

FUNDAMENTALS



OF WATER-WISE GARDENING

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WHY DO WE CARE?

- Water may be our next “limiting factor”
- Drought is always a reality for California
- 18% of CA’s energy use is for water, so water is tied to global warming and peak oil
- 60% of our fresh water goes to landscaping, lawns being the largest part of that

BASICS

- Lawn reduction or replacement
- Resilient, living soil
- Appropriate plants
- Separate hydrozones
- Irrigation types & timing
- Mulch

ADVANCED

- Rainwater harvesting
- Swales
- Pervious surfaces
- Graywater irrigation

SANTA MONICA DEMONSTRATION



Conventional Landscaping

California Natives



CONVENTIONAL GARDEN ESTABLISHED



CALIFORNIA NATIVE GARDEN ESTABLISHED



California Natives compared to Conventional:

- 1/10 of the water
- 1/4 of the maintenance labor
- 3/5 of the green waste
- Increased habitat
- Lowered pollution

To view online:

http://www.smgov.net/Departments/OSE/Categories/Landscape/Demonstration_Gardens.aspx

Annual Comparison

Sustainable Landscape



6,000 Gallons

WATER



250 Pounds

YARD WASTE



15 Hours

MAINTENANCE

Traditional Landscape



57,000 Gallons

WATER



670 Pounds

YARD WASTE



80 Hours

MAINTENANCE

LAWNS

- Turf is the largest water user
- Reduce size to what you really use
- Rebates available with a *Water Wise House Call* - www.valleywater.org
- Replace with ground covers, herbal lawns, meadows, paths, low shrubs, etc.
- EarthCare's low cost lawn replacement: www.naturalfrontyards.com

LAWN CARE

- Increase watering intervals
- Monitor controller often (or get ET “smart” controller)
- Fix leaks, check for overspray
- Mow high
- Use organic fertilizers and topdress with compost annually (slower, healthier)
- Grass-cycle
- Spray with compost tea for deep roots



Lawn alternative: *Carex pansa*

Design: Agi Kehoe

Installation: EarthCare Landscaping



Photo: Stephanie Morris

Lawn alternative: Eco-lawn



Eco-Lawn Closeup



Design: Agi Kehoe Photo: Deva Luna

Lawn alternative: Meadow with wildflowers

THE RIGHT PLANTS

Drought tolerant plants use different strategies

- grey or fuzzy leaves (lavender, lamb's ear)
- waxy or fleshy water-holding leaves (succulents)
- bulbs for storage underground (iris)
- deep rooting (manzanita, persimmon)
- dormancy (buckeye, monkeyflower)



Mediterranean plants
often have grey leaves

Photo: Deva Luna



California Natives

Design: Sherri Osaka, Installation: EarthCare Landscaping



Design: Stephanie Morris, Installation: EarthCare Landscaping

HYDROZONE

Separate plants by water requirements – “Like with like”

