

# DROUGHT TOLERANT

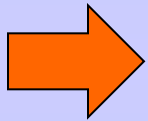


# PLANT SELECTION

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## Second of a 4 part series

Drought Tolerant Landscape Design  
March 22, 2018



Drought Tolerant Plant Selection  
April 5 , 2018

Drought Tolerant Landscape Installation  
April 19, 2018

Drought Tolerant Landscape Maintenance  
May 3, 2018

**Which plants  
are drought tolerant?**

# WUCOLS IV

## Water Use Classification of Landscape Species

- 3500 species of landscape plants  
(Including 44 different Manzanitas, 49 Oaks, and 90 Sages!)
- Listed by the amount of water they need
- Compared to irrigated turf grass (% ET<sub>o</sub>)

Category	Abbreviation	Percentage of ET <sub>o</sub>
High	H	70-90
Moderate/Medium	M	40-60
Low	L	10-30
Very Low	VL	< 10



# HELP WITH HYDROZONING!

## [www.waterwonk.us](http://www.waterwonk.us)

### California plant database search tool

Choose city ► Plant search ► My plant list

1

A plant's water needs vary with the climate region where it will live. Choose a city and the tool will place your search in the correct WUCOLS climate region.

2

Proceed to the plant search page, and search to your heart's content. There are 12 different search criteria you could specify, or just bring up the entire regional list, or the full list showing all plants and all 6 regions. You will be presented with the WUCOLS water-use value for each plant.

3

Create a list of plants for your project. This list can be printed or downloaded to your favorite spreadsheet program. We will save your plant lists for you in our database.

- You may have one courtesy plant list for each region. To access your existing plant list for any given region, you must first choose a city in that region, and then go to the plant search page. Your list may be accessed from the "Plant Search" page.
- In order for you to create plant lists, you must register for the site. Signing up is free, quick, and easy to do.

What is WUCOLS?

#### Water Use Classifications of Landscape Species

*Water Use Classifications of Landscape Species (WUCOLS) provides a guide to estimating irrigation water needs of landscape plantings in each of 6 distinct California climate regions. WUCOLS was developed by the University of California Cooperative Extension in cooperation with landscape professionals and funded by the California Department of Water Resources.*

 [Click pdf icon to view or download WUCOLS IV plant list. Learn more about WUCOLS \[here\]\(#\)](#)

Get started



## Choose City to identify WUCOLS REGION

[Show instructions](#)

**Find city in WUCOLS REGION** **Go to  
Plant Search**



**Or find by city name** **Find city**

Begins with

# Search for a category

*Example: very low water ground covers*

## Plant Search

North Central Coastal, CA

WUCOLS Region 1

[Choose new city](#)

[Save to PDF](#)

Botanical name begins with

Find

Common name begins with

Find

### Plant Type

- Ba Bamboo
- Bu Bulb
- G Grass
- Gc Groundcover
- P Perennial
- Pm Palm
- S Shrub
- Su Succulent
- T Tree
- V Vine

### Water use

- Very Low
- Low
- Moderate
- High
- Unknown
- Not appropriate for this region

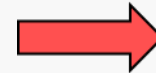
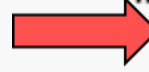
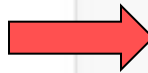
California Native

Reduced Summer Water [What's this?](#)

[Go to WUCOLS list for all 6 regions](#)

All plants for this region

Find



## Plant Search

North Central Coastal, CA

WUCOLS Region 1

[Choose new city](#)

[Save to PDF](#)

Botanical name begins with

Common name begins with

### Plant Type

- Ba Bamboo       Pm Palm  
 Bu Bulb       S Shrub  
 G Grass       Su Succulent  
 Gc Groundcover       T Tree  
 P Perennial       V Vine

### Water use

- Very Low  
 Low  
 Moderate  
 High  
 Unknown  
 Not appropriate for this region

California Native

Reduced Summer Water [What's this?](#)

[Go to WUCOLS list for all 6 regions](#)

All plants for this region

 New Search

 California Native

 Reduced Summer Water

### Search Results

7 plants:

Type-Groundcover

Water use-Very low

Type	Botanical Name	Common Name	Water Use	Flickr Photos	Select for My List
Gc S	Acacia redolens 	prostrate acacia	Very Low	<a href="#">See it</a>	<input type="checkbox"/> 
Gc S	Adenostoma fasciculatum 	chamise	Very Low	<a href="#">See it</a>	<input type="checkbox"/>
Gc S	Artemisia spp. (shrubby)	sagebrush	Very Low	<a href="#">See it</a>	<input type="checkbox"/>
Gc S	Atriplex CA native species 	saltbush	Very Low	<a href="#">See it</a>	<input type="checkbox"/>
Gc S	Atriplex semibaccata 	Australian saltbush	Very Low	<a href="#">See it</a>	<input type="checkbox"/>
Gc	Iva hayesiana  	poverty weed	Very Low	<a href="#">See it</a>	<input type="checkbox"/>
Gc P	Teucrium cossonii	Majorcan germander	Very Low	<a href="#">See it</a>	<input type="checkbox"/>

Results for “Very Low Groundcover”  
Click on “See it” for a picture!



