

University of California
Agriculture and Natural Resources



Water-Wise Landscape Design

Presented by Lynn Coffman

Water-Wise Landscaping
is more than cutting water
use and selecting plants.



NOT a Water-wise Landscape



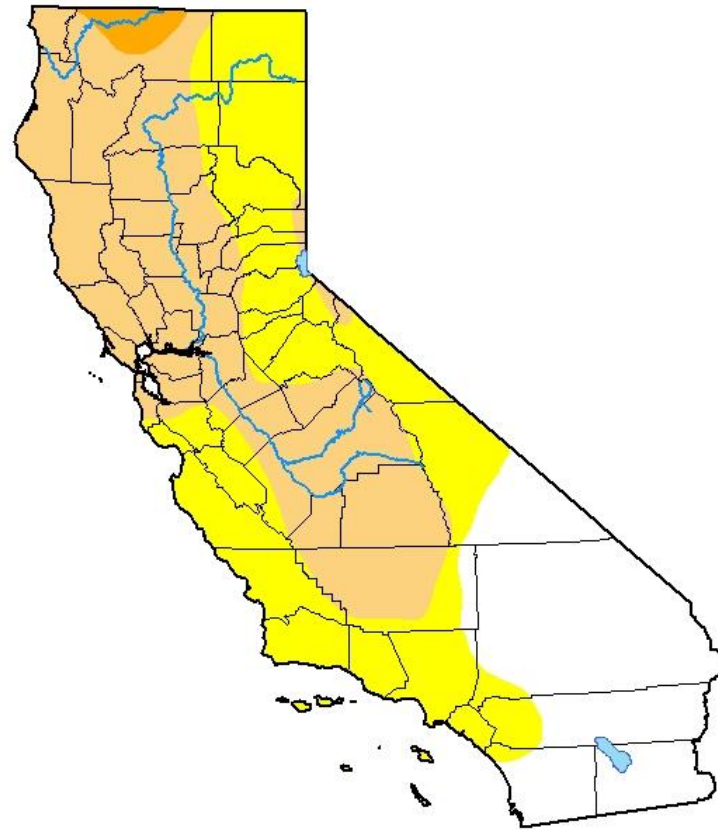
Rainfall Matters

.....now







US Drought Monitor CA
- March 24, 2020 (updated weekly)

U.S. Drought Monitor California

March 24, 2020
(Released Thursday, Mar. 26, 2020)
Valid 8 a.m. EDT



Intensity:

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <http://droughtmonitor.unl.edu/About.aspx>

Author:

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U.S. Department of Agriculture



droughtmonitor.unl.edu

This is your Santa Ana River Watershed



See your Landscape as a Mini Watershed

Conventional Landscape



Watershed Wise Landscape



How to Do
Transition
from this...



...to a
Water-Wise
Garden?



Step –by – Step Process

- A. Planning & Design
 - Set your Goals
 - Determine your Budget
 - Gather Site Information
 - Create a Bubble Diagram
 - Choose Plants
- B. Install
- C. Maintain and Enjoy!

Brainstorm
your
Big Idea!





Home Landscape Wants and Needs Worksheet

Who will use the yard?

- Adults
- Children (ages)
- Elderly
- Pets (describe)

When is the yard used?

Are you satisfied with the front door/family entry space? What should change?

Are you satisfied with the transition between the indoor and outdoor living areas? What should change?

Are you satisfied with the way existing walkways connect parts of the yard? What should change?

Are patios, sidewalks or driveways permeable?

Are you satisfied with the current amount and type of outdoor lighting? What should change?

What outdoor structures/ features would you like to add?

- Patio or deck
 - for how many people?
- Shade cover for patio/ deck
- Children's play area
- Cooking/grilling area
- Fenced vegetable garden
- Raised planters
- Dog pen/run
- Storage shed

Gazebo

For how many people?

Fences

Swimming pool

Spa/hot tub

Fire pit

Boulders

Dry Creek

Mounds/berms

Pond

Bench

Fountain

Waterfall/stream

Putting Green

Rain Barrel

Off-street parking

for guests

for RVs

for boats

Efficient Irrigation system

How many irrigation valves?

