



CLIMATE APPROPRIATE PLANTING

how to **plant the right species**
to **increase drought resilience**
and **enhance local ecologies**

for Inland Valleys
in Sonoma County



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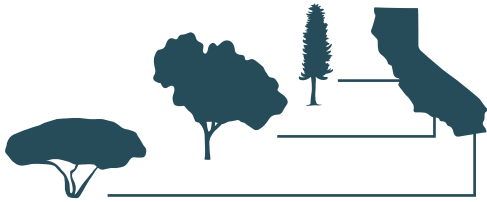
CLIMATE APPROPRIATE PLANTING

what, why, and how to plant species for inland valleys with hot summers to save water and enhance your neighborhood & ecosystem health

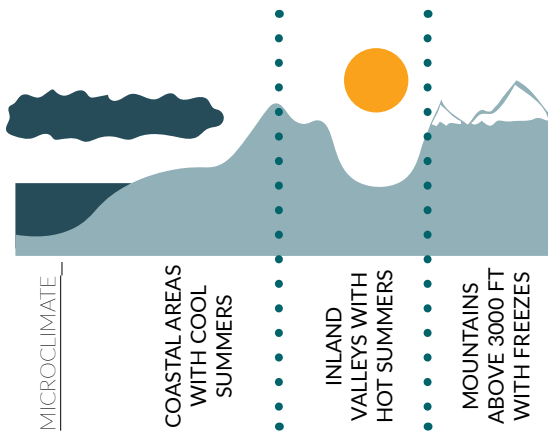


BASICS

California has a number of different climatic, therefore ecologic, zones that range from the desert to the redwoods. Each has a set of native and climate appropriate plants that are best suited to that environment and should be propagated to the benefit of other plant & animal species and water resources.



Along the Californian coast, regional microclimates are defined by coastal fog, which is trapped by coastal mountains. This leaves coastal inland valleys hotter and dryer than regions sandwiched between the ocean and mountains.



We will focus here on the climate appropriate plantings of inland valleys with hot summers, such as the Sonoma Valley region.

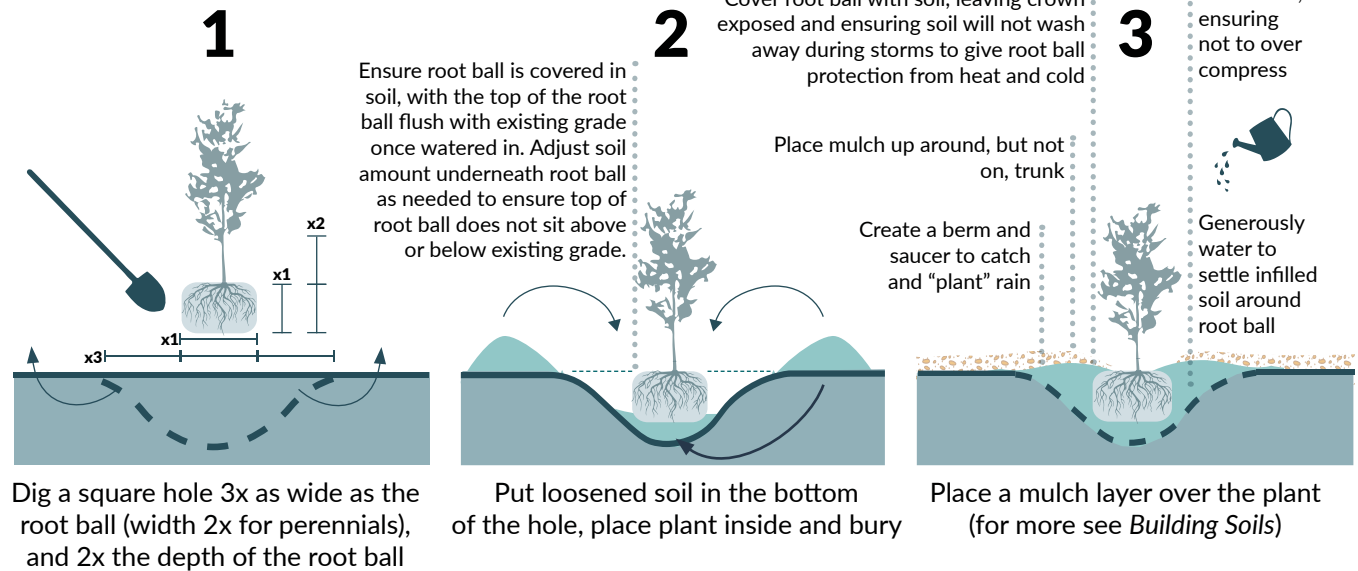
DO

- ✓ DO completely remove lawn and other invasive species before installing Climate Appropriate Planting. Maintain weeding when invasive species re-sprout. [Mulching](#) can help prevent weeds, too!
- ✓ DO consider microclimates: Observe your site. Which areas get sun or shade? Where are steep slopes or wetter drainages? What are the soil conditions? [Test your soils.](#)
- ✓ DO plant native and flowering pollinator plant species: many native and flowering plants provide critical pollinator habitat as food and shelter.

