

# Plant Selection for Beginning Gardeners



Jessica Woodard September 23, 2020 EBMUD Water Conservation Representative Ann-Marie Benz, CNPS Horticultural Outreach Manager

### UPCOMING WEBINARS

- **No Frustration Irrigation** Tuesday 9/29, 1pm - 2pm
- **Graywater: Laundry-to-Landscape** Thursday 10/8, 1pm - 2pm
- **Big Gardens in Small Spaces** Thursday 10/15, 1pm - 2pm

Register at: www.ebmud.com/watersmart





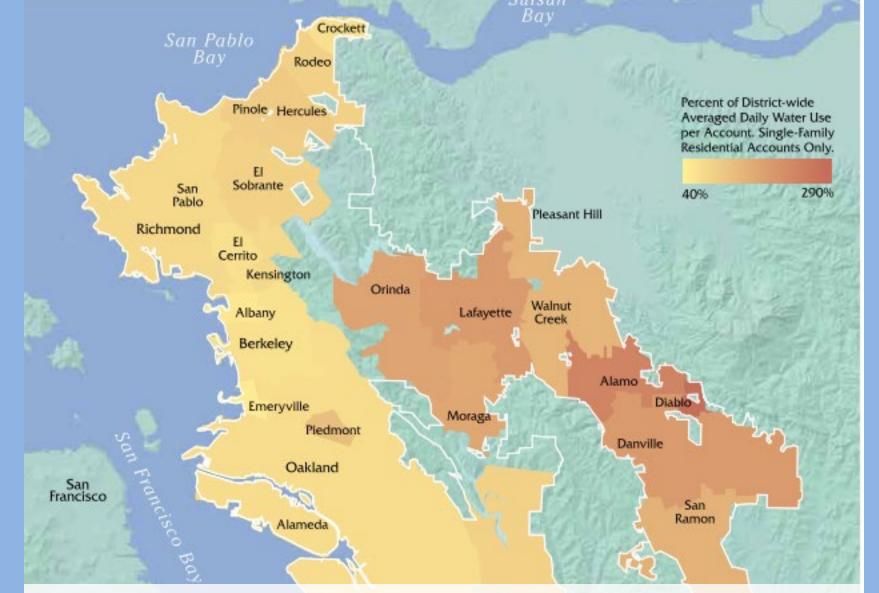
### AGENDA

- Why Plant Choice Matters
- California Native Plants

- Installation and Design Considerations
- Finding the Right Plants for Your Garden
- Resources and Rebates

# Why Plant Choice Matters





On average, 39% of total residential use goes to outdoor landscaping



# **Inspire Others**

Multiplier and spillover effect: One rebated lawn conversion on a block can increase the likelihood of more applicants by 7-fold.

60% A water conserving landscape 50% looks as nice as a landscape that uses a lot of water. 40% 30% 20% 10% 0% Neither Somewhat Strongly Somewhat Strongly agree nor disagree disagree agree agree disagree 2014 44% 29% 15% 9% 4% 2017 55% 28% 9% 6% 3%







Minimal benefits (beyond water savings)



### Many benefits (with this garden design)



### California Native Plants

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

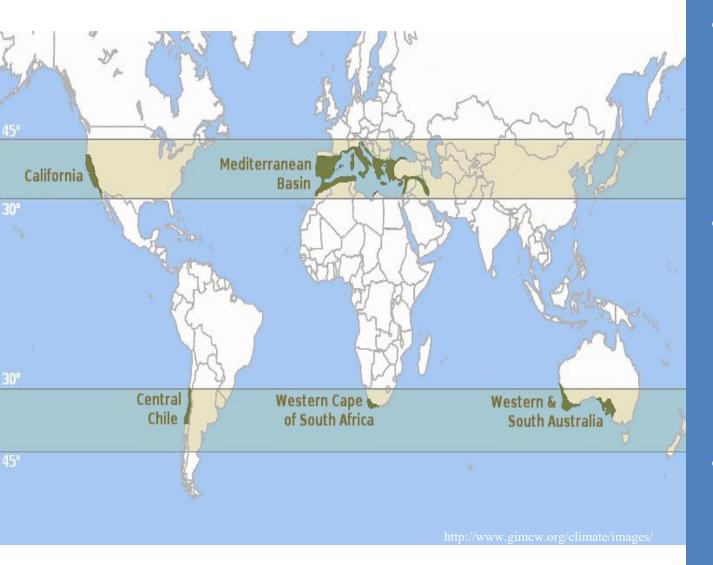
### A native plant...

