



An Ecoregional Approach to Plant Recommendations

Presentation to the EBMUD Landscape Advisory
Committee, October 5 2020

Andrea Williams, Director of Plant Science, CNPS

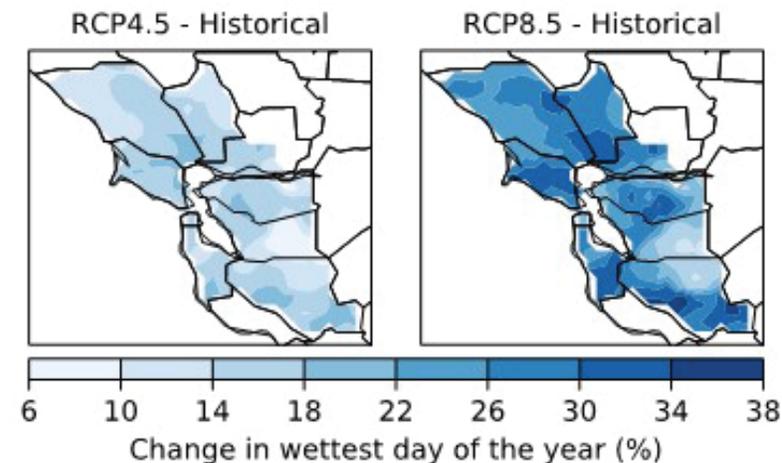
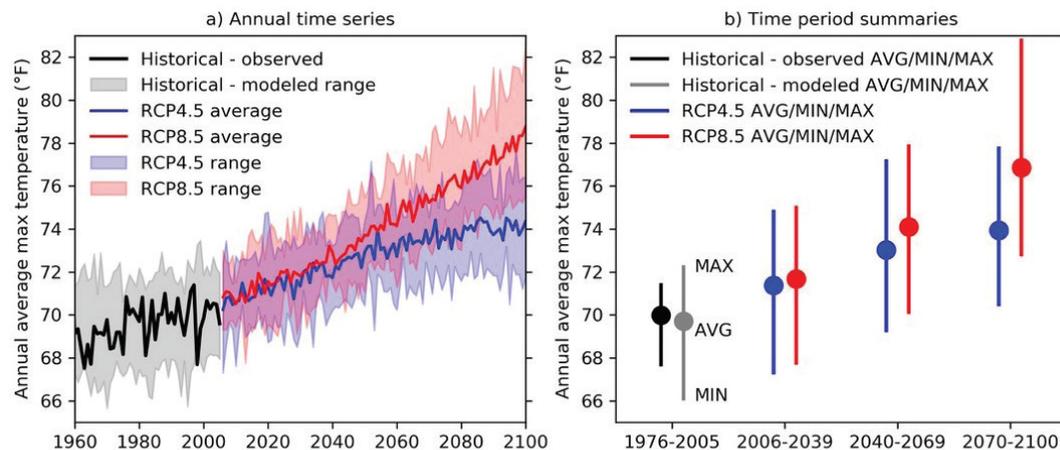


CALIFORNIA
NATIVE PLANT SOCIETY

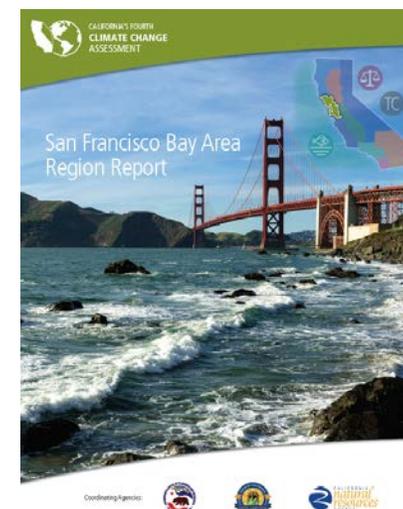
What we will cover

- Climate/hydrologic history and projections
- Current delineations
- Ecoregional approach
- Habitat Revolution
- Local lists
- Calscape.org