# *Teucrium cossoni* - Majorcan Germander



# Search for a plant and find out its water requirement

**Plant Search**  
North Central Coastal, CA  
WUCOLS Region 1

[Choose new city](#)  
[Save to PDF](#)

Botanical name begins with  [Find](#)

Common name begins with  [Find](#)

**Plant Type**

- Ba Bamboo
- Bu Bulb
- G Grass
- Gc Groundcover
- P Perennial
- California Native

**Water use**

- Vm Palm
- S Shrub
- Su Succulent
- T Tree
- V Vine

Very Low  
 Low  
 Moderate  
 High  
 Unknown  
 Not appropriate for this region  
 Reduced Summer Water [What's this?](#)

[Go to WUCOLS list for all 6 regions](#) [All plants for this region](#) [Find](#)

[New Search](#) [California Native](#) [Reduced Summer Water](#) [Go to list](#)

**Search Results**

1 plants:  
common name begins with "Japanese Maple"

Type	Botanical Name	Common Name	Water Use	Flickr Photos	Select for My List
T	Acer palmatum	Japanese maple	Moderate	<a href="#">See It</a>	<input type="checkbox"/> <a href="#">Add</a>

# Not all natives are DT

# Many non-natives are DT

## **Mediterranean plants**

- From 5 regions of the world with shared climates
- Grey, small or fuzzy leaves
- Leaves held sideways to the sun

## **Succulents & cacti**

- Fleshy, water holding leaves
- No leaves!
- Summer dormancy



# Trees

# An Assortment of Low Water Trees

Acacia

California Buckeye

Canary Island Pine

Carolina Cherry

Chinese Pistache

Chitalpa

Crape Myrtle

Deodar Cedar

Elm

Eucalyptus

Live Oak

Locust

Majestic Beauty Indian Hawthorn

Marina Strawberry Tree

Palo Verde

Pepper Tree

Toyon

Weeping Bottlebrush

Western Redbud



Coast live oak: *Quercus agrifolia*





Desert Museum Palo Verde:  
*Cercidium hybrid*





## Wild lilac: *Ceanothus* 'Ray Hartman'

Photo from book "*Ceanothus*" by David Fross





**Manzanita** *Arctostaphylos* 'Dr. Hurd'





# California Buckeye

*Aesculus californica*





Buckeye: *Aesculus californica*

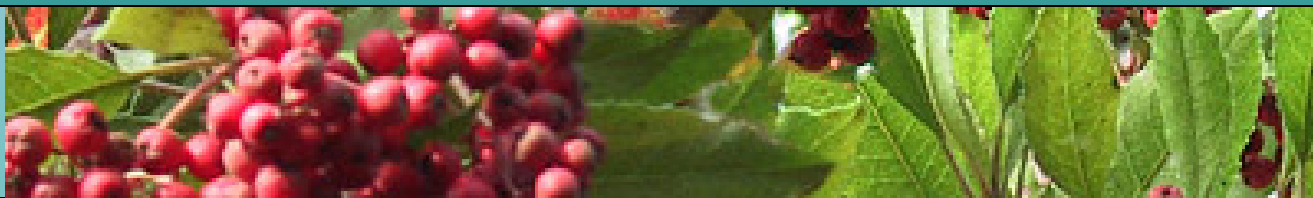




**Western Redbud**  
***Cercis occidentalis***



**Toyon** - *Heteromeles arbutifolia*







**x Chitalpa taskentensis**

# Low Water Edible Trees

Apricot

Avocado

Chinese Jujube

Date Palm

Elderberry

Filbert

Loquat

Nectarine/Peach

Olive

Pecan

Persimmon

Pinyon Pine

Pistachio

Plum

Pomegranate

Quince

Strawberry Tree

Sweet Bay

- Drought tolerant
- Fall color
- Disease and pest free
- Gorgeous edible fruit

# Persimmon







Pomegranate: *Punica granatum*



# Elderberry: *Sambucus mexicana*



# Shrubs



## Pineapple Guava

- Edible flowers and fruit
- Evergreen
- Drought tolerant
- Screening shrub
- Small attractive tree



Pineapple Guava:  
*Feijoa sellowiana*



# California Coffeeberry *Rhamnus californica* 'Mound San Bruno'



California native. Birds like the seeds which look like Coffee Beans.