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

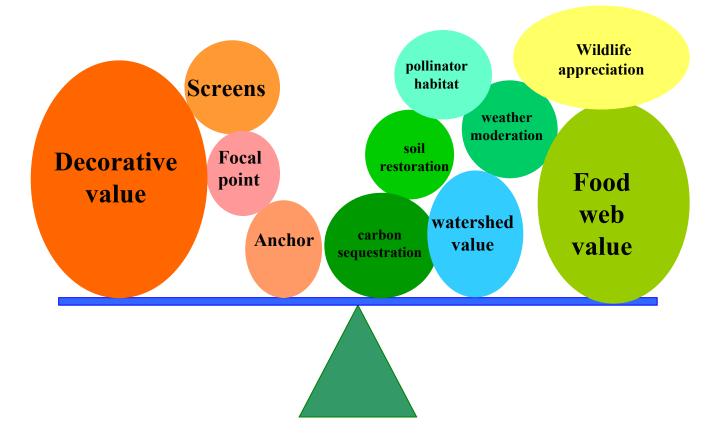
• Rest during the hot, dry summer and early fall

# 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



Source: Doug Tallamy

## Solution?

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

Photo: CNPS

### 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!

Photo: Ann Dalkey

### Reduce harmful runoff



Locally native plants are adapted to local conditions.

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

# Support local pollinators

Do you enjoy hummingbird, butterflies, and other beneficial insects?

Planting natives in your garden provides habitat for local pollinators and birds.

Photo: Jesse Chang

# Support local wildlife



Native plants are the foundation of our ecosystems. Research shows that native wildlife depends on native plants to thrive and survive.

#### Number of Butterflies and Moth Species Plants Support

#### Commonly used plants

Acacia	8
Agapanthus	0
Amarylis	0
Borage	0
Calla lily	3
Camphor tree	1
Candytuft	0
Catnip	1
Coreopsis	6
Cotoneaster	7
Crape myrtle	0
Daffodil	2
Daisy	3
English ivy	6

#### California native plants

Buckwheat	56
California lilac	117
California sage	65
Creambush	38
Currant	122
Goldenrod	55
Lupines	75
Manzanita	68
Native Asters	53
Native honeysuckle	30
Native Penstemmon	30
Native rose	95
Native Strawberry	58
Native Sunflower	60
Oak Tree	270

Source: Douglas Tallamy

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)

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# California is special

An incredibly important place with more native plant species than any other state.

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

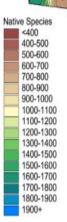
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Density Gradient of Native Vascular Plant Species per 10,000 km<sup>2</sup> © BONAP

# **Biodiversity Hotspot**

### Already lost 70% of the native habitat



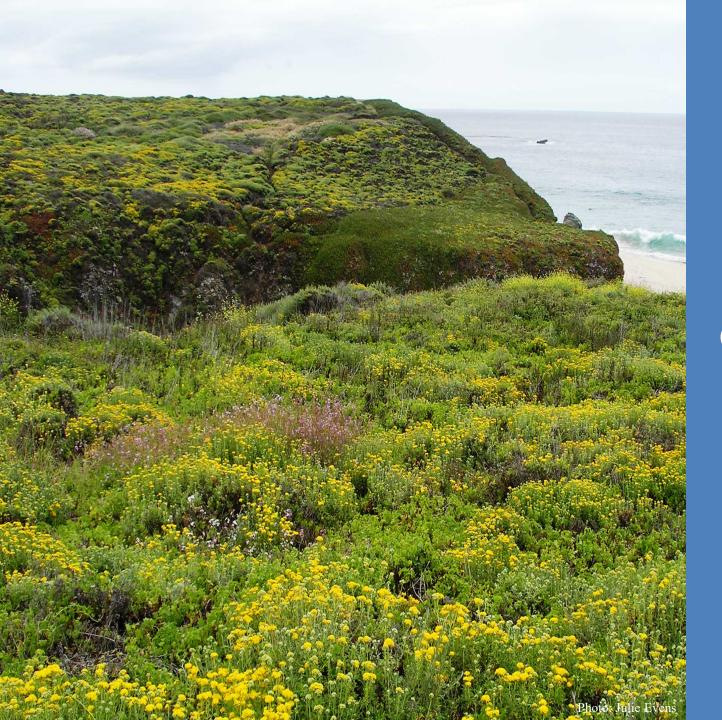
©2015 Gregory J. Schmidt and John T. Kartesz Biota of North America Program

