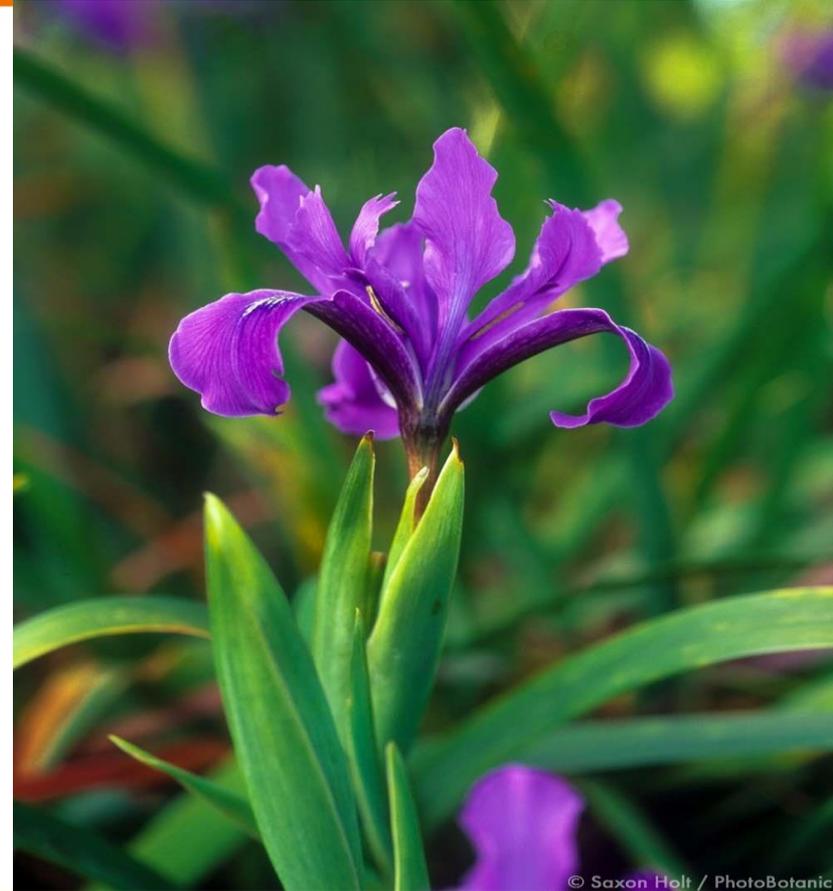


Plant Selection for Beginning Gardeners

March 4, 2021



© Saxon Holt / PhotoBotanic

Jessica Woodard, EBMUD Water Conservation Representative
Ann-Marie Benz, CNPS Horticultural Outreach Manager

UPCOMING WEBINARS

Gardening in Summer-Dry Climates

(Geared for Professionals)

Mar 8, 2-3:15

Irrigation Basics

Mar 11, 1-2pm (English and Spanish)

Graywater: Laundry to Landscape

Mar 16, 1-2pm

Home Leak Detection

Mar 18, 5-6pm (English and Spanish)

Water Conservation Showcase

Apr 6, 13, 20, 27

Register at:

www.ebmud.com/watersmart



AGENDA

- Why Plant Choice Matters
- Benefits of California Native Plants
- Installation and Design Considerations
- Finding the Right Plants for Your Garden
- Resources and Rebates



Photo:

Multi-Benefits of Water Conservation



A photograph of a house with a wooden deck and lattice railing, surrounded by greenery and a lawn. The house has a dark roof and light-colored siding. The deck is made of dark wood with a lattice railing. There are green bushes and trees in the background, and a green lawn in the foreground.

33% of *total* EBMUD residential water use goes outside

... in the summer, total residential water use doubles due to irrigation

Plant Choice - Inspire Others!

A photograph of a well-maintained garden. In the center, a white wooden bench sits on a stone path. The garden is filled with various plants, including tall green grasses, yellow flowers, and purple flowers. A wooden fence is visible in the background.

Multiplier and spillover effect: With 1 lawn conversion neighbors on the same block are *5-7 times* more likely to convert their lawn.





1430



Verbena lilacina 'De La Mina'

Penstemon heterophyllus
Foothill Penstemon



Image: Kate Kilduff

Minimal benefits (beyond water savings)



Image: Kate Kilduff

This garden design provides many benefits



California Native Plants

- What is a native plant?
- Benefits of native plants
- California habitats



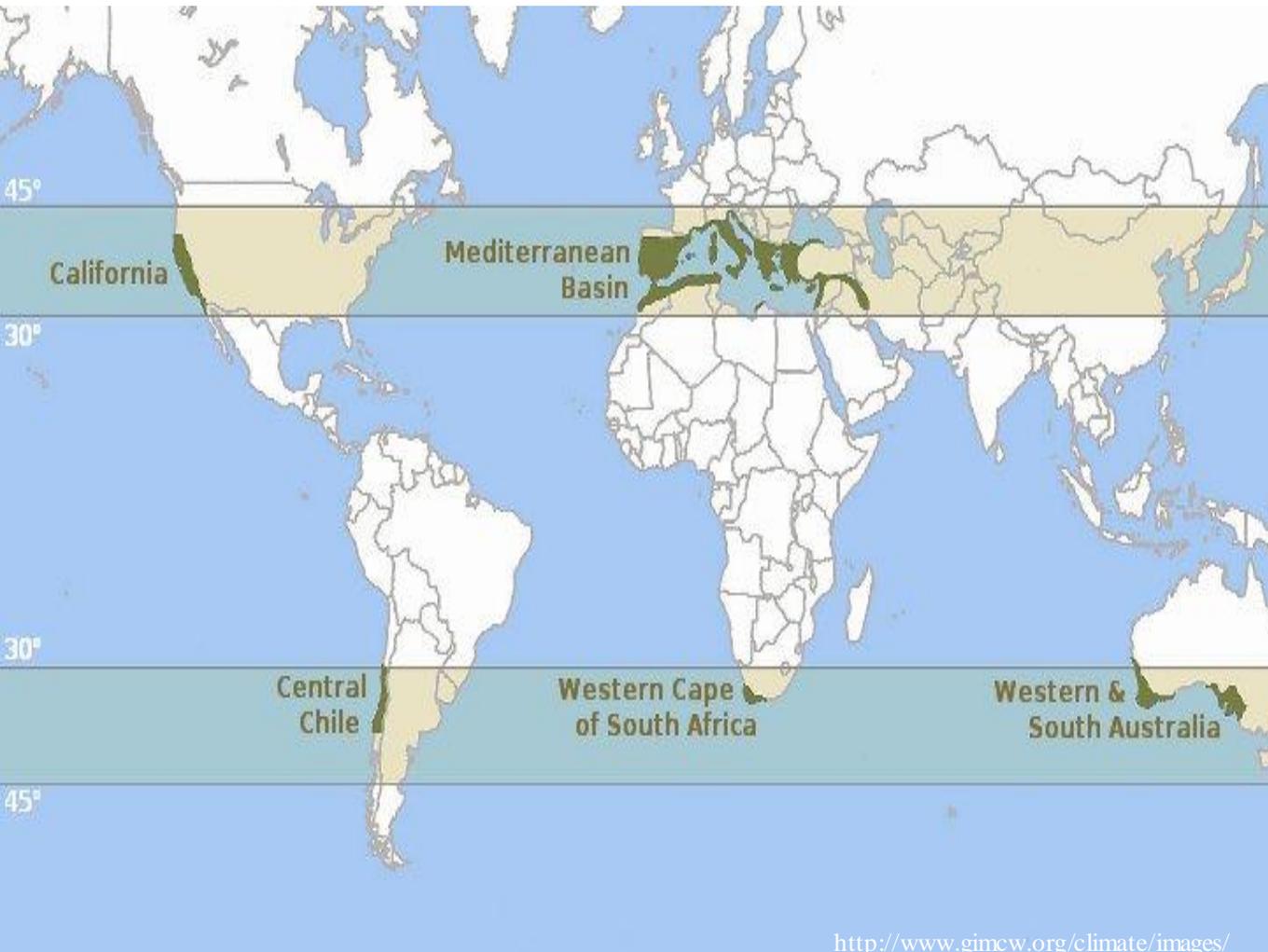
A native plant...



