

Lori Caldwell, Compostgal@hotmail.com Kristin.Bowman@ebmud.com Water Conservation Representative

What is Sheet Mulching?







The Perfect Marriage of: Cardboard + Compost + Mulch

Sheet Mulching Benefits

- Promotes healthy soil and plants
- Feeds the Soil Food Web
- Excellent for unused areas
- Mulch creates a uniform, attractive & natural landscape
- Saves \$\$, water & time
- Weed suppression
- Minimizes erosion
- Protects the environment
- Holds moisture in the soil longer

Sheet Mulch Prep

Lawn Conversion Rebate

- Apply for local and/or state lawn conversion rebates
- Wait for approval BEFORE beginning your project!!
- Early start prior to approval will disqualify you for rebate



Santa Clara Valley Water District

CONTRA COS

Call 811



- Call before you start trenching or putting in large plants
- A free service that will send all the utility companies whose lines intersect your property
- They will mark the lines with paint and/or flags

Other Prep Must-Haves



- Add hardscape elements
- Put in 5 gallon or larger plants first
- Pull out thick weeds ¼ in or larger
- Chop down waist high weeds

DO NOT REMOVE YOUR LAWN

TRENCHING ALONG HARDSCAPE EDGES

- Dig along edges of sidewalks, patios, utility boxes, etc.
- 3-6 inches deep at a 45 degree angle towards the hardscape
- 10-12 inches wide
- Helps keep mulch in the landscape and not spilling over
- Cardboard fits into trench to block running weeds



Create Mounds Using Trenched Materials

A great way to reuse materials on-site

Creates visual interest

Increases drainage for native and drought tolerant plants

Saves money



Irrigation Conversion

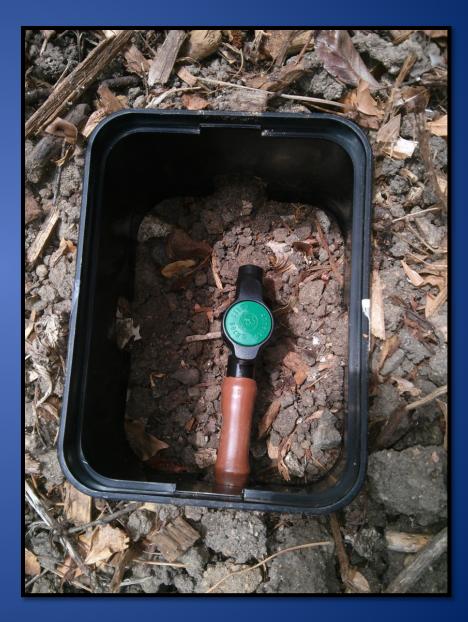
- Convert from pop-up sprinklers to drip irrigation
- Cap sprinkler heads that you don't need
- Install a pressure regulator either at the valve or at a former sprinkler head
- Many conversion kits contain a pressure regulator AND a filter.



Irrigation Conversion

- Lay emitters and hoses under a mulch layer
- Be sure to use Telfon tape when connecting plastic fittings
- Not planting right away? Convert the heads and connect the tubing later

Questions? Check out your local irrigation store



Sheer Mulch Recipe

(1st layer): Cardboard

- Weed blocker
- Permeable
- Will eventually break down and build the soil
- Overlap by 6-8 inches and water each layer to anchor into place
- For areas with Bermuda grass: apply cardboard and do not wet!
- It will last longer



Cardboard Types

Recycled cardboard

Grocery stores Bike stores* Appliance stores* Costco Furniture Stores*

* Has **VERY** large boxes

Avoid Waxed boxes



Cardboard Types



Rolled cardboard needs to be purchased (price range: \$50-\$100)

Come in lengths 250 ft or more

3-4 feet wide Type: B-flute

Easy to apply

Layering cardboard over mounds



Be sure to run boxes/rolls vertically across the mound

The mound will settle once all the materials become heavy

2nd Layer: Compost

- Put a 2 inch layer on top of the cardboard
- Provides food for new plantings
- Feeds the Soil Food Web
- Retains moisture
- Irrigation tubing goes on top of this layer



3rd Layer: Coarse Mulch





- Minimum 3 inches on top of the compost layer
- Creates a sponge and slows evaporation
- Make sure you allow a 12 inch space around trees
- Will need to be reapplied once it breaks down













Plant After Sheet Mulching 1 gallon plants

- Cut an X in the cardboard and carefully peel back cardboard
- Dig out some of the topsoil (don't make the hole too deep)
- Loosen the root ball if root-bound
- Place plant in hole and fold cardboard back down. A few handfuls of compost would be great over the cardboard at this point
- Cover the layers with mulch