Other

What items need storage space?

Garden equipment

Garbage cans

Bicycles

Outdoor toys

Sports equipment

Lawn furniture/cushions

Other

Maintenance considerations

How much time do family members have for yard care?

Hiring outside help?

Design considerations

What is your preferred design style?

Formal

Semiformal

Informal

What themes/styles do you want reflected in your outdoor space?

European

Asian

Natural

Other

What is your preferred shape (for lawns, walkway, decks)?

Rectangles

45-degree angles

Circles

Free form

Combination

List your favorite colors:

Describe any special considerations (Wheelchair access, etc.)

Soils Amendments

type

location

Mulch

Organic type

Inorganic type

Plant Choices

What types of **Climate Appropriate plants** do you prefer?

Evergreen trees/ shrubs

Deciduous trees/ shrubs

Flowering trees/ shrubs

Fruit trees/ shrubs

Vines

Annual flowers

Perennial flowers

Vegetables/ herbs

Fragrant plants

Wildlife/ native

Irrigation needs

Any specific allergies? (list plants)

Is wildlife damage a problem?

- Bolded and underlined type indicates elements for the Landscape Transformation Funds

Wants, Needs and Goals

Budget

How much to you want to spend?

Pay-as- you go / Savings

Loans

Rebates

Do you have a working knowledge for costs?

Professional vs. DIY

Hardscape, Plants, furniture, Pots

Is your budget realistic?

Turf Replacement Program:

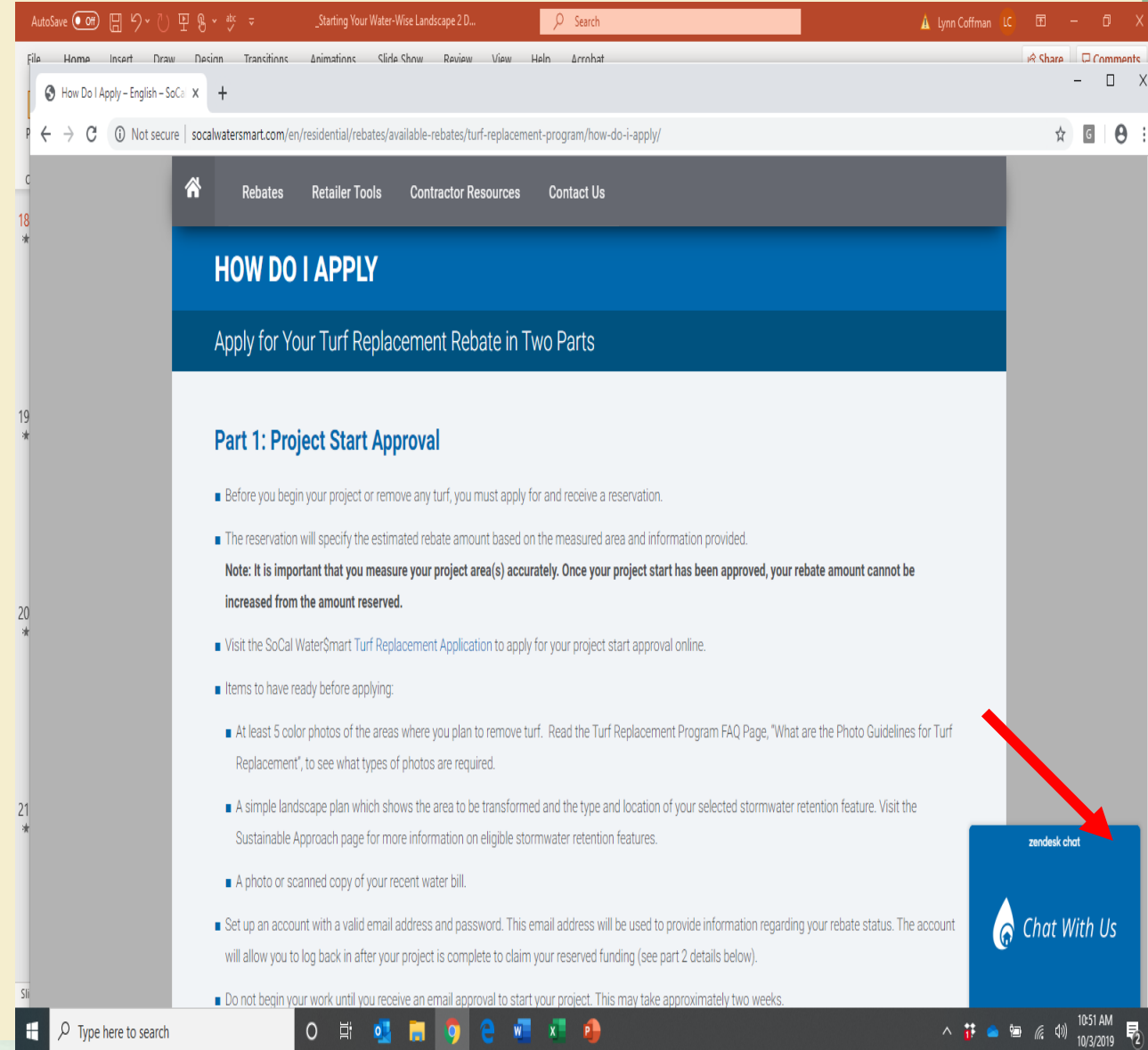
Guidelines for a multi-pronged approach to maximize water utilization and conservation.