DO NOT

- ✗ DO NOT use potable water to irrigate under-utilized lawn or high water demand plants; replace with Climate Appropriate Plants or reuse rainwater and greywater.
- ✗ DO NOT use pesticides and herbicides! These harm pollinator species.
- ✗ DO NOT remove leaves. Keep leaves on the ground and postpone pruning and cutting back. Instead of removing leaves in autumn and through winter, leave them behind to build soil and for pollinating insects to use for their eggs and pupae.

PLANT IN 3 EASY STEPS!



ADDITIONAL RESOURCES

Calscape
Bloom! California
Incorporating Climate Appropriate Planting into a Holistic Landscape:
www.calscape.org
www.bloomcalifornia.org
www.savingwaterpartnership.org

Land Resilience Partnership
Daily Acts
California Native Plant Society
www.landresiliencepartnership.org
www.dailyacts.org
www.cnps.org

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CLIMATE APPROPRIATE PLANTS




DROUGHT TOLERANT SPECIES

all species low water usage




WATER NEEDS

 low
 medium




SOIL DRAINAGE

 fast
 slow
 adaptable



POLLINATOR

 butterfly / moth
 bird
 bee

SUN/SHADE

 full sun
 partial sun / shade
 full shade

OTHER CONSIDERATIONS

 erosion control
 allelopathic: consult [Calscape](#) for context and companion plants

TREES



Quercus agrifolia
Coast Live Oak ⚠️



Quercus lobata
Valley oak ⚠️



Quercus wislizeni
Interior Live Oak ⚠️

SMALL TREES



Cercis Occidentalis
Western Redbud



Arctostaphylos glauca
Big Berry Manzanita



Heteromeles arbutifolia
Toyon

SHRUBS



Trichostema lanatum
Woolly Blue Curls



Diplacus aurantiacus
Bush Monkeyflower



Salvia apiana
White Sage

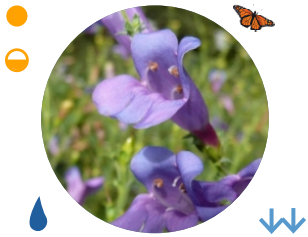
PERENNIALS



Salvia spathacea
Hummingbird Sage



Achillea mellifolium
Common Yarrow



Penstemon heterophyllus
'Margarita BOP'
Margarita Bop Penstemon

GRASSES



Festuca californica
California Fescue



Stipa pulchra
Purple Needle Grass

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CLIMATE APPROPRIATE PLANTS

DROUGHT and CLAY SOIL TOLERANT SPECIES

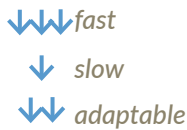
all species low water usage and can be planted in clay soils



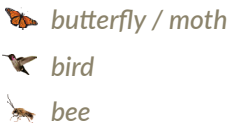
WATER NEEDS



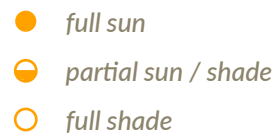
SOIL DRAINAGE



POLLINATOR



SUN/SHADE



OTHER CONSIDERATIONS



SMALL TREES



SHRUBS



SHRUBS



PERENNIALS / ANNUALS



GRASSES



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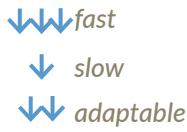
CLIMATE APPROPRIATE PLANTS POLLINATOR-FRIENDLY SPECIES