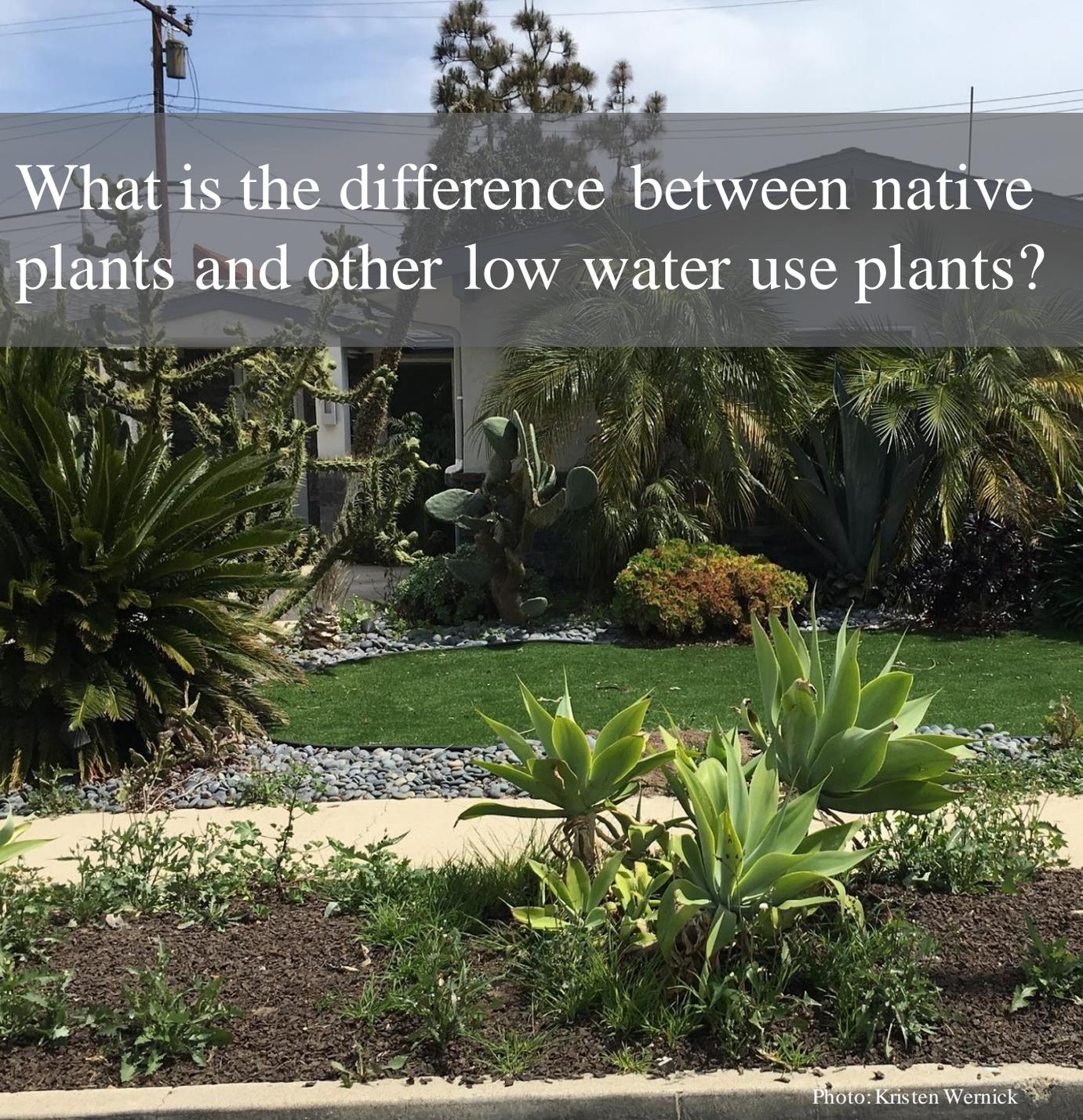
Photo: Tony Tubbs

- ✓ **Grows here naturally**, the plants that were here before European exploration.
- ✓ **Co-evolved** with animals, fungi, and microbes to form complex networks
- ✓ **Foundation of native ecosystems**

✓ Adapted to..



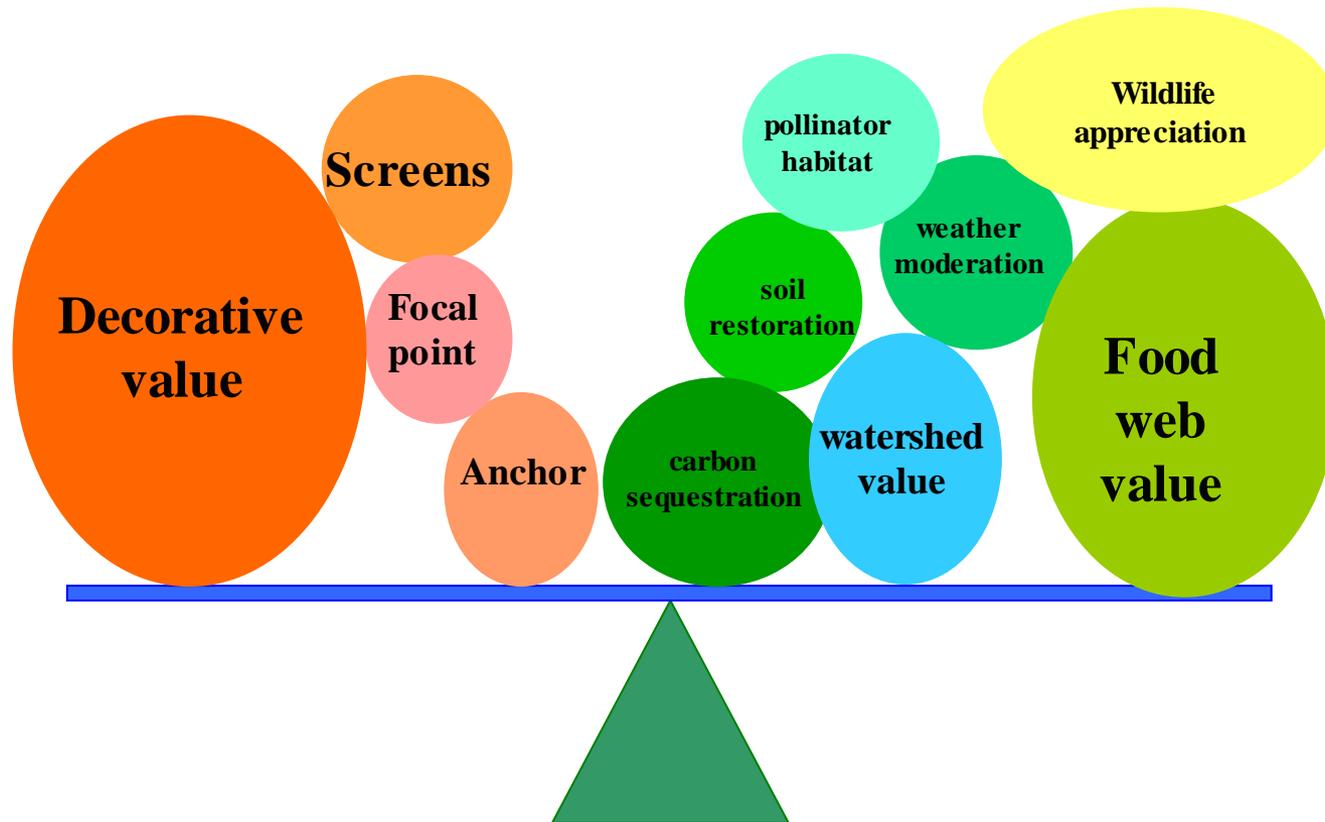
- California's unique Mediterranean climate.
- Of the 5 in the world, CA receives the least amount of rainfall
- Rest during the hot, dry summer and early fall