Planting 4" Plants

- Move mulch/compost back to cardboard layer
- Remove plant from container
- Loosen root ball, if necessary
- Place plant right on top of cardboard. Add compost, if necessary









Planting After Sheet Mulching

TIPS

- Be sure to allow room around the plant.
- Don't put mulch right next to the major stem of the plant.
- For succulents: Give succulents 12 inches of room away from mulch. Fill area with soil instead

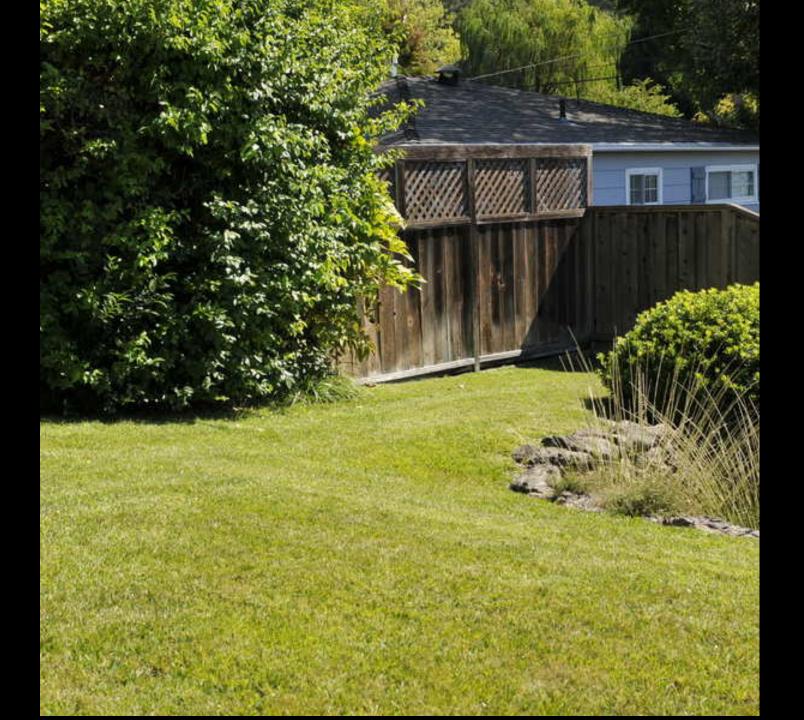






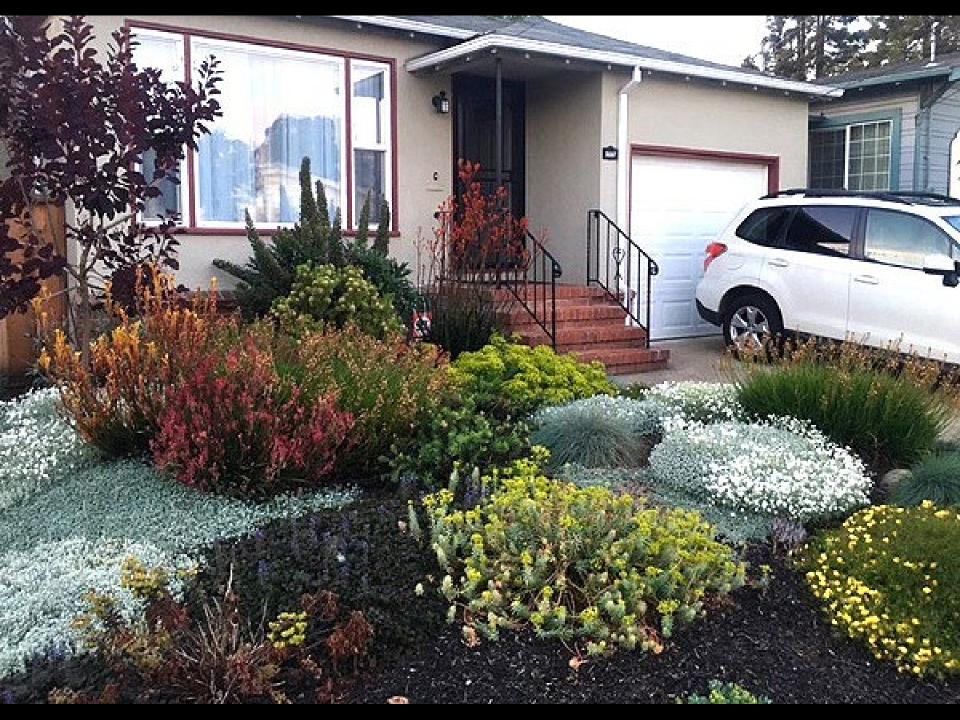














Bermuda Grass

TIPS

- Do not wet cardboard
- Make sure your trenches are clean along the edges
- Extra layers of cardboard
- Minimum 4 inches of mulch on top
- Use plants like Aster along property line to discourage Bermuda encroaching again