# Dwarf Bottlebrush *Callistemon* 'Little John'



No pruning necessary. Attracts hummingbirds

# Australian Fuchsia *Correa 'Dusky Bells'*



Dry shade okay, deer don't eat it, hummers like it





Wild lilac: *Ceanothus* 'Julia Phelps'





California Lilac: Ceanothus 'Valley Violet'



**Ceanothus 'El Dorado'**







# Matilija Poppy

*Romneya coulteri*



# *Blooms a long time*



Cedros Island Verbena  
*Verbena lilacina* 'De La Mina'





**Flowering Currant**  
*Ribes sanguineum* var. *glutinosum*





Design: Sherri Osaka Photo: Deva Luna

# St. Catherine's Lace





California bush anemone: *Carpenteria californica*





# Cleveland Sage

*Salvia clevelandii*





Manzanita: *Arctostaphylos densiflorus* 'Howard McMinn'

# Perennials





# Golden Aster

*Heterotheca sessiliflora* 'San Bruno Mountain'

# California Fuchsia *Epilobium* 'Everett's Choice'



Sun. Blooms in late summer/fall when hummingbirds don't have many flowers  
California native.  
Cut back to ground after bloom (November)





# California Fuchsia

*Epilobium canum*



# Coyote Mint *Monardella villosa*



California native perennial attractive to butterflies, bees & hummers. Fragrant leaves.





**Monkey Flower**  
*Mimulus aurantiacus* 'Pumpkin'





Sticky monkeyflower varieties:  
*Mimulus* 'Valentine' & 'Eleanor'



# Foothill Penstemon *Penstemon 'Margarita BOP'*



California native perennial attractive to hummingbirds.  
Cut back after bloom.



Sulfur buckwheat:

*Eriogonum umbellatum* var. *polyanthum*





## **Rosy Buckwheat (CN)**

***Eriogonum grande* var. *rubescens***

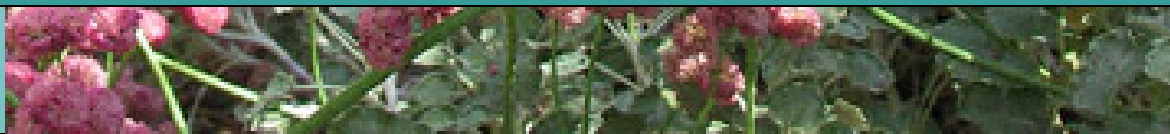




Photo: Deva Luna

# **Beach Aster**

## **Erigeron glaucus 'Wayne Roderick'**





**Yarrow** *Achillea millefolium*

# Ground Covers



***Reliable low groundcover***  
***(better than Emerald Carpet)***



Carmel Sur Manzanita  
*Arctostaphylos edmundsii* 'Carmel Sur'

***Evergreen, 2' high ground cover***



*Coffeeberry Rhamnus 'Seaview Improved'*



## Dwarf Coyote Bush *Baccharis* 'Pigeon Point'



California native that spreads 9'! Selected from a coastal dwarf plant. Great for erosion control. Can be cut back to the ground to renew.



## *Grevillea 'Coastal Gem'*



Sun. Spreader from Australia. Blooms in winter when hummingbirds don't have many flowers.



# Rosemary *Rosmarinus* 'Huntington Carpet'



Sun. Blooms in February, great for bees. European spreader.





Wild lilac: *Ceanothus* 'Yankee Point'





**Ceanothus 'Diamond Heights'**







# Salvia 'Bee's Bliss'

Design: Stephanie Morris

Installation: Curtis Horticulture



# Yerba Buena *Satureja douglasiana*



California native ground cover for dry shade with fragrant leaves. Non-invasive member of mint family. Grows under oaks.





# Hummingbird Sage

*Salvia spathacea*

The only *Salvia* that grows in the shade.



# Grasses

# *Dramatic accent grass*



Deer Grass – *Muhlenbergia rigens*



# Berkeley Sedge *Carex divulsa (tumulicola)*



Versatile green mophead: grows with drought or water, sandy or clay soil, sun or shade! Non-native, despite its name.