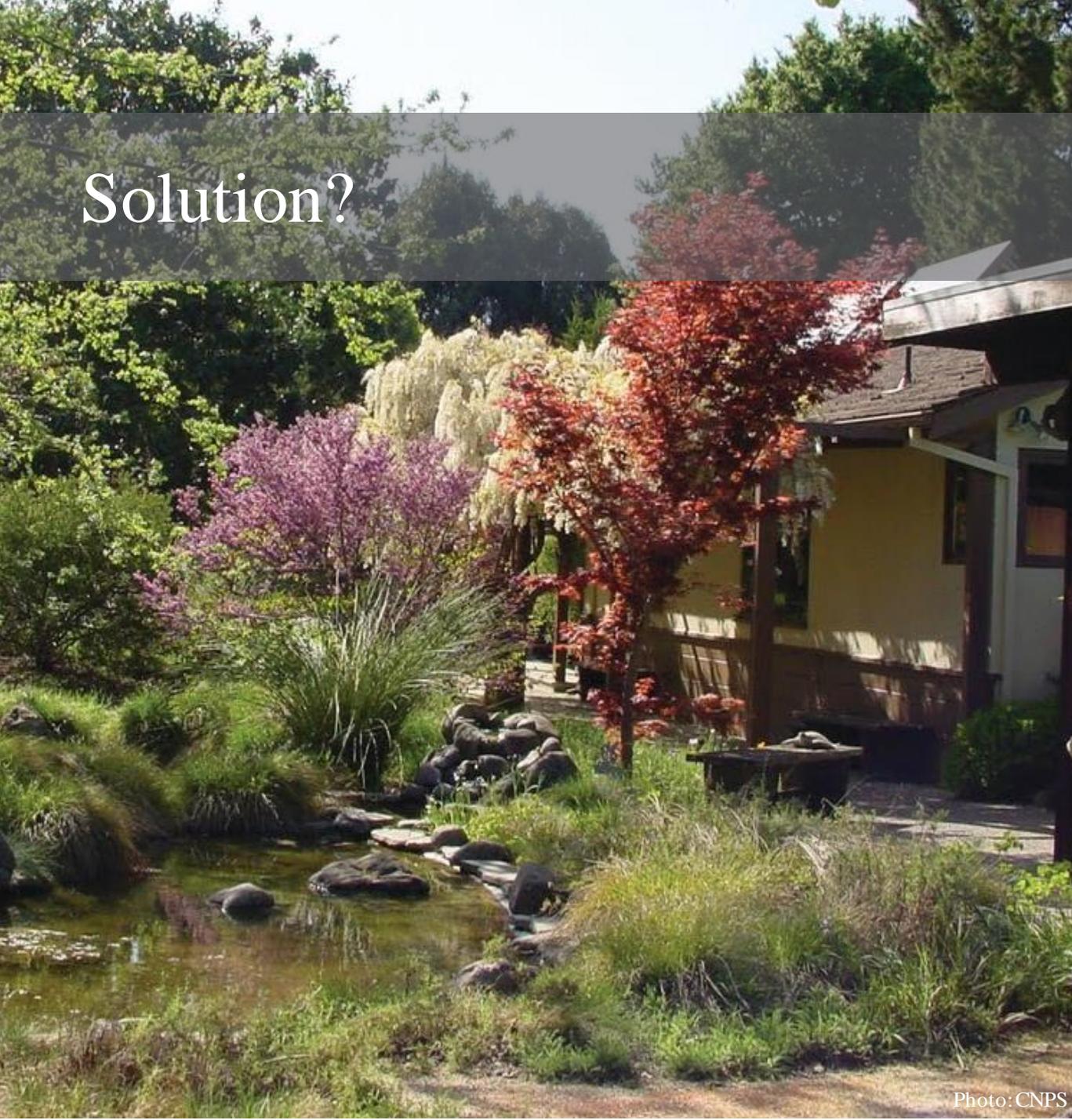
What is the difference between native plants and other low water use plants?

Non-native, drought friendly plants, even those from other Mediterranean climates, often need supplemental irrigation and care to thrive.

New criteria for designing our landscapes



Solution?



Convert sterile
suburban
gardens to rich
natural habitat
through the use
of local native
plants!



Native gardens excel at efficiency

- ✓ 83% less water
- ✓ 56% less green waste
- ✓ 68% less maintenance

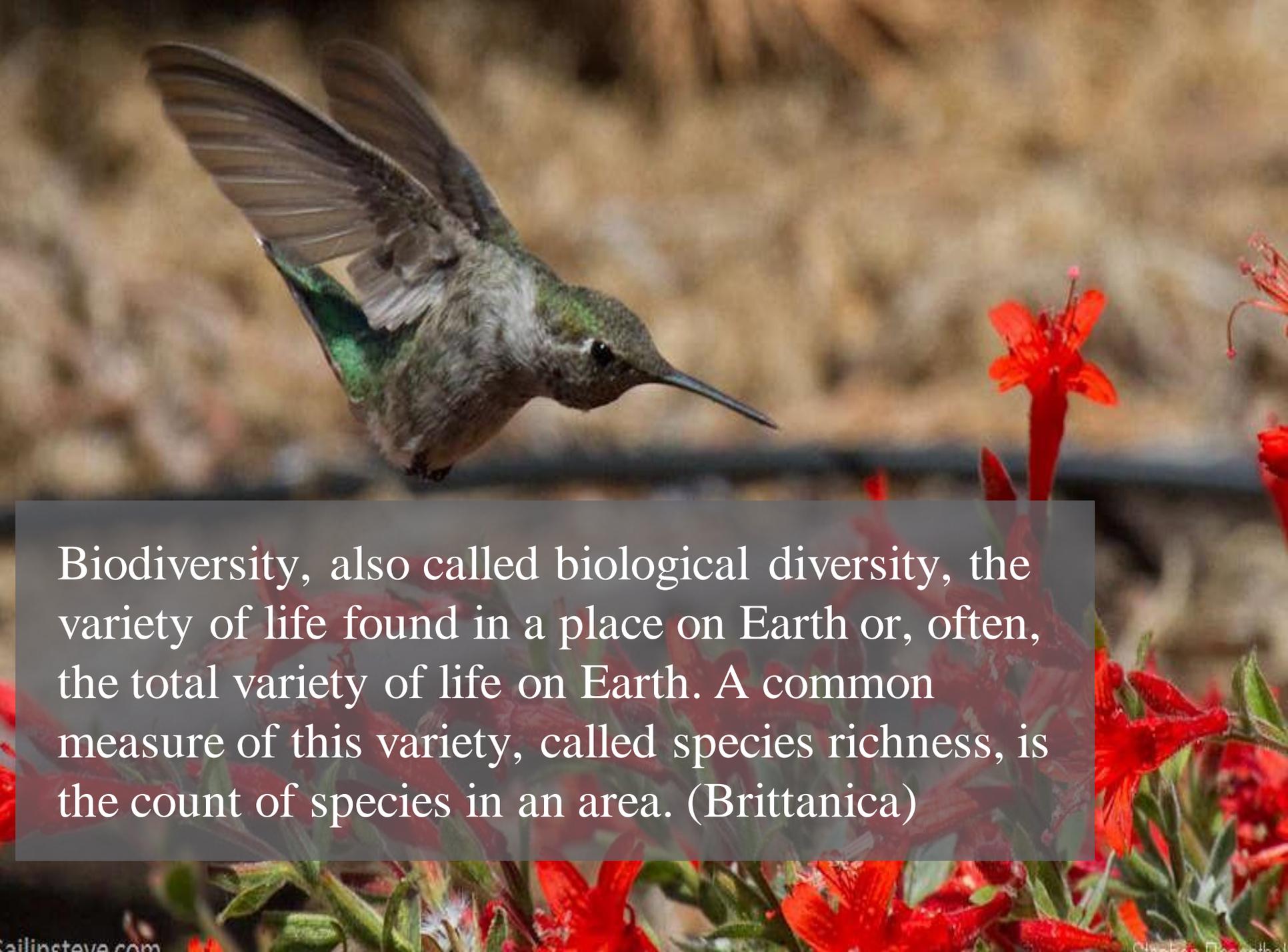
When planned well and cared for properly, native gardens can achieve these savings!

Reduce harmful runoff



Locally native plants are adapted to local conditions.

Harmful pesticides and other supplements that pollute streams and oceans are not needed.



Biodiversity, also called biological diversity, the variety of life found in a place on Earth or, often, the total variety of life on Earth. A common measure of this variety, called species richness, is the count of species in an area. (Brittanica)

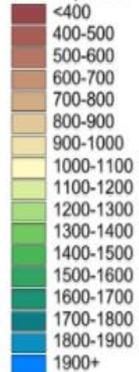


1/3 of our plants
are found nowhere
else on earth!

