MULCHING

for Inland Valleys
in Sonoma County

how to **build & maintain healthy soils**
and **reduce water consumption**

1 MULCHING

what, why, and how to mulch to remove lawn, prevent weeds and conserve 30% of your soil's moisture

SURFACE MULCHING

MULCH IS ORGANIC AND INORGANIC MATTER SPREAD AROUND LANDSCAPED AREAS TO:

1. RETAIN MOISTURE IN SOIL
2. PREVENT WEED GROWTH
3. PREVENT EROSION
4. BUILD AND ENRICH SOIL WITH ORGANIC CONTENT AND MINERALS
5. REGULATE SOIL TEMPERATURE TO PROTECT PLANT ROOTS

Source: Power of Plants https://powerofplants.com/2012/01/experience-the-power-of-plants/

Surface mulching helps retain moisture in the ground by protecting the soil from the evaporative effects of sun rays, reducing water stress by up to 30%. This makes mulching a critical, yet incredibly simple, tool in the drought-resilience toolkit.

ADDITIONAL RESOURCES

California Native Plant Society
Sheet mulching
Surface mulching

Mulching can support resilient residential landscape design templates of Sonoma, see below:
Saving Water Partnership

Daily Acts
Sheet Mulching 101

DO

- DO place mulch mixture at a thickness of 3"-4" atop topsoil, and up to 6" around trees, consult CNPS for more prepping tips
- DO place mulch up to base of shrubs and perennials, leaving the root crown exposed (see CAP templates)
- DO consider using inorganic mulch such as gravel and rocks around desert and riparian plants. Know what mulch plants prefer by visiting Calscape.org
- DO consider including a rain garden on your site where water collects to further increase soil moisture and water retention
- DO use local mulch chipped from a variety of sources and sizes

DO NOT

- DO NOT use synthetic materials such as rubber pellets, landscape fabric, or anything containing plastic
- DO NOT pile mulch up around trunks of trees or stems of plants
- DO NOT put oak mulch of one oak on another without asking if source oak was healthy and free of fungus
- DO NOT use gorilla hair or monotone fibrous mulch. It can be hydrophobic and can be a fire hazard instead of a fire retardant. Bigger bark/mulch smolders fires versus fibrous mulch, which spreads fire and is more energy intensive to create.

2 MULCHING

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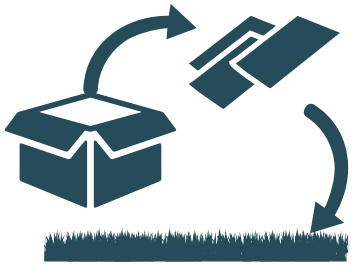
SHEET MULCHING



RECYCLES OR REPLACES LAWN & WEEDS, SETTING THE STAGE FOR CLIMATE APPROPRIATE PLANTING

1. Prepare Site & Materials

- **Remove existing turf or plants if invasive.** This can be done by hand (low impact) using a shovel OR sod cutter.
- **Mow existing turf if not an invasive grass.** If the turf is not invasive, mow and leave the grass clippings in place.
- **Create a shallow trench around the edge.** Remove existing turf around the entire perimeter and dig a shallow trench the width of the shovel.
- **Prep and soak cardboard.** Remove all tape, plastic labels, etc. from cardboard and soak in a wheelbarrow filled with water.
- **Water site thoroughly.**

2. Lay Down Mulch Layers

- **Layer #1: Compost.** Apply 1-2" of finished compost, aged manure, or grass clippings. Water thoroughly. *Skip this step if not planting area in the near future.*
- **Layer #2: Barrier.** Apply 3-4 layers of clean, soaked corrugated cardboard overlapping to ensure no areas are exposed to light. Pay special attention to cover the soil along the perimeter trench as well. Water thoroughly. Ensure there are no gaps in the cardboard. If the cardboard is thin or contains holes, add an additional layer.
- **Layer #3: Compost.** Apply 1-2" of finished compost. If cardboard dried, rewet before applying compost. *Skip this step if not planting area in the near future.*
- **Layer #4: Wood chip mulch.** Apply 4-6" of wood chip mulch. Be sure to add mulch inside the perimeter trench. This is where weeds will want to creep in. Water thoroughly. *Diverse sizes of wood chip mulch is the best, instead of uniform playground mulch.*

3. Final Touches & Watering

- **Walk the perimeter.** Walk around the perimeter and over the mulched area to make sure all areas were sufficiently covered.
- **Water.** Water the site as needed to keep the cardboard hydrated before, during and after the sheet mulching process to aid in decomposition and to prevent moisture loss from the soil to the cardboard. This will also encourage earthworms to aid in the soil building process.

Layer #1 (compost) underneath layer #2 (barrier)

Layer #3 (compost) covering layers #1 and #2

Landscape site grown in with layer #4 (wood chip mulch) atop all layers