

TEMPORARY EROSION CONTROL FOLLOWING WILD FIRE

STRAW MULCHING

What is it? The application of straw as a protective cover over seeded areas to reduce erosion and aid in revegetation or over bare soils that will be landscaped later to reduce erosion.

When is it used? Straw Mulching is used on bare and disturbed soil areas including slopes which need protection from winter rains and/or runoff and that have a high potential for erosion. In some circumstances, such as steep slopes and where wind is an issue, straw mulching requires some type of anchoring by crimping/"punching", netting or other methods to prevent blowing, sliding or washing away. Straw mulching is not suitable in waterways areas, including channel banks where it could easily mobilize and present issues for downstream culverts, stream crossings, drains, etc. Straw mulch forms a loose layer when applied over the soil surface.

Where necessary straw can be covered with jute or decomposable plastic netting or "punched/tucked" into the soil with a shovel, spade or by heavy equipment. The mulch should cover the entire seeded or bare soil area. On extensive acres or areas where it is not feasible to cover the entire area with straw then create 10' wide mulch strips on the contour no further than 100' apart to help protect soil, slow runoff and trap sediment. The mulch should extend into existing vegetation or be stabilized on all sides to prevent wind or water damage which may start at the edges.

Methods and Materials: On gentle to moderate slopes, straw mulch can be applied by hand broadcasting to a uniform depth of 2 inches. On steep slopes, the straw can be spread by hand, if accessible, or can be blown onto the slope by a straw blower contractor to achieve the same degree of cover. When applied properly, approximately 30 percent of the original ground surface can be seen. The application rate per acre should be about 2 tons (or one 75 pound bale per 800 square feet). Straw should be clean rice, barley, or wheat straw.

Anchoring of straw mulch (when necessary) can be accomplished using the following methods:

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 3-4 inches into the slope. It should be punched about 1-2 feet apart.

Roller Punching: An equipment 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.

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

Where to Get Help: Technical Assistance is available from your local USDA Natural Resources Conservation Service office or your local Resource Conservation District regarding this practice and other erosion and sediment control treatments. www.ca.nrcs.usda.gov.

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