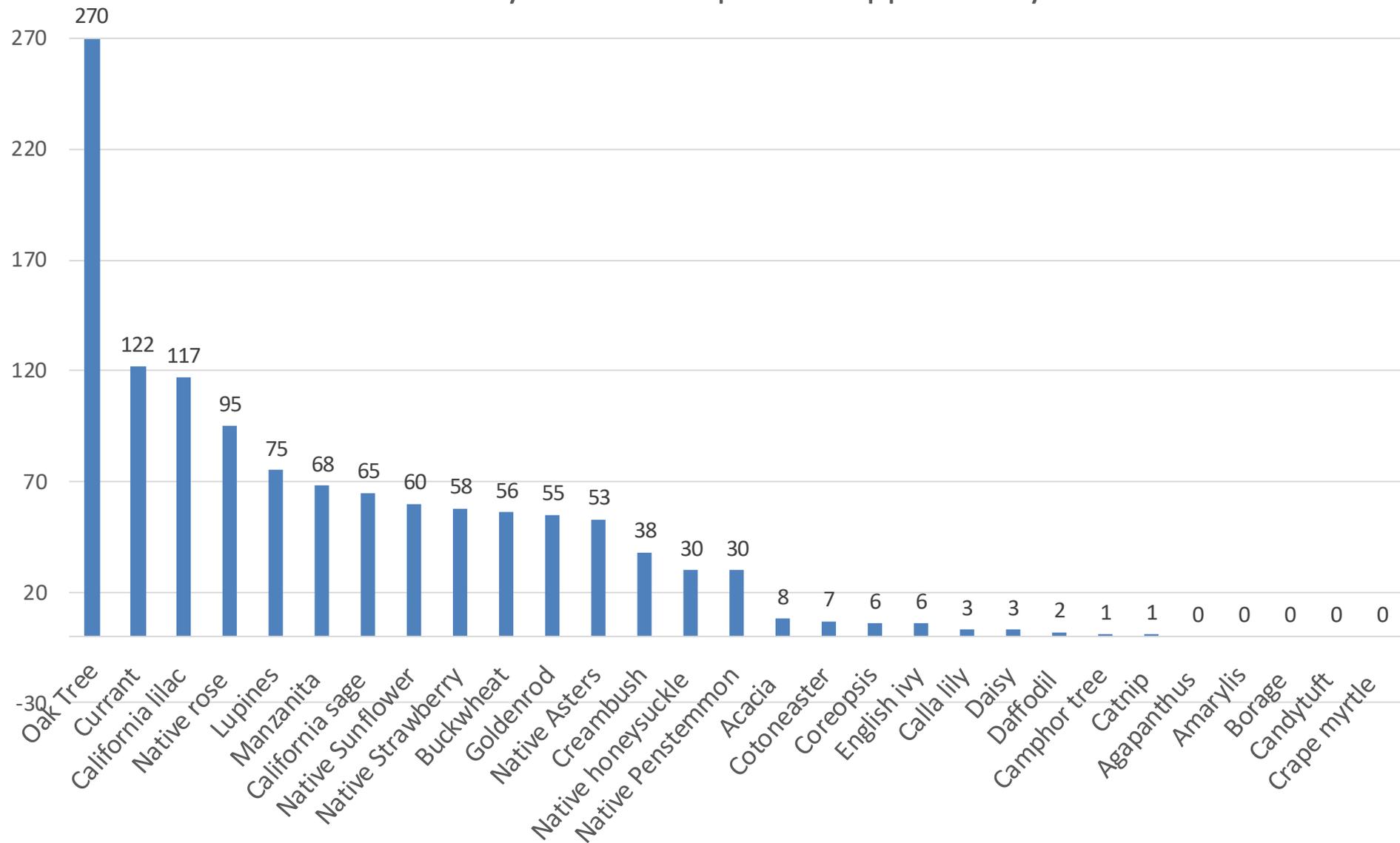
Biodiversity Hotspot

Already lost 70% of the native habitat

Native Species



Number of Butterfly and Moth Species Supported by each Plant





Chaparral

Photo: Julie Evens



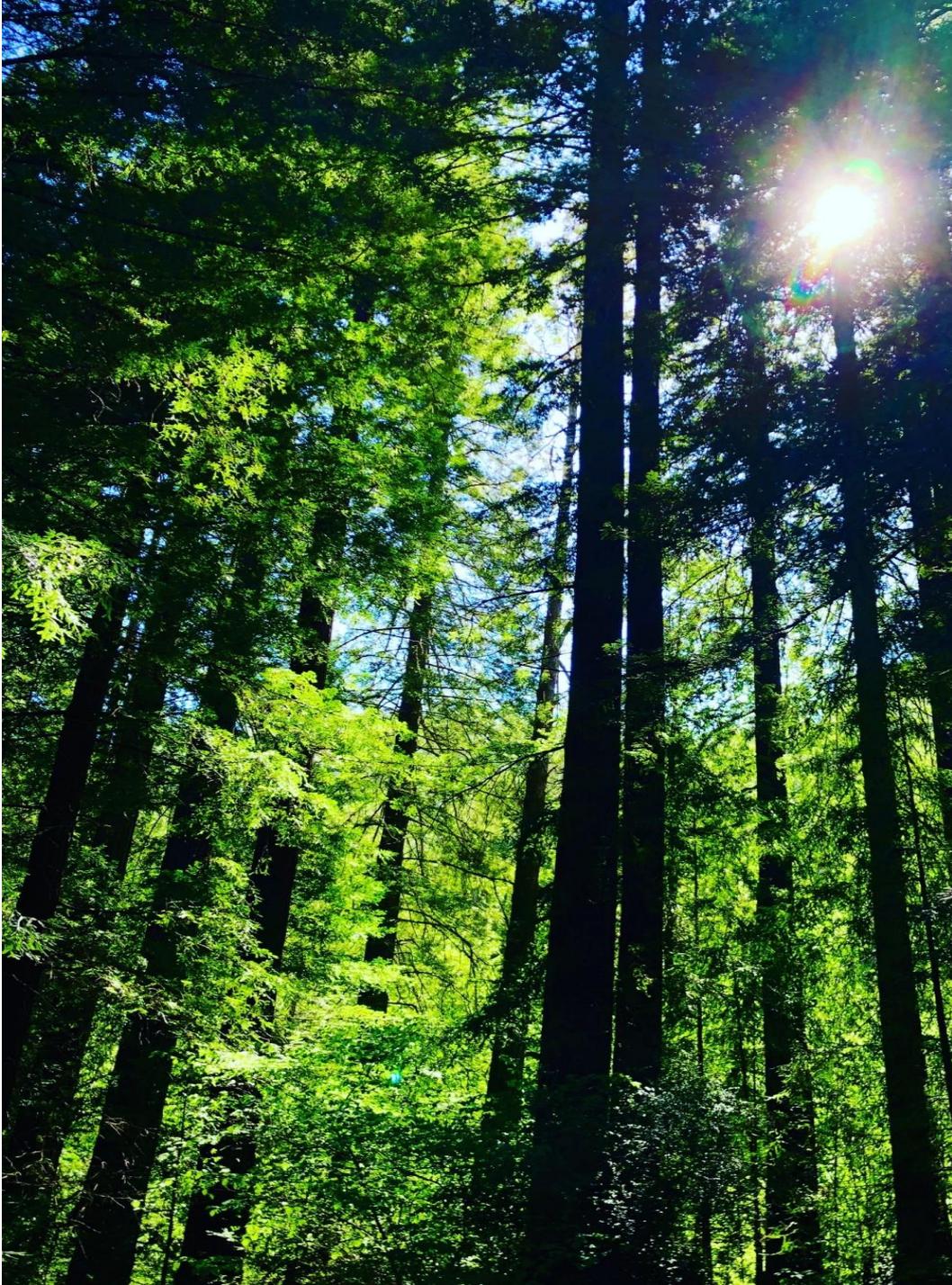
Coastal Sage Scrub

Photo: Julie Evens



Valley Oak Savannah

Photo: Nancy Buck



Mixed Conifer Forest

Photo: Ann-Marie Benz

What habitat do you live in?



Determine the natural habitat of the site prior to urbanization to identify what will work best with the site's microclimate, soil, and biotic factors.



Questions?



Installation and Design Considerations



Converting Lawn is Easy



Sheet
Mulching
is like a
lasagna recipe

What's Soil Got to Do With It?