- 3 plants for every 100 sq. ft. of grass removed and no turf of any type
- Stormwater Feature
- No hardscape or synthetic turf
- Mulch on all bare spaces
- Replacement or modification of overhead sprinklers



Applying for Turf Replacement Funds:

- Check out <http://www.socalwatersmart.com>
- In order to receive a rebate, you must apply to reserve rebate funds and wait to receive approval prior to starting your project.
- After the reservation approval, you will have 180 days to complete the project and submit your request for a rebate.
- **EVMWD is offering \$2.25 per square foot for up to 5,000 square feet.** To verify the full incentive offered for your area, please visit [estimate my rebate](#).
- You may be eligible for additional rebates on devices such as weather-based irrigation controllers, soil moisture sensors, rotating nozzles, rain barrels or cisterns. For information on available outdoor device rebates, please visit the [outdoor device](#) page.



The screenshot displays a web browser window showing the 'How Do I Apply' page for the Turf Replacement Rebate program. The page is titled 'HOW DO I APPLY' and 'Apply for Your Turf Replacement Rebate in Two Parts'. The main heading is 'Part 1: Project Start Approval'. The page lists several steps and requirements for applying, including: before starting a project, a reservation must be applied for; the reservation specifies the estimated rebate amount; it is important to measure the project area accurately; the SoCal WaterSmart Turf Replacement Application must be used; items to have ready before applying include 5 color photos, a landscape plan, and a water bill; an account must be set up; and work should not begin until approval is received. A red arrow points to a 'zendesk chat' button in the bottom right corner of the page.

AutoSave Off | Starting Your Water-Wise Landscape 2 D... | Search | Lynn Coffman LC

File Home Insert Draw Design Transitions Animations Slide Show Review View Help | Share | Comments

How Do I Apply - English - SoCal WaterSmart | Not secure | socalwatersmart.com/en/residential/rebates/available-rebates/turf-replacement-program/how-do-i-apply/