Design& Installation: Erin Dougherty Photo: Deva Luna

# BERKELEY SEDGE





Design & Installation: Erin Dougherty

Photo: Laura Gardner

Berkeley Sedge after haircut





Design & Photo: Agi Kehoe

# Berkeley Sedge with Wildflowers





Idaho fescue:  
*Festuca idahoensis*



- Prefers a bit of shade
- Needs to be cut back annually



# RED FESCUE





NATIVE SOD NOW AVAILABLE

# Vines

Catalina Perfume

Grapes

Bougainvillea

Cecile Brunner & Lady Banks Rose

California Pipe Vine

Blue Dawn Flower

Carolina Jessamine

Catclaw Vine

Hops



# *A reasonable sized plant for a trellis*



Catalina Perfume – *Ribes viburnifolium*



# *Bougainvillea*





Lady Banks — *Rosa banksia lutea*



Cecile Brunner Climbing Rose

***Drought tolerant roses!***

# Bulbs





Naked Ladies: *Amaryllis belladonna*







Pacific Coast hybrid iris: *Iris 'Idylwild'*



# Annuals

California natives

Plant seeds in Fall, for rainfall



Farewell-to-Spring: *Clarkia amoena*





# California Poppy *Eschscholzia californica*

Actually a perennial, not an annual!



# Succulents



Succulents have great texture





# Soap Aloe *Aloe saponaria*



Excellent for hummers







Delosperma 'Desert Flame'



Sempervivum 'Red Beauty'



Echevaria 'Perle von Nurnberg'

# Ferns



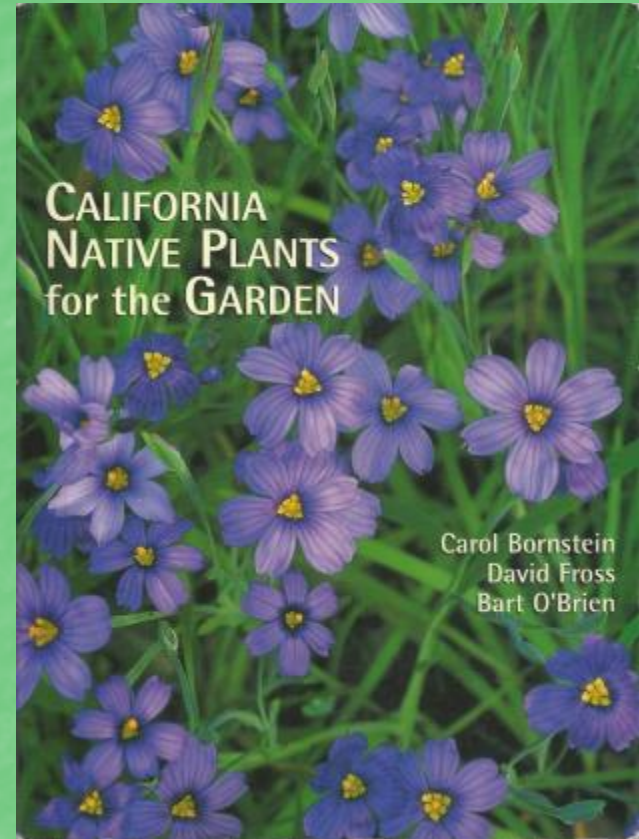
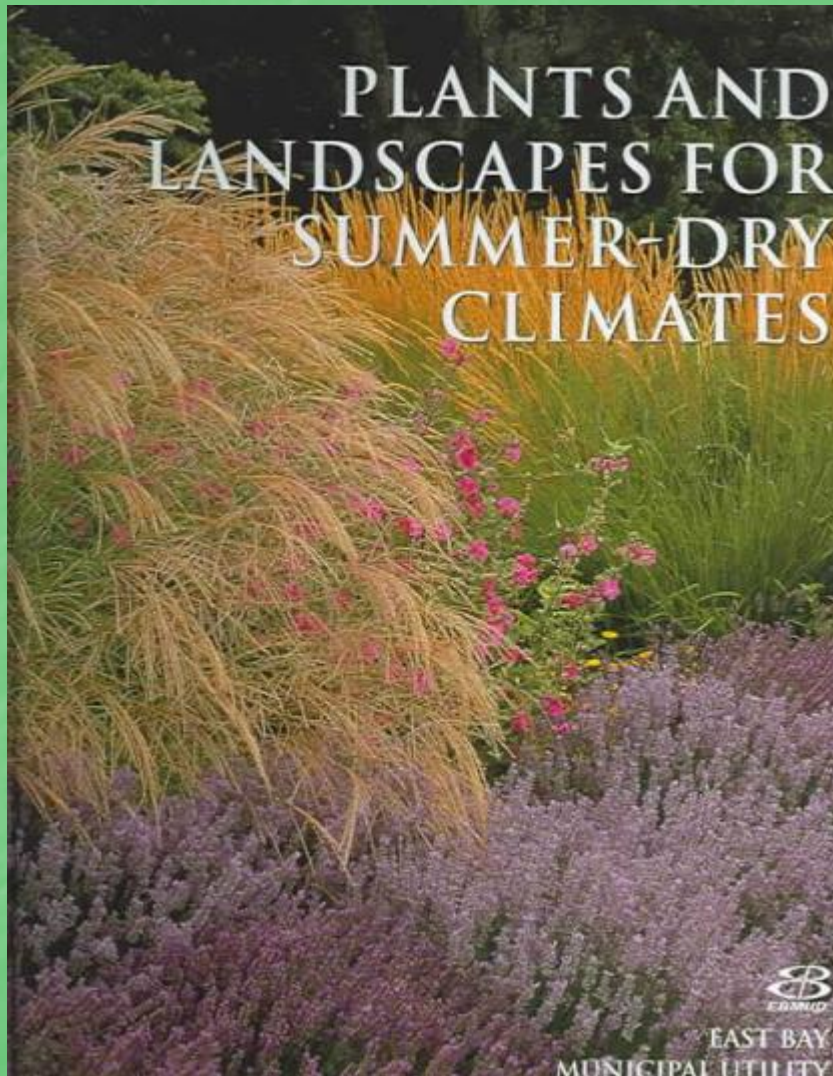