Do a Site
Analysis
And
Figure Out
Your
Soil Type



Planting Natives

Plant California natives are in late fall, winter, or early spring

Start with 1 gallon (or smaller) plants

Dig a hole that is twice as wide and half again as deep

Mulch



Leave a few areas mulch-free for native bees

3" Layers

Different California native plants prefer different types of mulch



Gardening for pollinators

- ✓ Have 10 different flowering plants that attract pollinators- different colors and flower shapes
- ✓ Plant in groups so there is a mass of the same flower
- ✓ Have 3 different plants in bloom each season

Attracting butterflies and moths



- ✓ Flat landing pad
- ✓ Butterflies are usually brightly colored and moths are more subtle
- ✓ Ants may have a symbiotic relationship with some butterflies

Attracting hummingbirds

- ✓ Tubular flowers
- ✓ Will feed on any flower that produces abundant nectar
- ✓ Will also eat many insects for protein such as mosquitoes

Attracting birds



- ✓ Seeds, berries, nesting material
- ✓ Birds will stick around if there is a water source
- ✓ They are also eating the protein rich insects in the tree
- ✓ Migrations patterns are based on plant communities and cycles

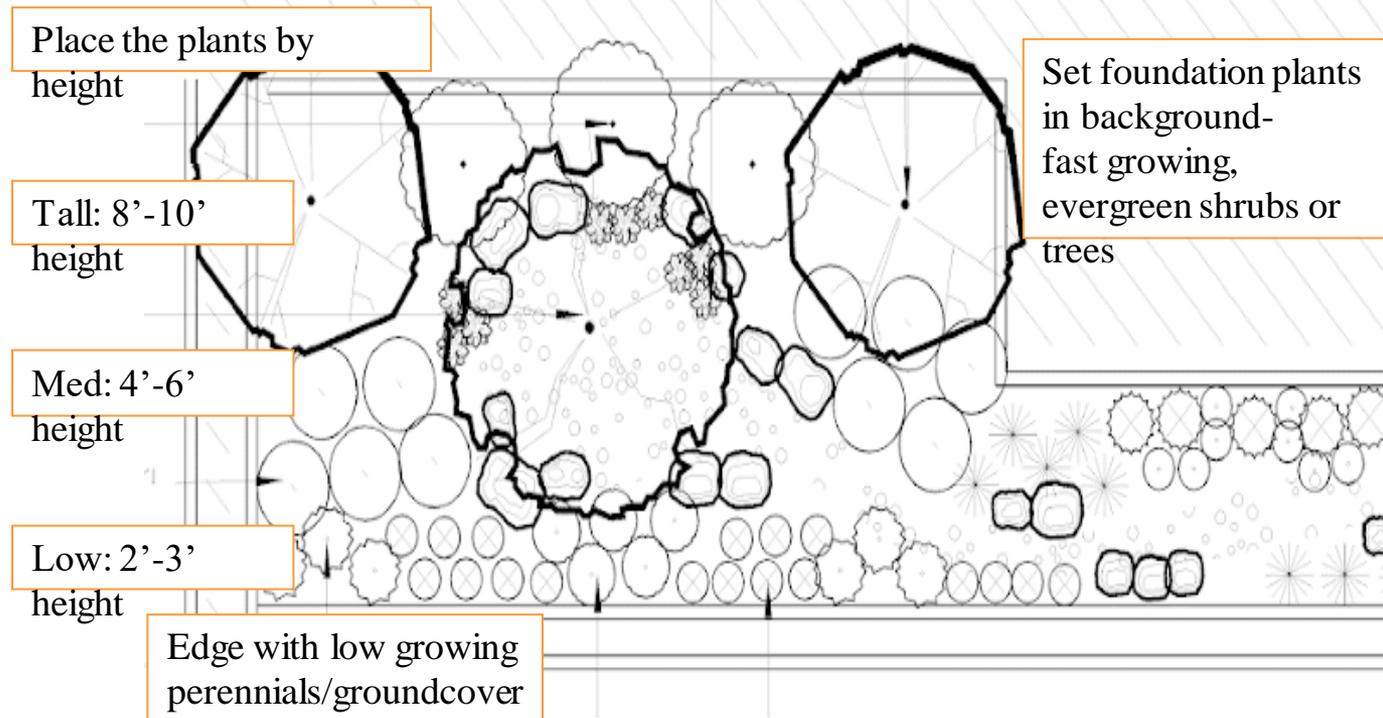
Attracting native bees



Photo: Carl Mautner

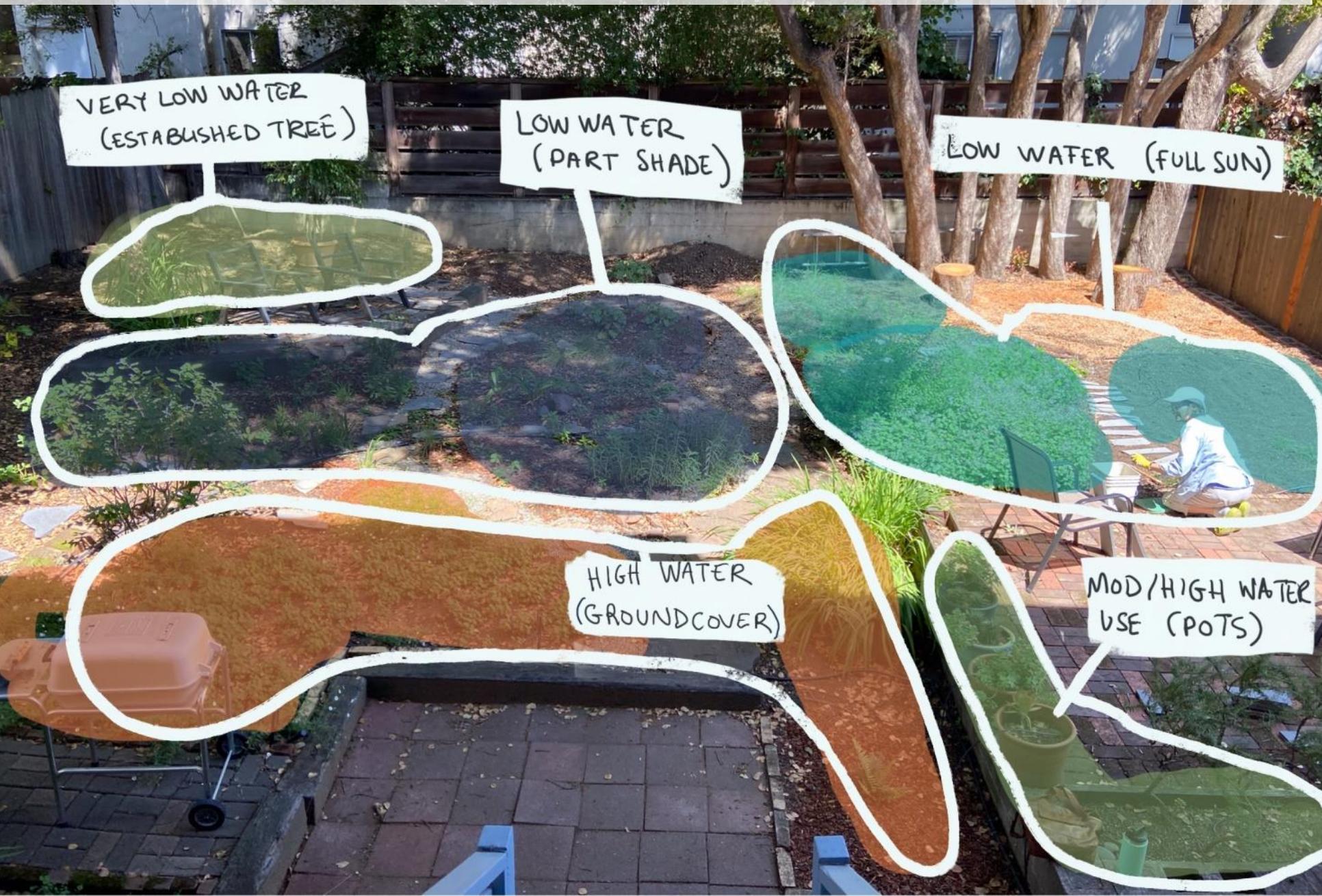
- ✓ Most effective pollinators
- ✓ Some areas of sunny bare soil, some branch piles, hollow twigs, rotten logs
- ✓ Avoid using weed cloth
- ✓ In North America:
 - thousands of sp.
 - 47 Bumble bee sp.
 - 70% nest underground

Tips for Laying Out Plants



- Contour the ground with a dry creek bed or varying sizes of rocks, logs and boulders.
- Scale your plant symbol to accurately reflect the mature width to allow for proper spacing.
- Group plants (other than specimens) in odd numbers: 3, 5, 7, 9
- Don't forget about the understory of trees – great place for shade loving perennials
- Seed wildflowers throughout the dry creek beds to stabilize the slope and give pops of color.

