Information

1. *Conservation Practice Standard for Contour Farming (Acre)*, Code 330, USDA - Natural Resources Conservation Service, April 2008.

Determination of the Impact on Other Resources

The benefits of this practice are significant. Farming on the contour reduces sheet and rill erosion and the resulting sediment deposition at the foot of the slope or off-site. It can increase water infiltration, thereby reducing the transport of nutrients and organics to surface water and increasing water storage in the soil profile.