

Best Management Farming Practices for Water Quality Protection

Mulching (484) Fact Sheet

BMP: Bare soil is covered with vegetation, reduction of erosion from non-cropped areas, protect newly planted areas.

NRCS Practice Standard: Mulching (484)

Applying plant residues or other suitable materials produced off site to the land surface. Mulching is used on bare, exposed soil surfaces that are deemed to be potential critical erosion areas. In most cases, mulch will consist of grain straw residue, but may include wood chips, leaves, composted yard waste, etc.



Mulching (NRCS Conservation Practice Code 484)

Definition: Applying plant residues or other suitable materials produced off site to the land surface.

Purposes:

- Conserve soil moisture
- Moderate soil temperature
- Provide erosion control
- Suppress weed growth
- Facilitate the establishment of vegetative cover
- Improve soil condition
- Reduce airborne particulates

For more information contact your local NRCS office or visit our website at <http://efotg.sc.egov.usda.gov/treemenuFS.aspx>

CONSIDER THIS:

Straw mulches will generally be applied at a rate of at least 2,000 lbs per acre (approximately one straw bale per 20 ft x 40 ft plot)

Anchor straw using hand tools, rollers, crimpers, disks or similar equipment (see page 2 of this document).

Use certified weed-free straw.

Key areas for mulch application will be field perimeters, vineyard avenues, and steep slopes requiring quick erosion control cover.

Mulches, including wood fiber materials and manufactured erosion control blankets may also be used.

Where feasible, use late summer irrigation to help bind mulch and establish vegetative cover before fall rains commence.

Straw bales, straw wattles, and other similar materials may also be installed in critical locations to provide sediment retention and storm runoff control.

Maintain mulched surfaces throughout the rainy season.

Stockpile and tarp erosion control materials such as straw bales or wattles, gravel or geotextile fabrics in locations with wet-weather access. Train crews in proper installation techniques.

Check site after each rainfall.

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Methods for Anchoring Straw Mulch – From NRCS Fact Sheet 55

Hand Punching: A spade or shovel is used to punch straw into the slope until all areas have straw standing perpendicularly to the slope and embedded at least 4 inches into the slope. It should be punched about 12 inches apart.

Roller Punching: A roller equipped with straight studs not less than 6 inches long, from 4 - 6 inches wide and approximately one inch thick is rolled over the slope.

Crimper Punching: Like roller punching, the crimper has serrated disk blades about 4 - 8 inches apart which force straw mulch into the soil.

Crimping should be done in two directions with the final pass across the slope.

Matting: Matting is used on large, steep areas which cannot be punched with a roller or by hand. Jute, wood excelsior or plastic netting is applied over unpunched straw

Matting Instructions

- A.** Lay jute netting or similar material in strips down the slope over straw. Bury upper end in 6-8 inch deep and wide trench. Most netting comes in 14 to 17 ft wide rolls.
- B.** Secure upper end with stakes every 2 ft.
- C.** Overlap seams on each side by 4-5 inches.
- D.** Secure seams with stakes every 5 ft.
- E.** Stake down the center every 5 ft.
- F.** Stake middles to create diamond pattern that provides stakes spaced 4-5 ft apart.
- G.** Use pointed 1x2 inch stakes 8-9 inches long. Leave 1-2 inch top above netting, or use U-shaped metal pins at least 9 inches long. **NOTE:** when joining two strips, overlap upper strip 3 ft. over lower strip.

Matting Diagram

