HEALTHY SOILS PRACTICES

MULCHING

Mulching (USDA NRCS CPS 484) can be implemented as either a one-time practice or 3-year practice. It involves applying plant residues or other suitable materials to the land surface.

Part of California Farm Bureau's Healthy Soils Block Grant Program, learn more online at: cfbf.com/HSP

This practice aims to:

- Help with soil erosion.
- Protect crops.
- Improve moisture management.
- Reduce irrigation energy.
- Maintain or increase soil organic matter.
- Improve plant productivity and health.
- Provide habitat for beneficial organisms and provide pest suppression.

Appendix A: Standard Payments

- $4,385.44 per acre for wood chips.
- $518.38 per acre for natural materials.

Criteria:

- Cannot overlap with cover crop, conservation cover, and whole orchard recycling (WOR).
- Mulching with wood chips is a one-time practice, while using natural materials (e.g. straw), is a 3-year practice.
- Choose mulching materials based on the purpose of application, site conditions, and availability. Materials can be natural or artificial, with adequate dimensions and durability.
- Prepare the soil surface before applying mulch.
- Spread mulch material evenly. Secure it using tackifiers, emulsions, pinning, netting, crimping or other methods of anchoring methods as necessary.
- For manufactured mulches, adhere to the manufacture's specifications.
- Do not mix synthetic mulches into the soil.
- For mulching with wood products (e.g. woodchips, bark, shavings), use at least a 2-inch think layer to withstand heavy rain or strong winds.
- Use gravel or other inorganic materials at minimum size of 0.75 inches and a depth of 2 inches.
- Aim for at least 70% ground coverage when using straw or grass hay.
- Do no use plant-based mulches with a carbon to nitrogen ratio less than 20:1 near watercourses.

Information was acquired from the CDFA's Appendix A and the USDA Conservation Standard Practices Code 484

Implementation Guidelines:

Wood chips (one-time practice):

- Materials produced off site.
- Wood chips are characterized as chemically untreated, woody material that is ¾ - 2 inches in diameter, without leaves and hardy enough to last for several years.
- Mulch thickness at 2-4 inches.
- Application rate at ≥ 40 cubic yards/acre or ≥ 10 tons/acre.

Natural Materials (3-year practice):

- Materials produced off site.
- ≥70% of the acreage by mulch materials at 1-3 inches thickness or 1-2 tons/acre if using straw.
- Natural materials include chipped brush, bark, wood shavings, sawdust, leaves, leaf mold, pine needles, grass hay, rice hulls, grasses, grass clippings, crop residues, straw, almond/walnut shells, cocoa bean hulls or coconut fiber.

Verification Requirements:

- 3-4 geotagged photographs showing mulching is implemented including thickness measured by a ruler and mulch coverage.
- Receipts of materials if purchased or donated with proof documents.

Additional Resources:

USDA NRCS. (2017). 484 CPS Mulching

Appendix A: Practice Payment Scenarios, Rates, Requirements, and Implementation Guidelines

A Review of Soil Health Management Practices Impact on Soil Water, NRCS Soil Health Literature Review, March 2018