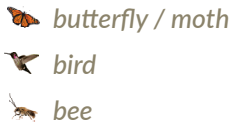
WATER NEEDS



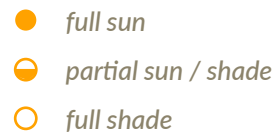
SOIL DRAINAGE



POLLINATOR



SUN/SHADE



OTHER CONSIDERATIONS



TREES



Aesculus californica
California Buckeye



Cersis occidentalis
Western Redbud



Salix lasiolepis
Arroyo Willow

SHRUBS



Arctostaphylos ssp.
Manzanita



Ceanothus ssp.
California Lilac



Heteromeles arbutifolia
Toyon

SHRUBS



Carpenteria californica
Bush Anemone



Fremontodendron californicum
California Flannelbush



Rhamnus californica
Coffeeberry

PERENNIALS



Achillea millefolium
Yarrow



Asclepias fascicularis
Narrow Leaf Milkweed

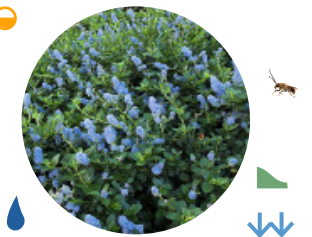


Eriogonum fasciculatum
California Buckwheat

GROUNDCOVERS



Arctostaphylos uva-ursi
Bearberry



Ceanothus griseus horizontalis
Carmel Creeper

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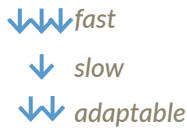
CLIMATE APPROPRIATE PLANTS POLLINATOR-FRIENDLY SPECIES



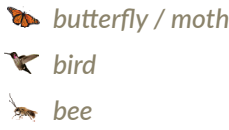
WATER NEEDS



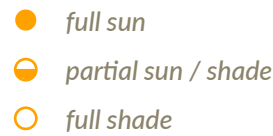
SOIL DRAINAGE



POLLINATOR



SUN/SHADE



OTHER CONSIDERATIONS



TREES

Prunus ilicifolia
Hollyleaf Cherry

Quercus agrifolia
Coast Live Oak

Quercus lobata
Valley Oak

SHRUBS

Sambucus nigra
Black Elderberry

Epilobium canum
California Fuchsia

Lupinus albus
Silver Lupine

SHRUBS

Diplacus/Mimulus longiflorus
Sticky Monkeyflower

Ceanothus lemmonii
Lemmon's Ceanothus

Rosa californica
California Wild Rose

PERENNIALS

Salvia spathacea
Hummingbird Sage

Monardella villosa
Coyote Mint

GROUNDCOVERS

Eschscholzia californica
California Poppy

Salvia "Bee's Bliss"
Creeping Sage

Nemophila menziesii
Baby Blue Eyes

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CLIMATE APPROPRIATE PLANTS

RAIN GARDEN PLANTS



SOIL DRAINAGE

- fast
- slow
- adaptable

POLLINATOR

- butterfly / moth
- bird
- bee

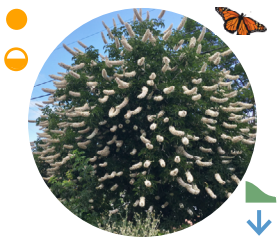
SUN/SHADE

- full sun
- partial sun / shade
- full shade

OTHER CONSIDERATIONS

- erosion control
- edible

TREES



Aesculus californica
California Buckeye

SHRUBS



Carpinteria californica
Bush Anemone

SHRUBS



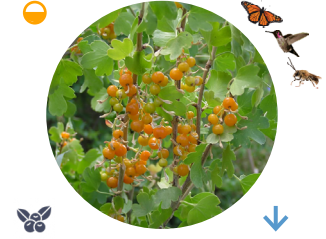
Heteromeles arbutifolia
Toyon

SHRUBS

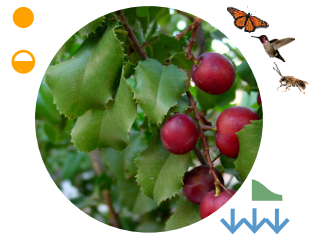


Ceanothus spp.
California Lilac

SHRUBS



Ribes aureum
Golden Currant



Prunus ilicifolia
Hollyleaf Cherry



Cercis occidentalis
Western Redbud



Rhamnus californica
Coffeeberry



Diplacus/Mimulus longiflorus
Sticky Monkeyflower



Quercus agrifolia
Coast Live Oak



Dendromecon rigida
Bush Poppy



Romneya coulteri
Matilija Poppy



Sambucus nigra
Black Elderberry

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CLIMATE APPROPRIATE PLANTS

RAIN GARDEN PLANTS



MEDIUM WATER USE

ZONE 2



SOIL DRAINAGE



fast



slow



adaptable

POLLINATOR



butterfly / moth



bird



bee

SUN/SHADE



full sun



partial sun / shade



full shade

OTHER CONSIDERATIONS



erosion control



edible

SHRUBS



Rosa californica
California Wild Rose

SHRUBS



Trichostema lanatum
Woolly Blue Curls

PERRENNIALS



Achillea millefolium
Yarrow

PERRENNIALS



Iris douglasiana
Douglas Iris

GRASSES



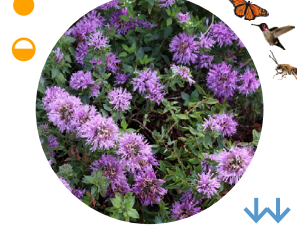
Calamagrostis foliosa
Mendocino Reed Grass



