



Contour Farming #330

FARM WATER QUALITY PLANNING MANAGEMENT PRACTICE

*University of California Cooperative Extension
Natural Resources Conservation Service*



Contour farming is the practice of performing tilling, planting and other farming operations on or near the contour of the field slope to reduce sheet and rill erosion. Runoff is best controlled by following the slope contour, but straight rows can be aligned across the slope to reduce runoff. This practice is usually planned in conjunction with drainage practices such as Underground Outlets #620, Diversions #362, or Grassed Waterways #412 to transport excess runoff during heavy rainfall events. Contour farming reduces the size and cost of drainage practices since less runoff will occur than with sloped furrows. When used in vineyards and orchards, this practice may be referred to as Contour Orchard and Other Fruit Area #331.

Advantages

- Reduced sheet, rill and gully erosion
- Reduced runoff and flooding
- Increased moisture retention
- Improved irrigation distribution uniformity
- Can reduce size and cost of downstream runoff management

Disadvantages

- Not suitable for lands with heavy overland flows unless these flows can be diverted to safe outlets
- Curved rows impractical for some farm machinery or for drip tape installation

Practice Costs

Costs for this practice vary widely with location according to costs for surveying the contours, and potentially for increased time in planting . Consult your local resources for costs for this practice.

Practice Effectiveness for Reducing Water Quality NPS Pollution Potential^a

Erosion-sheet & rill	Erosion-streambank	Pesticides-leaching	Pesticides-dissolved in runoff	Pesticides-adsorbed to sediment	Nutrients-leaching	Nutrients-surface waters
moderate to significant	negligible	slight potential to increase leaching	slight	moderate	slight potential to increase leaching	slight

^a From: Conservation Practice Physical Effects, USDA Natural Resources Inventory and Analysis Institute, adapted for local conditions where applicable

Additional sources of information regarding contour farming:

- Information in this management sheet has been taken from the Natural Resource Conservation Service (NRCS) Handbook of Conservation Practices for Practice #330. Contact your local NRCS office or visit <http://www.nrcs.usda.gov> for more information
- Your local NRCS, UC Cooperative Extension, and Resource Conservation District offices

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