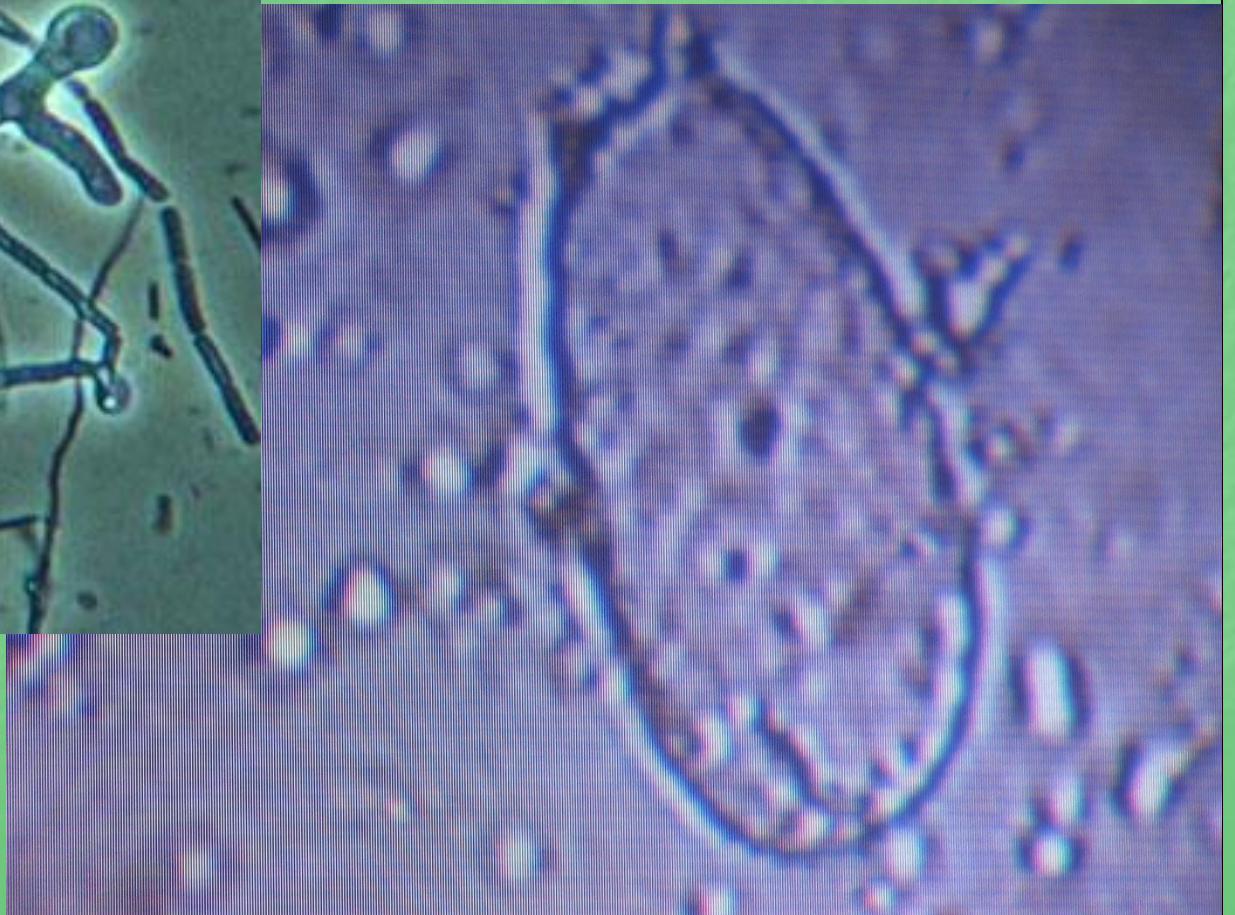
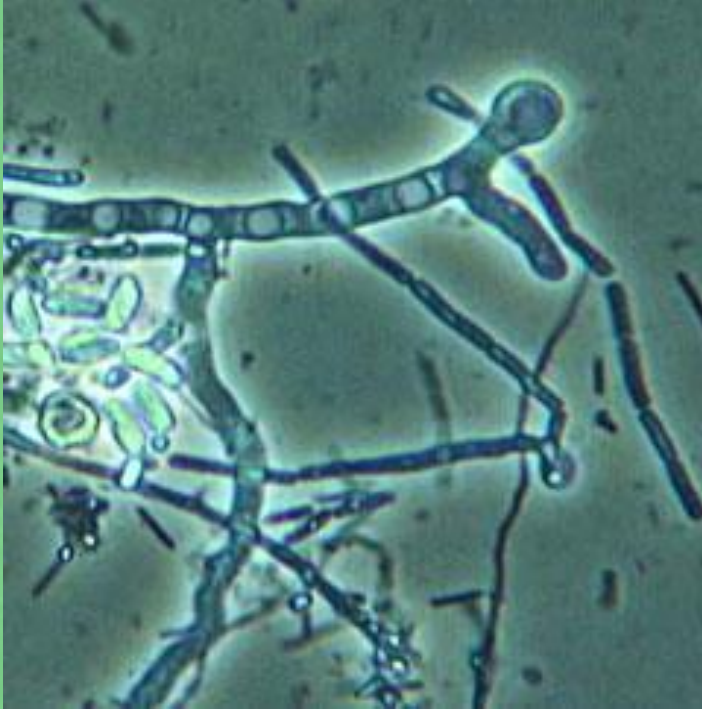
- Keep lush, high-maintenance, water-lovers in small areas close to the house
- Plants that can transition away from artificial irrigation
- Turf on separate valve
- Fruit trees on separate valve