Rebates Retailer Tools Contractor Resources Contact Us

HOW DO I APPLY

Apply for Your Turf Replacement Rebate in Two Parts

Part 1: Project Start Approval

- Before you begin your project or remove any turf, you must apply for and receive a reservation.
- The reservation will specify the estimated rebate amount based on the measured area and information provided.
Note: It is important that you measure your project area(s) accurately. Once your project start has been approved, your rebate amount cannot be increased from the amount reserved.
- Visit the SoCal WaterSmart Turf Replacement Application to apply for your project start approval online.
- Items to have ready before applying:
 - At least 5 color photos of the areas where you plan to remove turf. Read the Turf Replacement Program FAQ Page, "What are the Photo Guidelines for Turf Replacement", to see what types of photos are required.
 - A simple landscape plan which shows the area to be transformed and the type and location of your selected stormwater retention feature. Visit the Sustainable Approach page for more information on eligible stormwater retention features.
 - A photo or scanned copy of your recent water bill.
- Set up an account with a valid email address and password. This email address will be used to provide information regarding your rebate status. The account will allow you to log back in after your project is complete to claim your reserved funding (see part 2 details below).
- Do not begin your work until you receive an email approval to start your project. This may take approximately two weeks.

zendesk chat

Chat With Us

Type here to search | 10:51 AM 10/3/2019

Gather Site Information

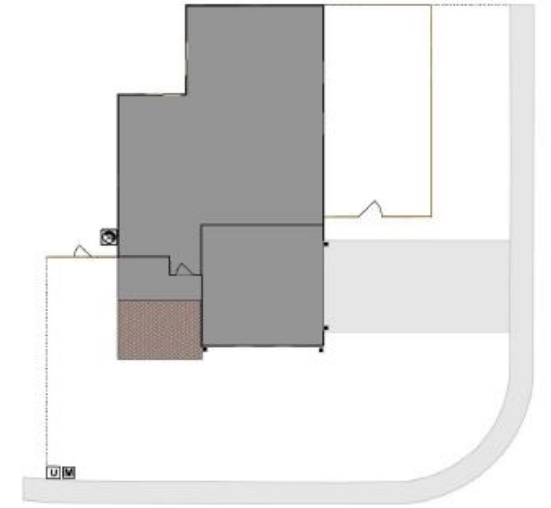
Measure your property

Property lines

Footprint of house

Existing features - driveways, sidewalks, fences, trees, irrigation utilities, etc.

Identify lot orientation (N-S-E-W)



Mark information onto Base Plot Plan

Know Your Site's Environment

- ❑ Microclimates – sun, shade, wind patterns and changes during the year
- ❑ Views
- ❑ Large vegetation elements – tree canopies, lawns, etc.
- ❑ Elevation changes – slopes, berms, terraces, etc.
- ❑ Drainage
- ❑ Soil type



