

Mulching (acre)

Definition

Applying plant residues or other suitable materials not produced on the site to the soil surface.

Purpose

To conserve moisture; prevent surface compaction or crusting; reduce runoff and erosion; control weeds; and help establish plant cover.

Conditions where practice applies

On soils subject to erosion on which low-residue-producing crops, such as grapes and small fruits, are grown; on critical areas; and on soils that have a low infiltration rate.

Specifications guide

Amount of mulch and the type of management needed under different conditions.

Planning considerations for water quantity and quality

Quantity

1. Effects on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, and transpiration.
2. Variability of the practice's effects caused by seasonal weather variations.
3. Effects of increased cover on soil moisture.
4. Potential for changes in plant growth and transpiration because of changes in the soil water volume.

Quality

1. Effects on erosion and the movement of sediment and soluble and sediment-attached substances carried by runoff.
2. Effects on the visual quality of downstream water resources.