RESILIENT SOIL

A biologically alive soil holds water well

- Add organic matter (compost)
- AACT (Actively Aerated Compost Tea)
purchase at Lyngso Garden Materials
- Don't compact (no digging when soggy)
- Don't poison the Soil Foodweb with pesticides, herbicides, or chemical fertilizers
- Protect the soil with organic mulch

LIVING SOIL



WATERING

After plants are established:

- Water infrequently but deeply
- Allow soil surface to dry out (check!)
- Increase the intervals between watering
- Hand watering is okay
- Don't use the % feature on the timer

DRIP VS. SPRAY

- Drip is measured in gallons per HOUR
- Spray is measured in gallons per MINUTE
- Therefore drip needs to be on LONGER, but less often
- Never put drip and spray on the same line

SMART CONTROLLERS

Also called "ET" (evapotranspiration) or weather- based controllers

- Connected to a satellite, receives local weather updates and automatically adjusts
- Monthly fee
- Rebates from SCV Water District
- Many brands



MULCH

- Wood chips, not plastic
- Protects the soil from drying out
- Decomposes and improves soil
- Vibrant biology just underneath
- Suppress weeds
- Can get free “arbor chips”



"Arbor Chips"

3/4" Fir Bark

Wood Chips

Three kinds of mulch



Define paths with different colors of mulch

**A few favorite spreading
drought tolerant
GROUND COVERS**



Design: Fran Adams Photo: Deva Luna

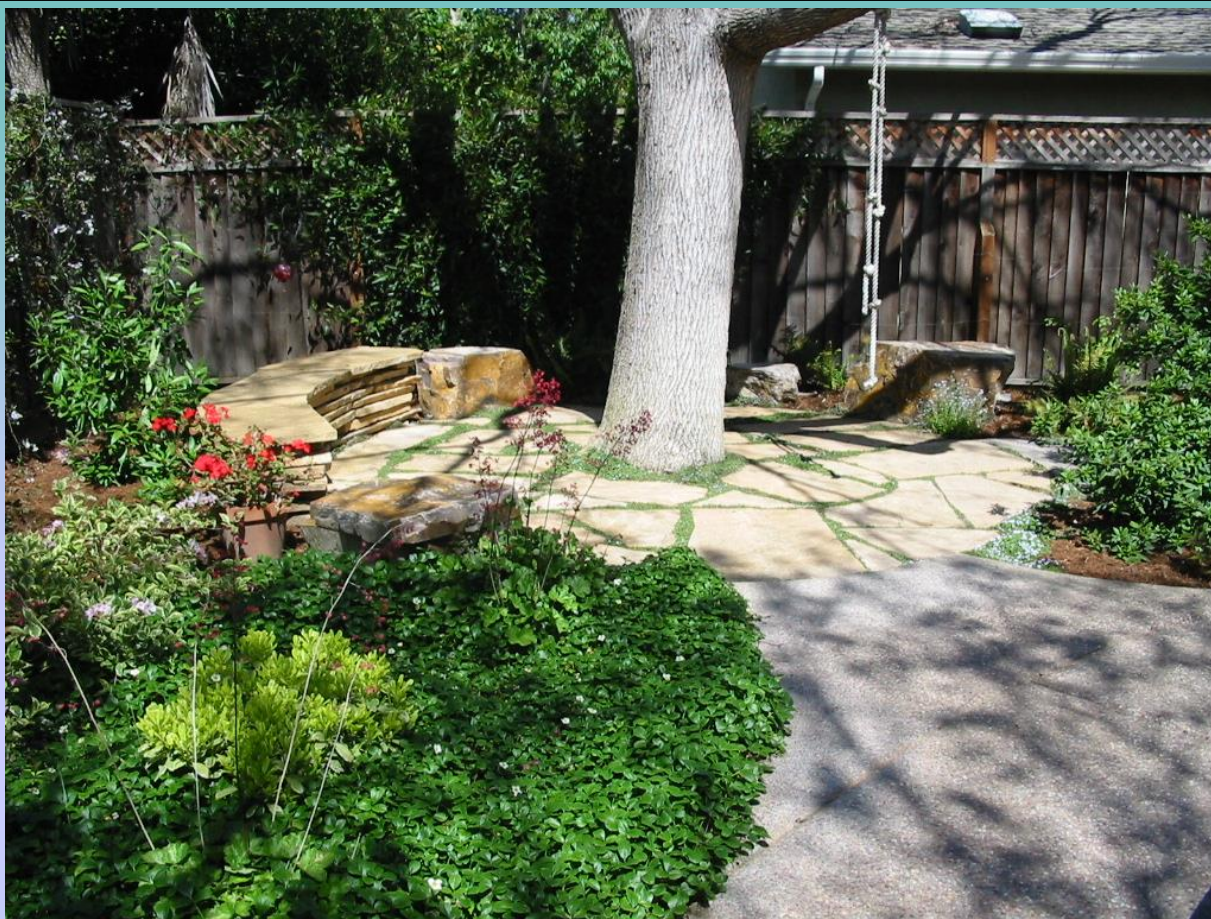
Manzanita (Arctostaphylos)