Design Principles of a Watershed Approach



Capture and Use Rainwater



Use Climate-Appropriate Plants

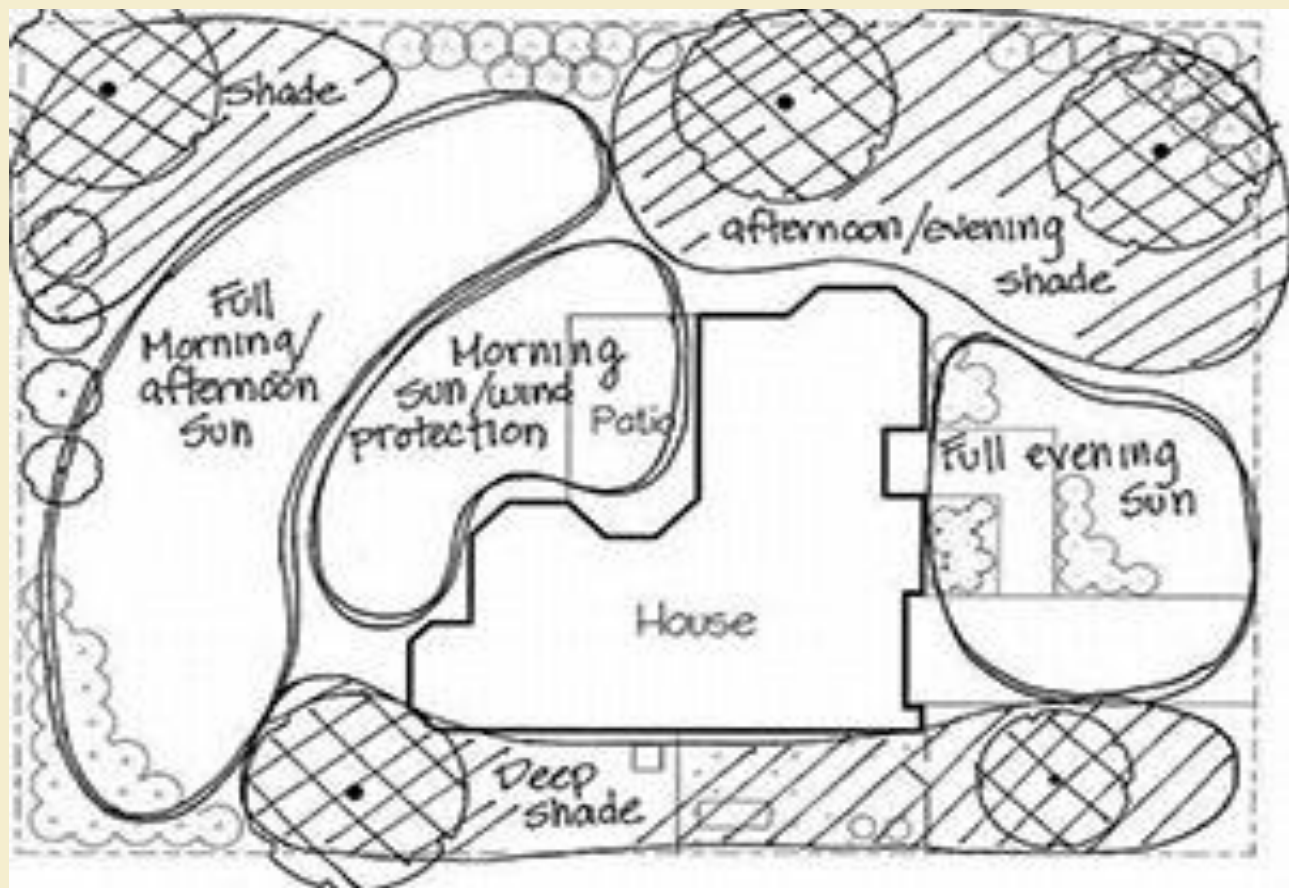


Create & Maintain a Living Soil



Use Highly Efficient Irrigation

View of your Current Landscape



Combine
your Plot
Plan and
your Site
Information



Demonstration Gardens

Pinterest

Drive neighborhoods

Train Your Eye
to Water-Wise
Landscapes



What Shapes
Do You Like?



Rectilinear

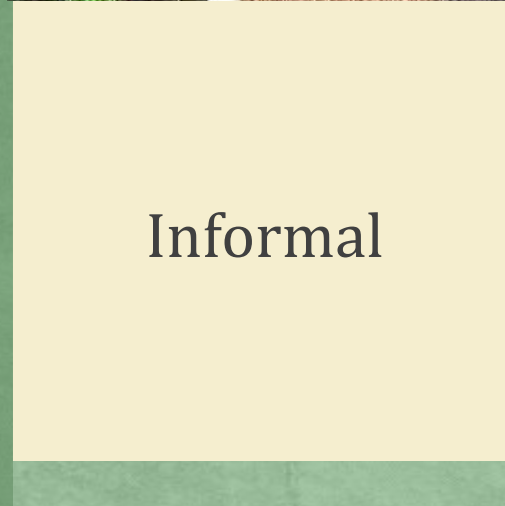
Curvilinear



What Style &
Feel Do You
Want?