Hydrozone: group plants together by water need

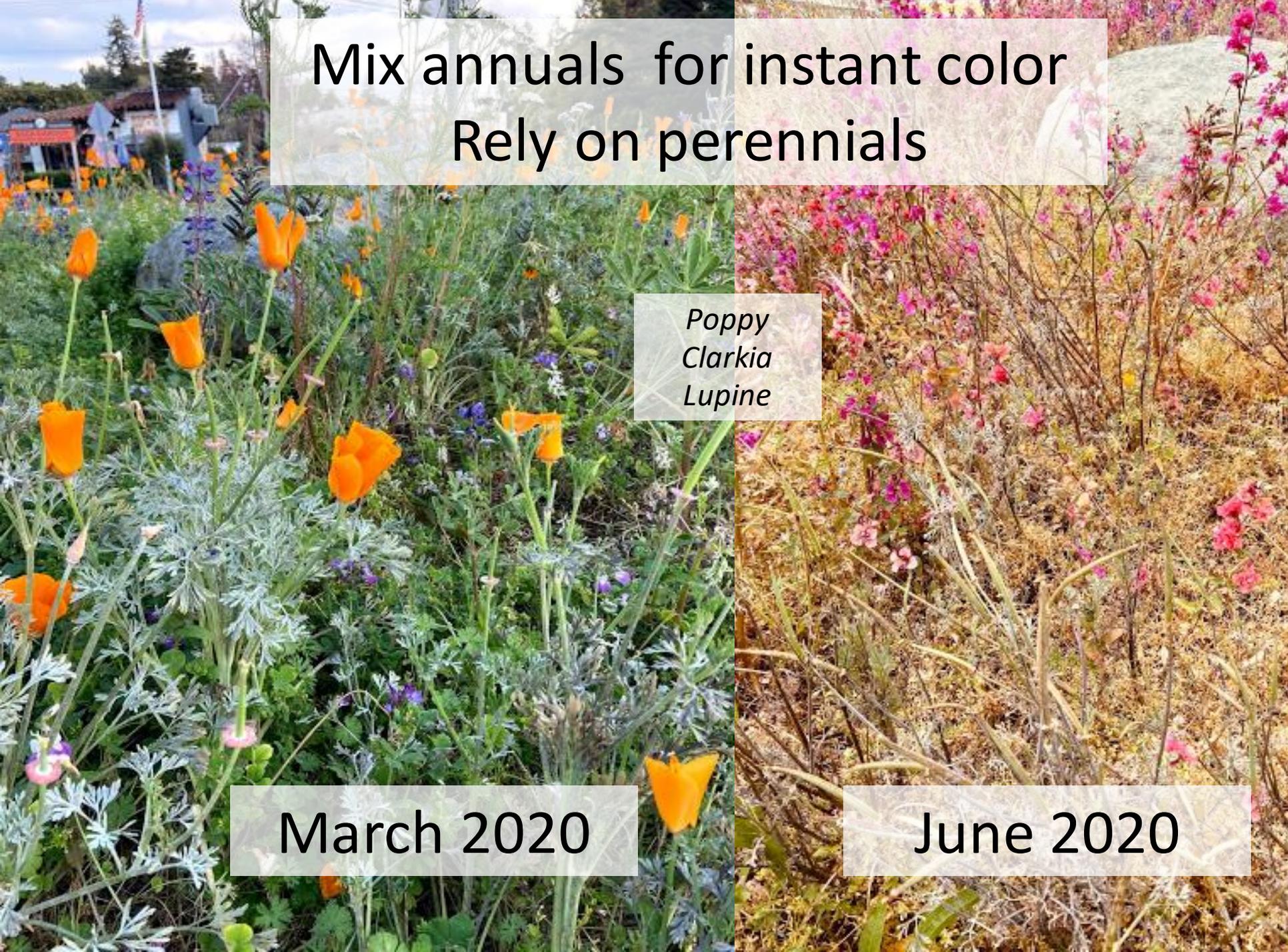


Mix annuals for instant color
Rely on perennials

Poppy
Clarkia
Lupine

March 2020

June 2020





Finding Plants for Your Garden





Go on a Walk!

Observe what's doing well and what you like.

Apps available to identify plants using your phone camera.



California native plants at the Watershed Nursery in...

45 views • 1 month ago



Gardening with California native plants: Peter and...

Plant Tours & Demonstration Gardens

Bringing Back the Natives
(Virtual)

Bringingbackthenatives.net

Sustainable Gardens Map

ebmud.com/gardens-near-me

Botanical Gardens
UC and Tilden



CALIFORNIA
NATIVE PLANT SOCIETY
East Bay Chapter
Alameda and Contra Costa Counties

Native Landscape Planting Guide

Starting a native plant garden doesn't have to be complicated. This easy guide takes the guesswork out of which plants to use where. Simply choose one of the garden vignettes below and select from recommended native plants listed on the inside of your guide.

✓ Low Water Use ✓ Pollinator Friendly ✓ Locally Native

Five Easy Project Ideas for your Garden



Homey Habitat

Featuring a bench and bird bath, you can take a seat in this habitat and enjoy all of the bustling activity in your yard!
Features: bench, bird bath, boulders.



Colorful Entry

Make a statement in your entryway! Be sure to choose plants with a variety of colors.
Features: large pot, decorative round stones.



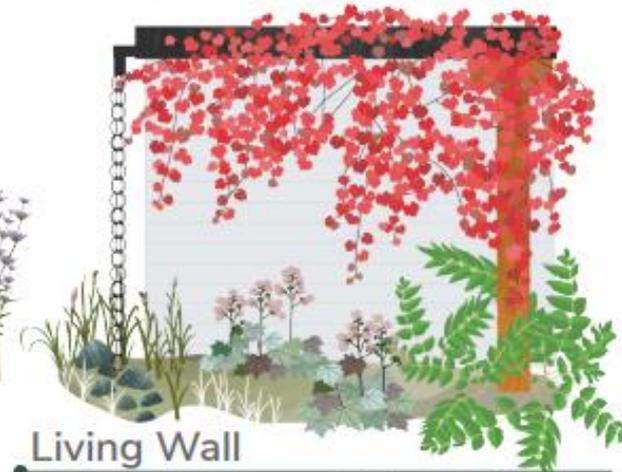
Wildlife Walkway

Take a stroll through your landscape. Use permeable materials for your pathway, such as stepping stones or decomposed granite.
Features: permeable walkway, large boulders.



Pollinator Park

Add excitement to the parkway strip along your driveway by adding plants that butterflies and other pollinators love.
Features: stepping stones and contrasting colors.

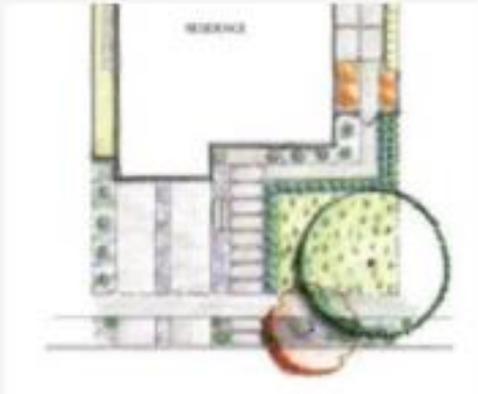


Living Wall

Designing your space vertically can add life to your yard. Use bold colors, and interesting shapes to make a flat area stand out.
Features: rain chain, swale, trellis.