Salvia 'Bee's Bliss'

Design: Stephanie Morris

Installation: Curtis Horticulture



Design: Sherri Osaka Photo: Deva Luna

Beach Strawberry Ground Cover



Design & Photo: Sherri Osaka

Installation: EarthCare Landscaping

Ceanothus ~ California Lilac

KEEP YOUR WATER ON SITE

- Downspouts to drywells, dry creeks or rain barrels
- Swales (contour lines of slopes)
- Pervious surfaces - no run-off





Permeable Hardscape





Pavers set in sand



Decomposed granite path

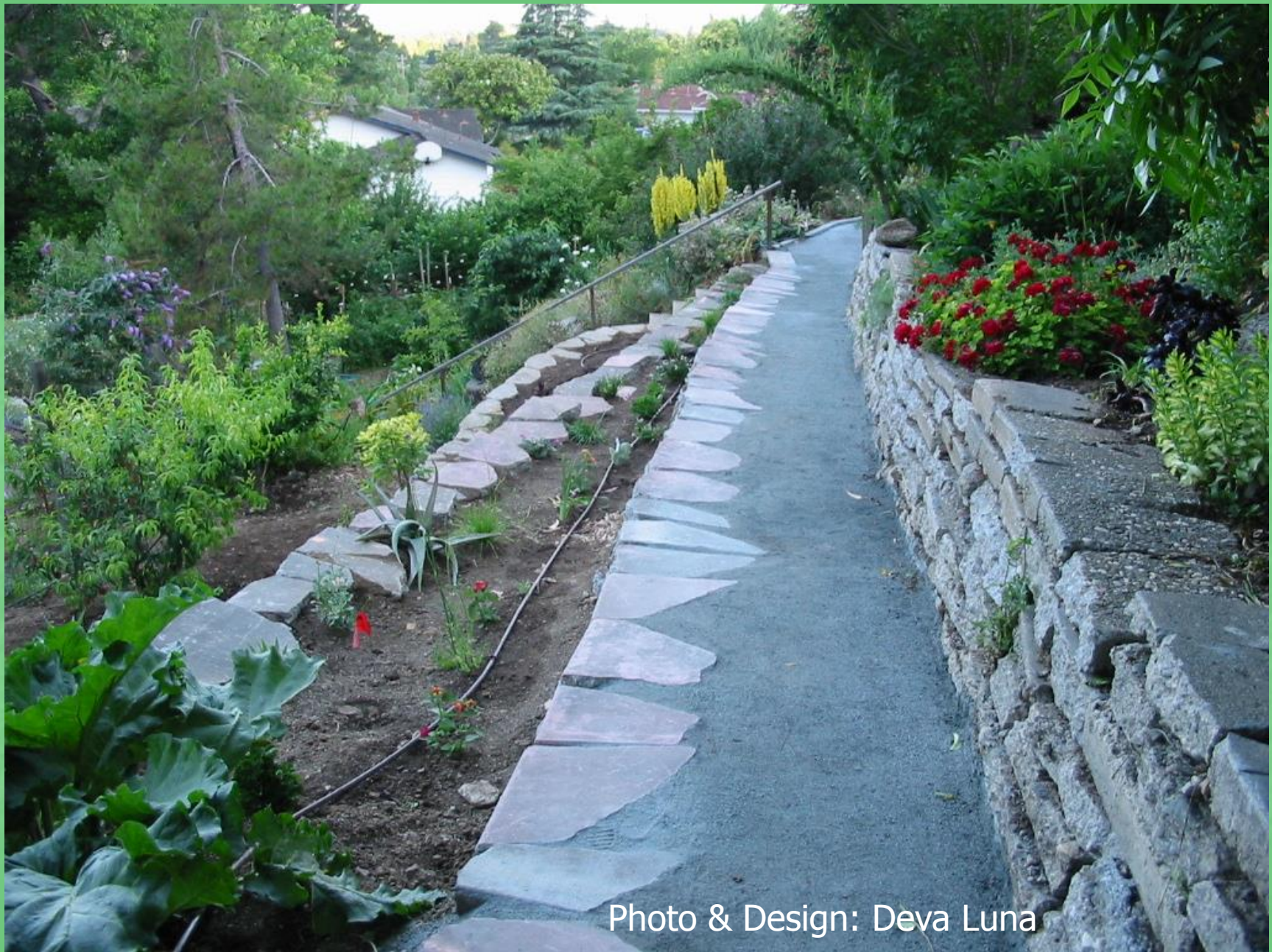