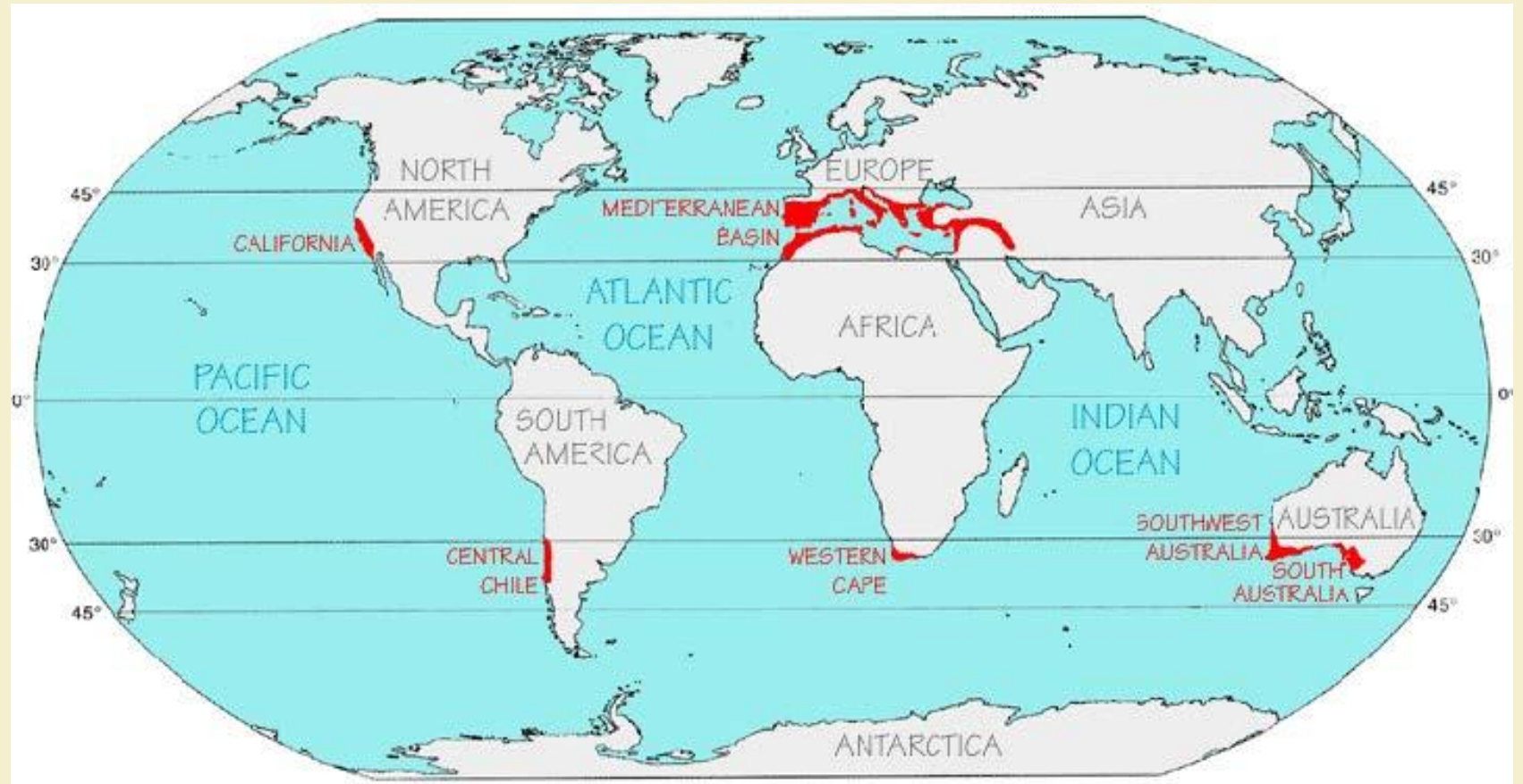
Formal



Informal



Select Plants for Mediterranean Climates



Plant Requirements

Compare plants to your site map

Water Requirements (Hydrozones)



Moderate (restrict)

Low

Very Low



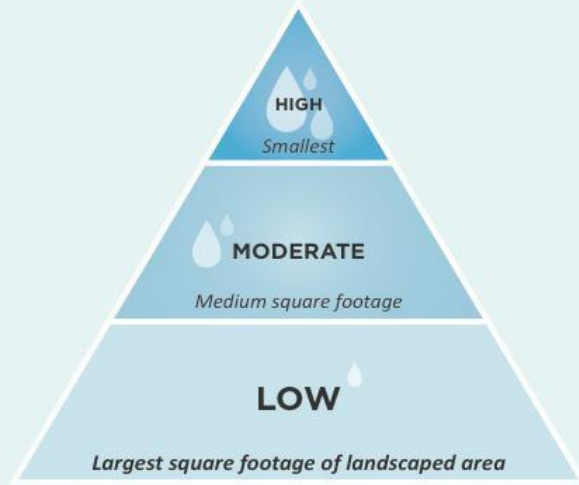
Soil types

Sun and Shade Requirements

Size (Height and width)

HYDROZONE TRIANGLE

Hydrozone means the grouping of plants by their water requirements for efficient irrigation and plant health.