# Native plants are the foundation of

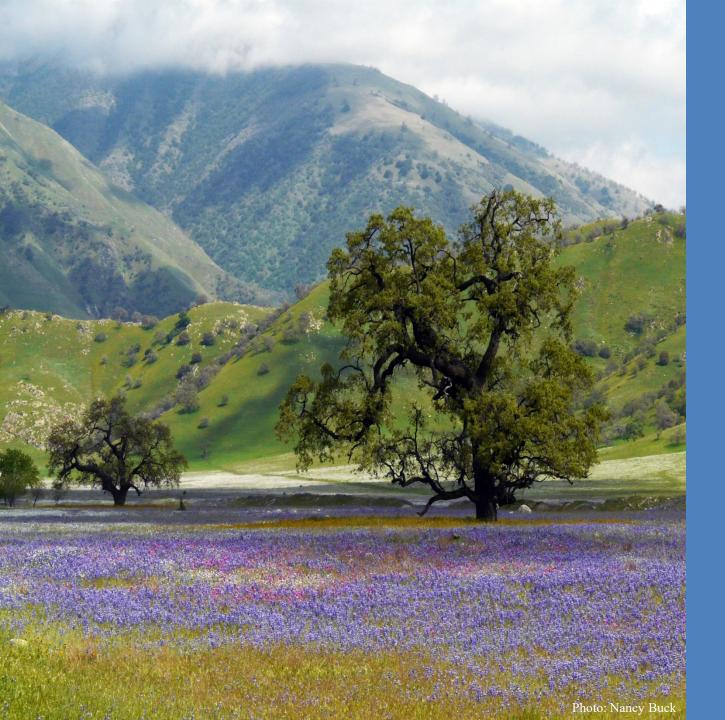
ecosystems



### Chaparral



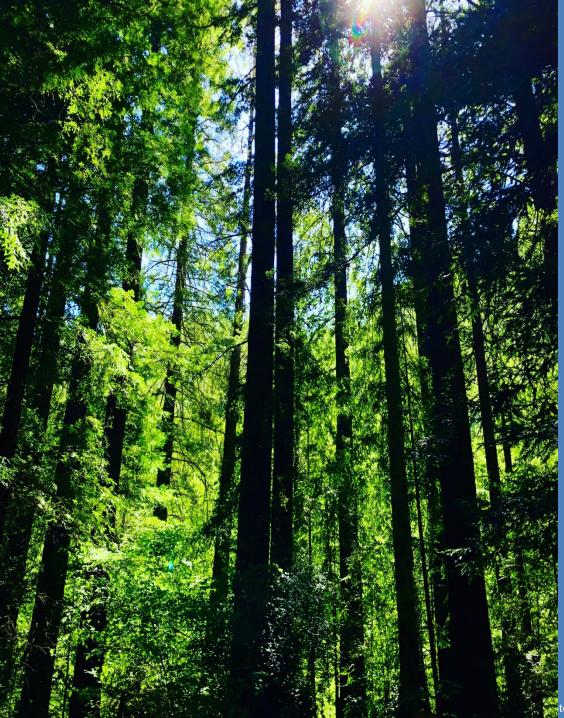
### Coastal Sage Scrub



### Valley Oak Savannah



### Grassland



### Mixed Conifer Forest

to: 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?

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Jim Wadsworth

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# Installation and Design Considerations