Summer dormancy

# California Polypody



# Good reference books





# Nurseries with a good selection of natives

- California Native Plant Society Sales, Hidden Villa, Los Altos Hills, (monthly for members) October
- Summerwinds, Palo Alto and other locations
- Almaden Nursery, San Jose
- Capitol Nursery, San Jose (wholesale/retail)
- Yerba Buena Nursery, Half Moon Bay
- East Bay Wilds, Oakland
- Lerner Seeds, mail order seeds
- Annie Annuals, Richmond and online
- Las Pilitas online



# Going Native Garden Tour 2018

North: Sat, Apr 07, 2018, 10:00am to 4:00pm

South: Sun, Apr 08, 2018, 10:00am to 4:00pm

*A free tour of native gardens in Santa Clara Valley & Peninsula, San Francisco Bay Area*

*Organized by the California Native Plant Society (Santa Clara Valley Chapter) in association with UCCE Master Gardeners of Santa Clara County.*



[Access Garden Addresses Here ...](#)



Since 2003, the Bay Area's pioneering native garden tour has showcased **gardens featuring California native plants**. This community-based tour is free of charge to the public. Each tour features up to 50 gardens, most of them private home gardens, which are open on tour day in a do-it-yourself, open house format.

The gardens on the tour demonstrate reduced water use, reduced chemical and pesticide use, improved habitat, and the unique aesthetic appeal of gardens designed with California native plants. Our website also provides resources to help Bay Area gardeners to "go native" in their own gardens.

On tour day, sponsoring nurseries will conduct native plant sales at select gardens. Part of the proceeds benefit Going Native Garden Tour. Please pay by cash or check.



[Click Here To Register For The 2018 Tour](#)

Registration will close on Sun, Apr 08, 2018, 3:00 pm.  
**Note:** there will be no e-mail help available on the tour day.

[Click here](#) to preview the gardens on the 2018 tour.

## TOUR ORGANIZERS



CALIFORNIA  
NATIVE PLANT  
SOCIETY



## Be a 2018 Tour Volunteer

Tour volunteers can visit tour gardens throughout the year through a series of Garden Preview events and receive a custom GNGT T-shirt with artwork that changes yearly.

Tour volunteers work one 3-hour shift on tour day at one of the gardens either as a docent or as a greeter.

[Click here](#) to sign up.



## Submit Your Garden for the 2019 Tour

If you live in Santa Clara County or San Mateo County, and California native plants are a significant percentage (60% or more) of your garden, we invite you to submit your garden for inclusion in the Going Native Garden Tour 2019. The submission deadline is Wed, Oct 31, 2018, 11:59 pm.

[Click here](#) to submit your garden. Additional details are on the [How do I submit my garden to be included in the Tour? page](#).



California is going crazy in bloom!