Fungi



All part of the process... totally natural

Types vary

Don't bother pulling them unless you have concerns with kids or pets

You may also see a cobwebby type of fungi right under the mulch layer







Oxalis a.k.a. Sourgrass

Bad News First...

- Created by tiny bulbils/rhizomes embedded in the soil
- Can also re-grow from to fragments

Good News There is no good news...

Treat Oxalis how you would an out-of-town- house-guest-you-don'tlike-but- only-see-once-a-year



After Sheet Mulching: Ongoing Maintenance

When do you add more mulch?



Once the cardboard starts peeking out

Weeds start popping up from below

Patch with dry cardboard and new mulch

Watering plants

- Most drought tolerant and/or native plants will need 1-2 winters of good rain to get established
- Irrigation can be turned off after plants get established



Weeds?!



Often there are flyover weeds from birds and wind

Buried weeds by squirrels

You will find these weeds very easy to remove

Check Out Water Savings

Water Efficient Landscape Design Calculator

Curious about how much water you can save by converting your lawn? Use this calculator to see potential water savings and benefits of sheet mulching!

Select your city:	Oakland 🗸				
Total lawn area to be converted:	1000	(square feet)			
A 1,000 square foot lawn is estimated to use 32,736 gallons of water per year, based on your location. ¹					

Ebmud.com/watersmart-gardener.com

Choose for each landscape:

- sq. ft.
- water use (WUCOLS)
- type irrigation type
- sheet mulch

Landscape Type	Planting Area (sq. ft)	Water Use	Irrigation Type	Annual Water Use (gal)
Groundcover 🗸	250	Low 🗸	Drip 🗸	2,273
Perennials 🗸	250	Low 🗸	Drip 🗸	2,273
Shrubs 🗸	250	Low 🗸	Drip 🗸	2,273
Trees 🗸	250	Moderate 🗸	Drip 🗸	4,547
Lawn 🗸		High 🗸	Spray 🗸	0
Annuals 🗸		High 🗸	Spray 🗸	0
Total Area	1000		Total Water Use:	9,602

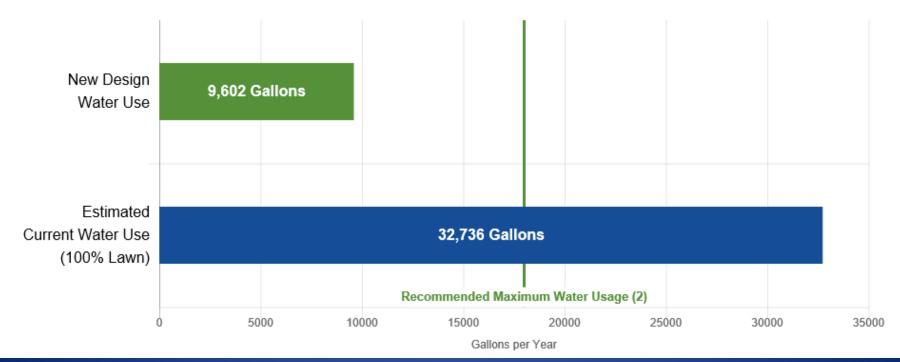
Sheet Mulching? Check box to see how much more water you can save by sheet mulching with cardboard, compost and mulch.

Water	Savings from
	Sheet Mulch:

1,765

Water Efficient Design: 9602 gallons annually Lawn: 32,736 gallons annually

Estimated Annual Water Use for 1,000 Square Feet:



References

Lawn to Garden Website

- lawntogarden.org
- Resource calculator, how-to videos, compost/mulch vendor marketplace & more

EBMUD

- Rebates: Ebmud.com/watersmart
- Plant Selection: Ebmud.com/garden-design-center
- Landscape Design Water Use Calculator: Ebmud.com/watersmart-gardener.com
- Presentation: ebmud/mulch

Thank you!!

Lori Caldwell compostgal@hotmail.com 925-922-3504

Kristin.Bowman@ebmud.com 510-986-7610