### Converting Lawn is Easy

Sheet Mulching is like a lasagna recipe

Photo: Kristen

# What's Soil Got to Do With It?

Do a Site Analysis And Figure Out Your Soil Type

Photo: Peyton Ellas

## **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

Photo: Greg Suba



Leave a few areas mulchfree for native bees

3" Layers

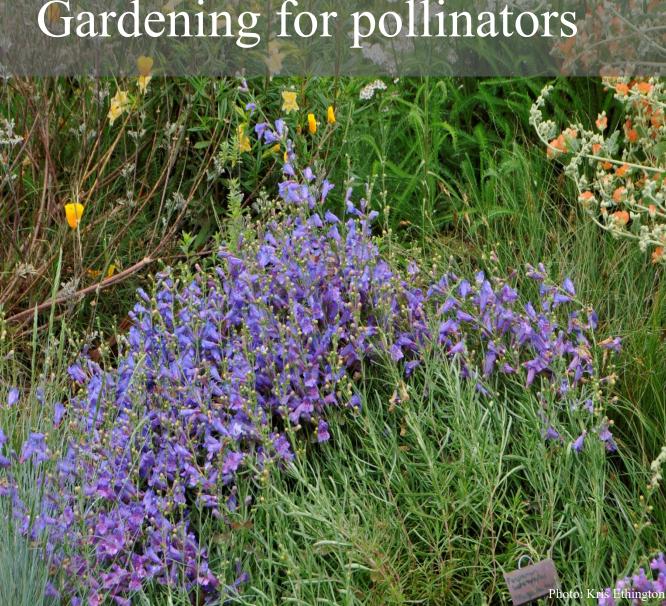
Different California native plants prefer different types of mulch



You are watering the soil in order to provide for the plants' needs

Photo: Jim Brugger

# Gardening for pollinators



Have 10 different flowering plants that attract pollinatorsdifferent 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

flowers ✓ Will feed on any flower that produces abundant nectar

✓ <u>Tubular</u>

 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

Photo: Kris Ethington

### Attracting native bees



Most effective pollinators

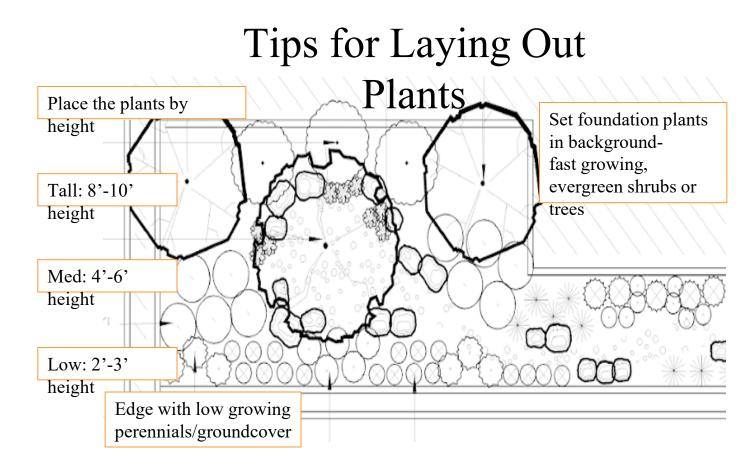
 Some areas of sunny bare soil, some branch piles, hollow twigs, rotten logs

Avoid using weed
 cloth

In North America:Thousands of sp.

-47 Bumble bee sp.

- 70% nest underground



- 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.

### Use shade/sun to identify plant groups



### Mix annuals for instant color Rely on perennials

### March 2020

June 2020

# Questions?



# 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



#### Free designs resources

#### **Native Planting Guide and Design**

Starting a native plant garden doesn't have to be complicated. This easy guide takes the guesswork out of which plants to use where. (Printer friendly version here).

#### Gardens for San Lorenzo

You don't need to live in San Lorenzo to use this book: it includes four garden design for various lot types, illustrations, plant lists, estimated costs, and how-to guidance.



#### Landscape Design Templates

Eight contemporary front yard plans are available for various styles, and can be scaled for landscapes up to 2,500 square feet. Templates are courtesy of the Sonoma-Marin Saving Water Partnership.



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 VPollinator Friendly Locally Native

#### Five Easy **Project Ideas** for your Garden



#### Wildlife Walkway

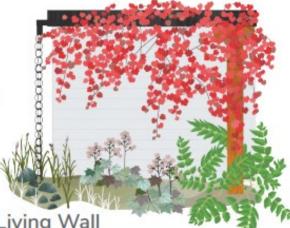
Take a stroll through your landscape. Use permeable materials for your pathway, such as stepping stones or decomposed granite. Features: permeable walkway, large boulders.

#### 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.



#### Pollinator Park

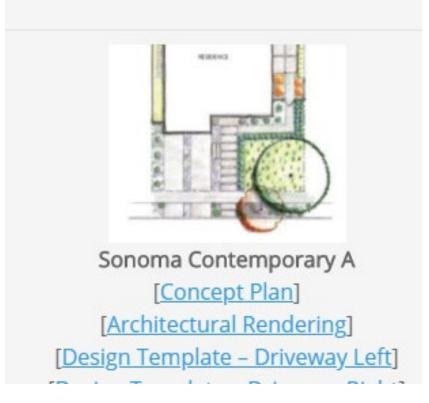
Add excitement to the parkway strip along your driveway by adding plants that butterflies and other pollinators love.