Photo & Design: Deva Luna



Gravel used as mulch

Installation: EarthCare Landscaping



PERVIOUS CONCRETE

Swales slow & capture water



GRAYWATER

Laundry to Landscape

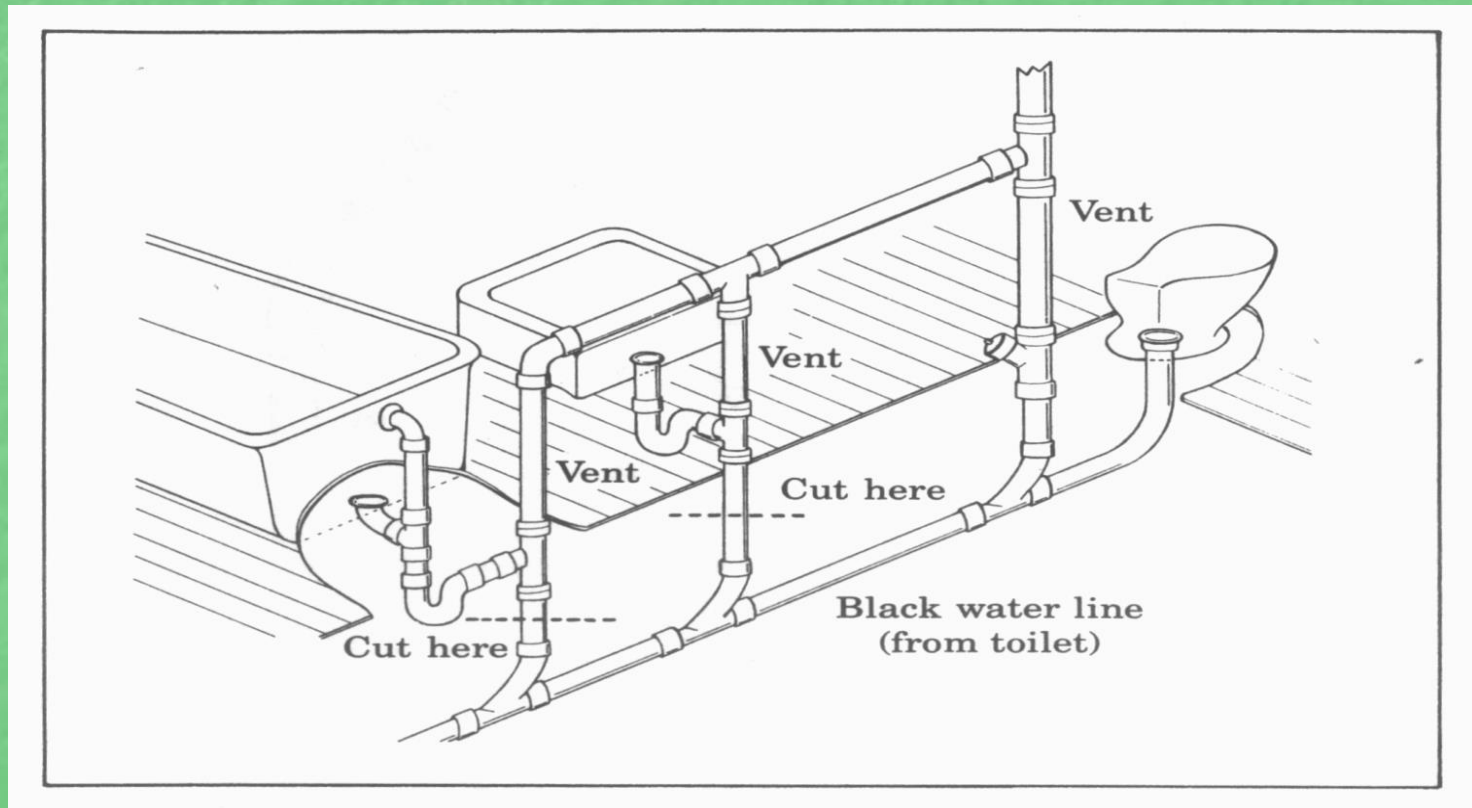


MULCH BASINS



Retrofitting for Graywater

Step 1: Separate black and gray water



Drawing from: *Gray Water Use in the Landscape* by Robert Kourik, 1988

Lawn Irrigation Installation



Photos from ReWater, Inc.



Lawn five years after installation

Rain Barrels



Larger Rain Storage



