

# Irrigation System, Microirrigation

## PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 441



### DEFINITION

A trickle system is a planned system in which all necessary components have been installed for efficient application of irrigation water directly to the root zone of the plants by means of emitters, orifices, or porous tubing.

### PRACTICE INFORMATION

Trickle irrigation refers to irrigation water being applied by means small diameter pipes and very low volume orifices or emitters that apply the water directly to the plant root zone. This method of irrigation is very efficient and is normally utilized on a commercial basis when water is in short supply or very expensive.

The trickle method of irrigation is suited more for orchards, vineyards, and specialty crops. However, as water shortages develop trickle irrigation has potential for most field

crops. Trickle irrigation can be used on very steep slopes where other methods of irrigation would cause excessive erosion and runoff. This method is also well suited for home gardens and systems are often automated with electric solenoids and timers.

A trickle irrigation system must be designed as an integral part of a conservation plan based on the capabilities of the natural resources and the needs of the farm enterprise. The planned system must be suited to the site conditions and the crops to be grown.

Additional information including design criteria and specifications are in the local NRCS Field Office Technical Guide.