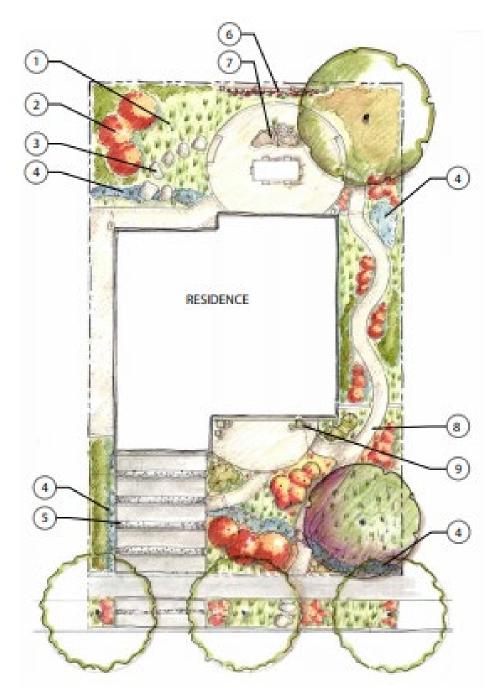
Features: stepping stones and contrasting colors.

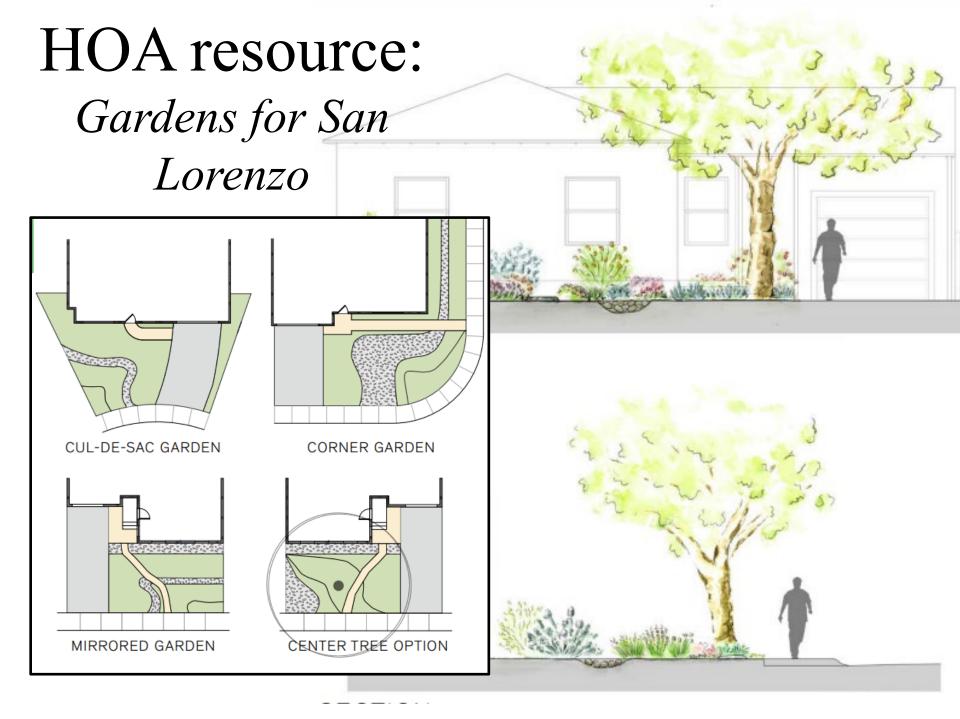
#### Living Wall

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







# More Resources

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

### PLANTS AND LANDSCAPES FOR SUMMER-DRY CLIMATES

of the San Francisco Bay Region





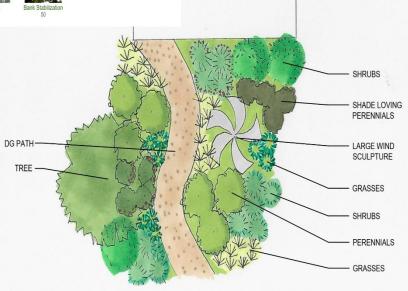
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	Cals	NATIVE PLANT SOCIE Cape ure One Garden at a Tim		Search	h for California nativ	e plants by name	٩)	ADVANCED SEARCH
Enter a California address or click the map to see plants native to that location								

(Mill Valley

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



### California Natural Entryway Design



Coming Soon..

### Calscape Garden Planning Wizard

Generates garden designs based on design preferences!

### 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** 



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Thank you!

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