Landscape Design Templates

savingwaterpartnership.org

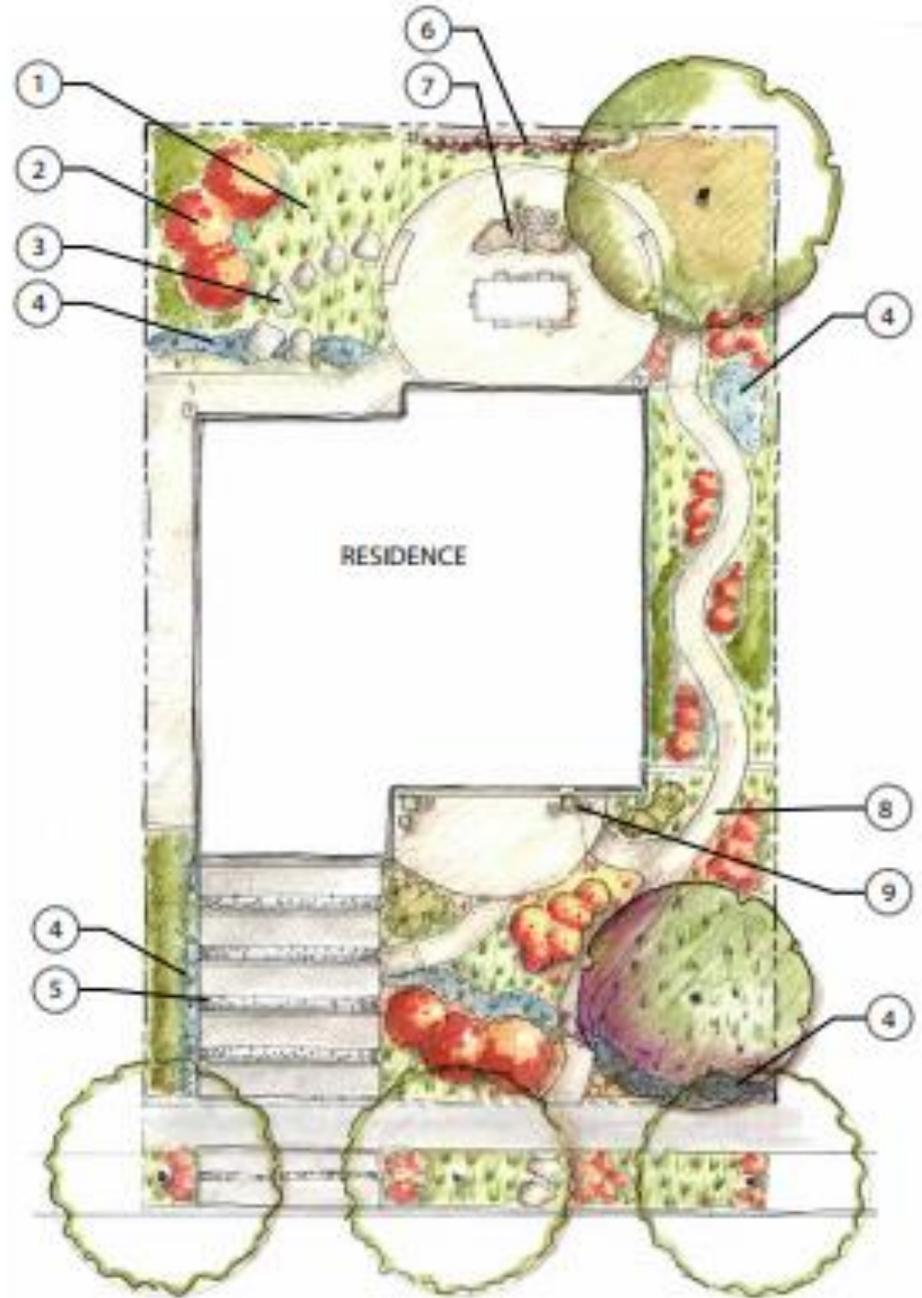


Sonoma Contemporary A

[\[Concept Plan\]](#)

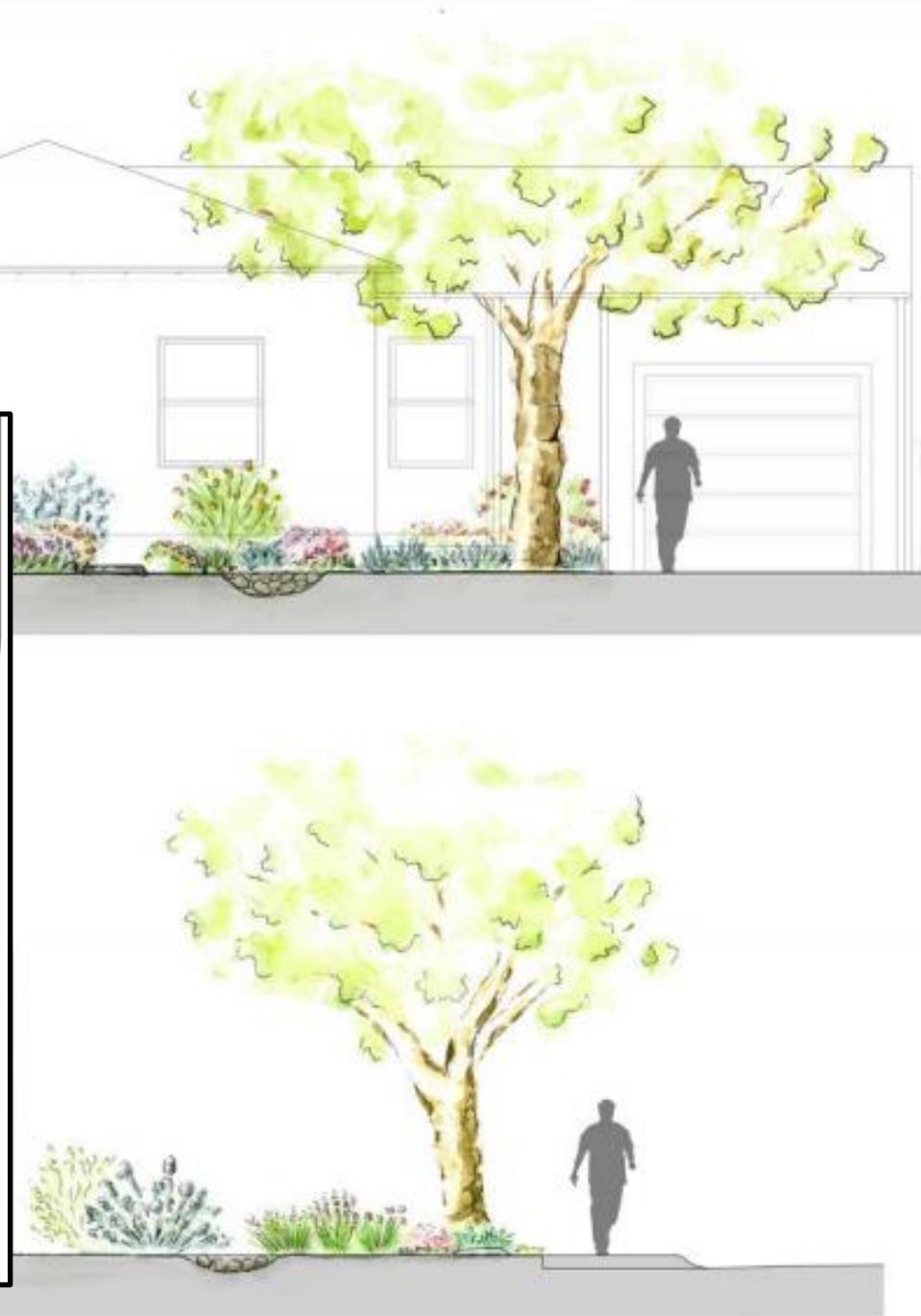
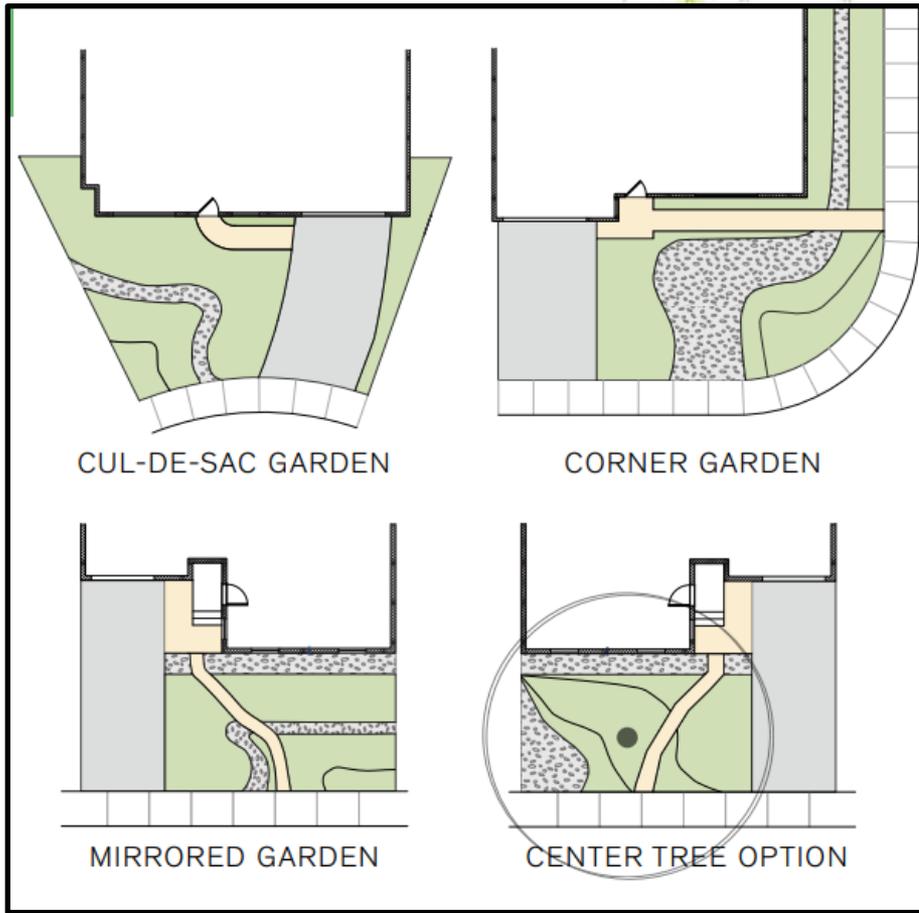
[\[Architectural Rendering\]](#)