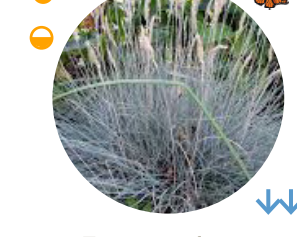
Rubus ursinus
California Blackberry



Eschscholzia californica
California Poppy



Monardella villosa
Coyote Mint



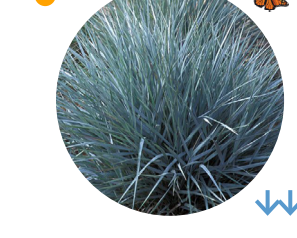
Festuca glauca
Blue Fescue



Salvia apiana
White Sage



Solidago velutina
ssp. *californica*
California Goldenrod



Leymus condensatus
Canyon Prince Wild Rye

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CLIMATE APPROPRIATE PLANTS

RAIN GARDEN PLANTS



HIGHER WATER USE*

ZONE 1



SOIL DRAINAGE

- ↓↓↓ fast
- ↓ slow
- ↓↓ adaptable

POLLINATOR

- butterfly / moth
- bird
- bee

SUN/SHADE

- full sun
- ◐ partial sun / shade
- full shade

OTHER CONSIDERATIONS

- erosion control
- allelopathic: consult [Calscape](#) for context and companion plants

TREES**



Juglans californica
California Black Walnut



Platanus racemosa
Sycamore



Salix laevigata
Red Willow

PERRENIALS



Fragaria chiloensis
Beach Strawberry



Heuchera maxima
Coral Bells

GRASSES



Carex praegracilis
California Field Sedge



Juncus texilis
Basket Rush



Sisyrinchium bellum
Blue Eyed Grass

GRASSES



Juncus patens
California Gray Rush

*Plants may require supplemental irrigation

**Trees only appropriate for very large rain gardens




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CLIMATE APPROPRIATE PLANTS

GREYWATER PLANTS

Plants that can be irrigated by greywater systems

SUN/SHADE

-  full sun
-  partial sun / shade
-  full shade

OTHER CONSIDERATIONS

-  edible
-  native

TREES



Acer macrophyllum
Big Leaf Maple



Citrus spp.
Citrus tree



Ficus carica
Common fig

SHRUBS



Acca sellowiana
Pineapple Guava



Diospyros kaki
Persimmon



Punica granatum
Pomegranate

PERENNIALS



Achillea mellifolium
Yarrow



Fragaria chiloensis
Beach Strawberry



Cynara scolymus
Artichoke

GRASSES



Calamagrostis foliosa
Mendocino Reed Grass



Carex barbare
Basket Sedge



Carex praegracilis
California Field Sege

VINES



Actinidia argata
Hardy Kiwi



Humulus lupulus
Hops Vine



Lathyrus odoratus
Sweet Pea Vine

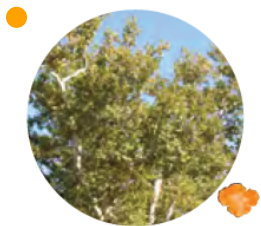
SUN/SHADE

- full sun
- ◐ partial sun / shade
- full shade

OTHER CONSIDERATIONS

- 🍃 edible
- 🌸 native

TREES



Platanus racemosus
Sycamore

SHRUBS



Rubus ursinus
California Blackberry

PERRENIALS



Iris douglasiana
Douglas Iris

GRASSES



Juncus textilis
Basket Rush

VINES



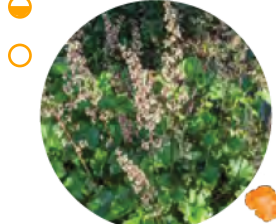
Selenicereus undatus
Dragon Fruit Vine



Morus alba x rubra
Pakistan Mulberry



Rosa californica
California Wild Rose



Heuchera spp.
Coral Bells



Juncus patens
California Gray Rush



Physalis ixocarpa
Tamatillo Vine



Juglans californica
California Black Walnut



Ribes aureum
Golden Currant



Dicentra formosa
Pacific Bleeding Heart



Festuca glauca
Blue Fescue



Passiflora edulis
Passionfruit Vine