Daisy chain barrels

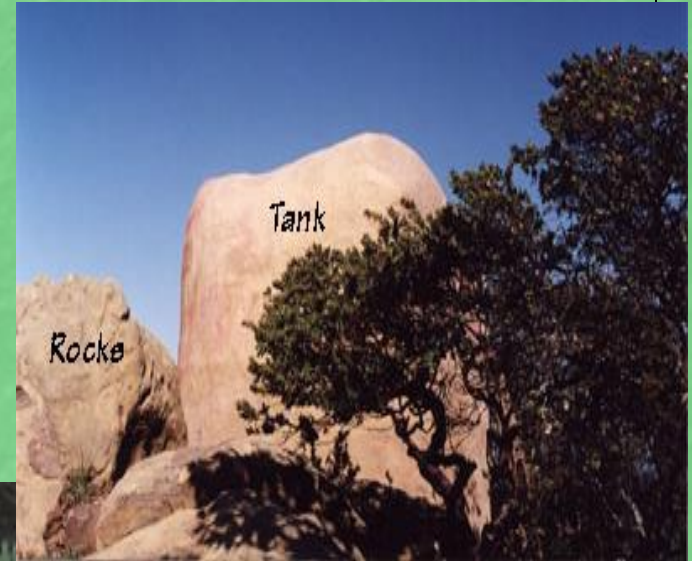


Photo courtesy of EarthCraft Design

Remember “garden / garden”?



The choice is yours!

RESOURCES

www.naturalfrontyards.com

EarthCare's low-cost front lawn replacement

www.goingnativegardentour.org

Going Native Garden Tour – April

www.cnps.org

California Native Plant Society

www.cngf.org

California Native Garden Foundation

www.landscapestandards.com

**A wiki site for Sustainable Landscaping with lists
of professionals and pictures**



THE END