[\[Design Template - Driveway Left\]](#)



HOA resource:

Gardens for San Lorenzo



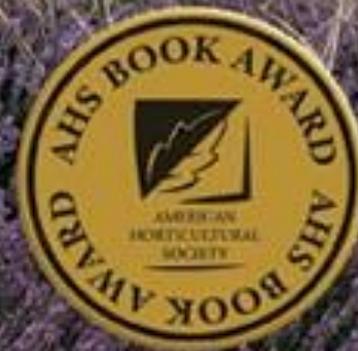
More Resources

- EBMUD Plant Book
- EBMUD low water use plant list
- Firescape Booklet
- Plant Databases:
Calscape and WUCOLS

Ebmud.com/plants

PLANTS AND LANDSCAPES FOR SUMMER-DRY CLIMATES

*of the San Francisco
Bay Region*



Choosing Plants Can Be Easy



CALIFORNIA NATIVE PLANT SOCIETY

Calscape

Restore Nature One Garden at a Time

Search for California native plants by name

ADVANCED SEARCH

Enter a California address or click the map to see plants native to that location

Mill Valley

743 plants native to 37.906,-122.545 (Mill valley)



All Plants
743



Trees
40



Shrubs
132



Perennials
285



Annuals
210



Grasses
105



Succulents
5



Vines
18



Ferns
26



Sun
397



Shade
94



Part Shade
341



Groundcovers
83



Butterfly Hosts
614



Hedges
57



Bank Stabilization
50

Pulling Design and Plants Together



Calscape Garden Planner

1 2 3 4

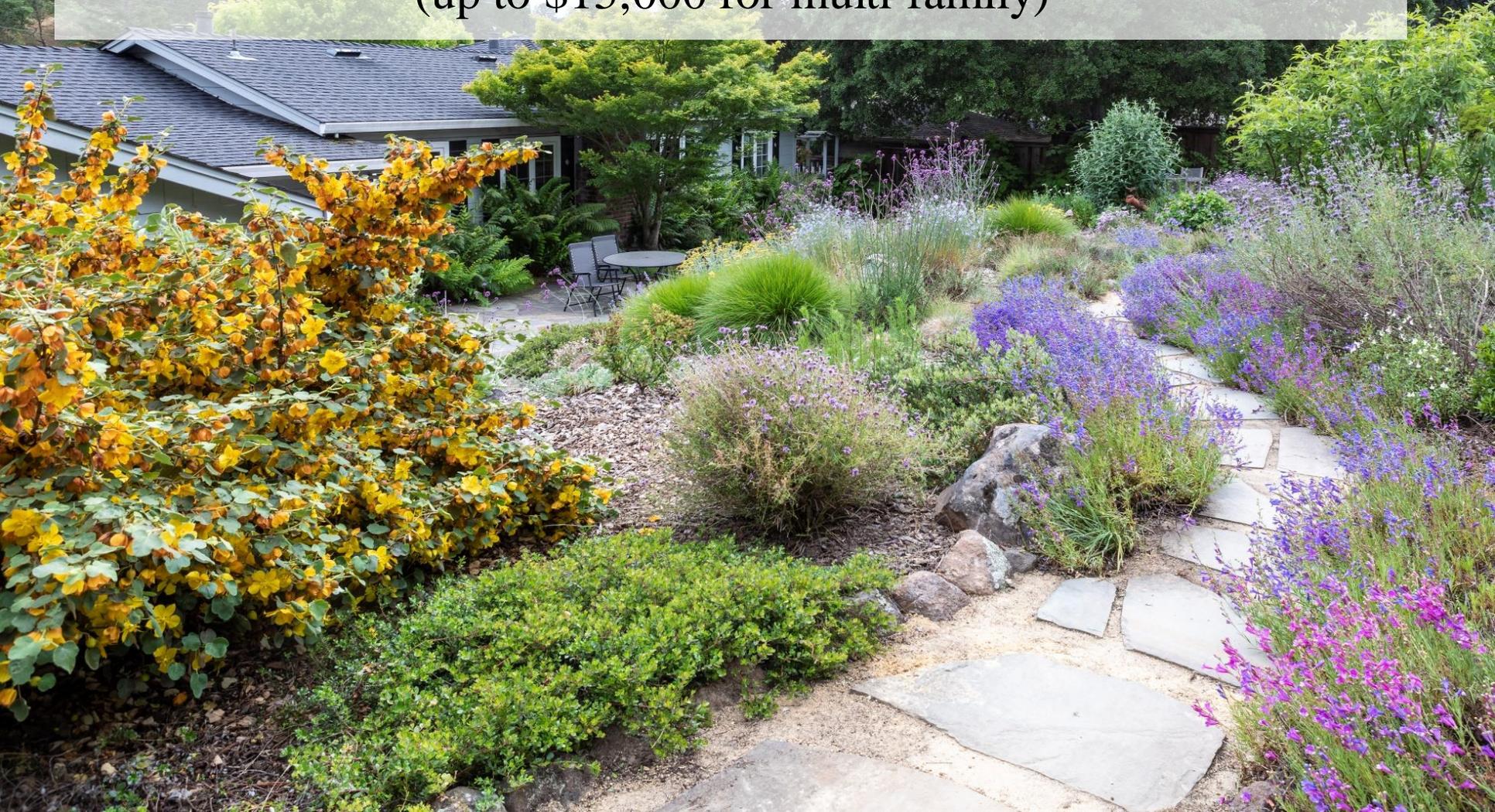
Find the perfect
native plants for
your garden **in**
just 4 questions.

Begin

This project was made possible by a gift from the Stanley Smith Horticultural Trust

Landscape Rebates

up to \$2,000 for residential properties
(up to \$15,000 for multi-family)



SUMMARY

- **Why Plant Choice Matters**

(save water, improve aesthetics, inspire neighbors)

- **California Native Plants**

(biodiversity hotspot, foundation of ecosystems, adapted to dry summers)

- **Installation and Design Considerations**

(sheet mulch, provide blooms year-round, hydrozone)

- **Finding the Right Plants for Your Garden**

(take a walk, visit a demo garden, on-line tools)

- **Resources and Rebates**



Thank you!



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cnps.org

References to Perceptions of Low-Water Use Gardens

Torpey, Holly. 2017. “Spatiotemporal Spillover in Lawn-to-Garden Program Participation in Long Beach, California.” Thesis Dissertation

Irvine Ranch Water District. 2016. “Multiplier Effect Pilot Study for Turf Removal Program.” edited by Lindsey Stuvick and Haritha Vendra

Woodard, Jessica. 2019. “Mainstreaming Sustainable Landscapes in the East Bay Municipal Utility District.” Thesis Dissertation