Group plants with similar water (and sun) needs

- Water where and when plants need it
- Reduce plant stress, non-beneficial growth, pest & disease problems



Group with
Hydrozones

Low-Water Use & Drought-Tolerant are NOT Equal

Drought tolerant = *once established* – plants can survive on:

Seasonal rainfall

Infrequent watering or

Repeated periods of dry conditions and recover from repeated wilting

Low Water-Use Plants:

A constant classification

Plants always require low amounts of water.



Select Plants
based on
Form and
Site Requirements
(then if you like them)

Online Plant Selectors

<https://inlandvalleygardenplanner.org>

<http://www.landdesignpublishing.com>

<http://ie.watersavingplants.com>

Demonstration Gardens

rsabg.org Rancho Santa Ana Botanic Garden (Natives)

cbwcd.org Chino Basin Water Conservation District

evmwd.com Elsinore Valley Municipal Water District

emwd.org Eastern Municipal Water District

wmwd.com Western Municipal Water District

Making Plants Work for You



Unity (theme)

Simplicity (Less plant types)

Balance (Proportion)

Transitions (Low to High)

Environmental modification

Prepare for Planting



Living Soil (Oxygen, Water and Life)



Remove turf

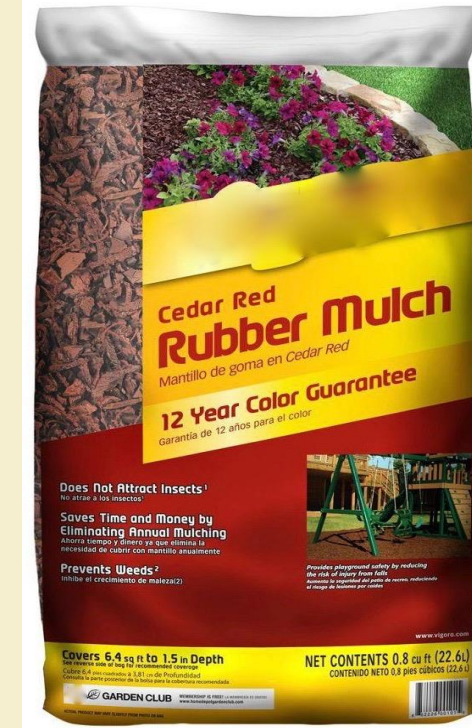


Drainage/ berms to slow, spread,
sink and store rainwater



Plan irrigation valves for Hydrozones

Finish with Mulch!



Spread evenly over the soil:
to keep moisture in
improve the soil
enhance appearance of the landscape

Cues to Care

Mow the Edges

Space Plants Wisely

Focal points

Formal layouts

Bold planting patterns

Signage





Your Path to a Lovely Water-Wise Landscape

Beauty

Greater Bio-diversity and sense of place

Cleaner oceans/waterways/air

Conservation of money and resources



Useful Websites & Information

UC Vegetable Research & Information Center

<http://vric.ucdavis.edu/>

Gardening Information

<http://ucanr.org/fininformation.efm?findinfosub=6>

Pest Notes

<http://www.ipm.ucdavis.edu/PMG/menu.homegarden.html>

Weeds

http://www.ipm.ucdavis.edu/PMP/weeds_common.html

Online Order Catalog for UC Publications

<http://anrcatalog.ucdavis.edu>

California Master Gardener Handbook

Home Vegetable Gardening, Publication #21444

Pests of the Garden & Small Farm, Publication #3332

Local Helpline

951-683-6491

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