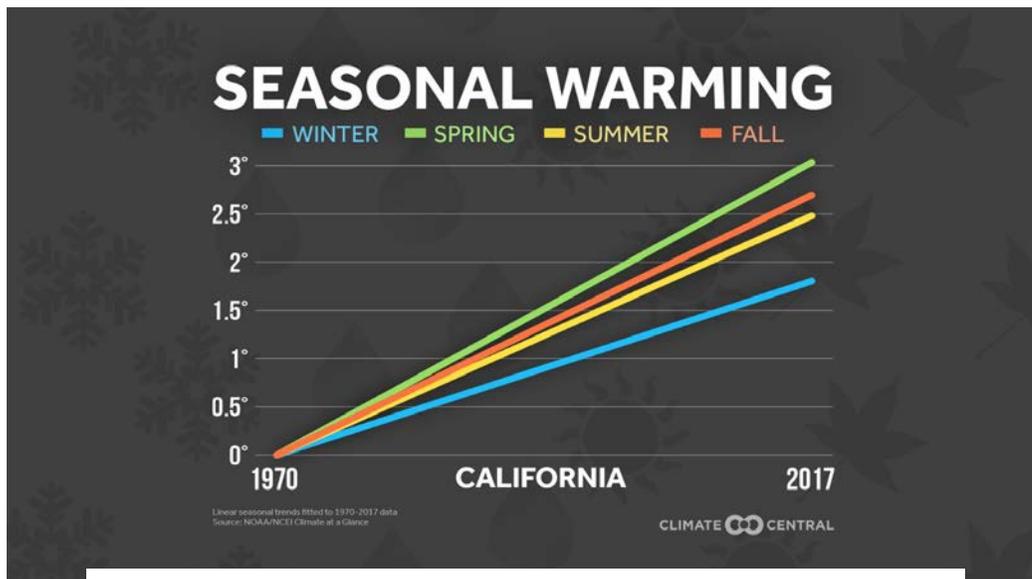
Climate Change in the Bay Area



- Temperature increasing; projected to keep increasing
- Total precipitation may not change but wet season compressing, extremes more likely
- Water shortages projected to escalate

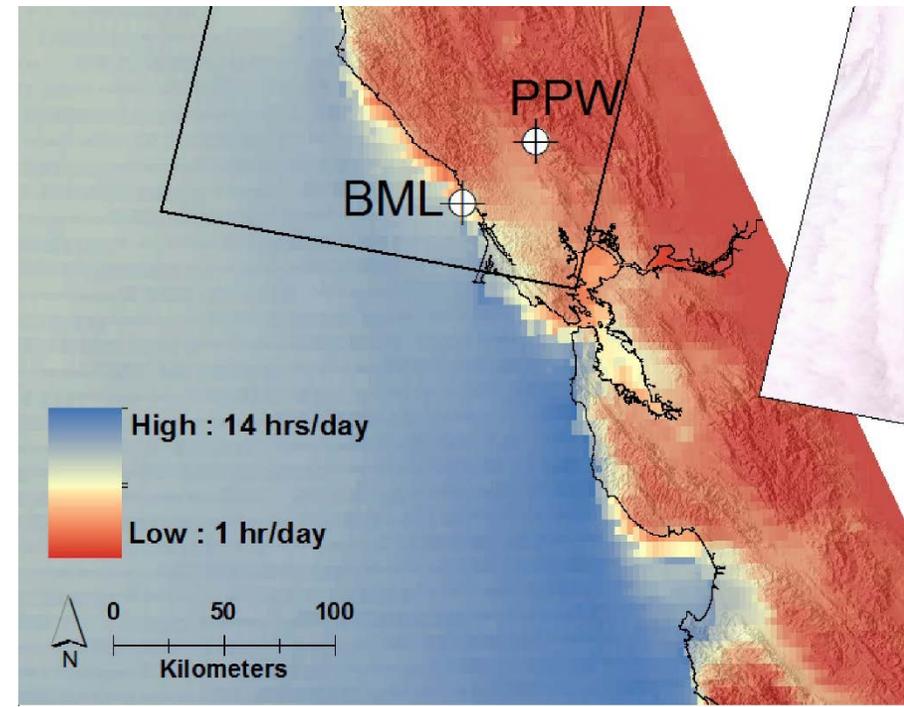
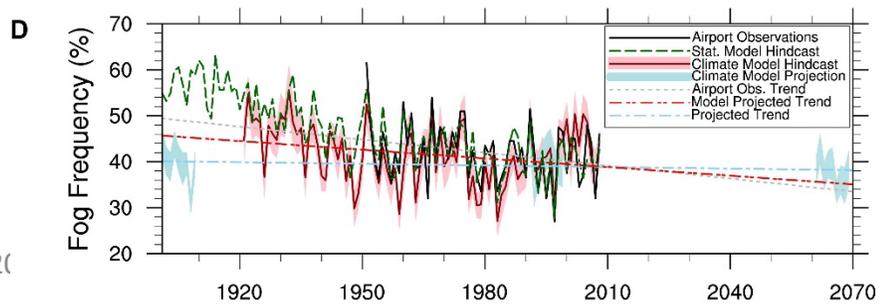
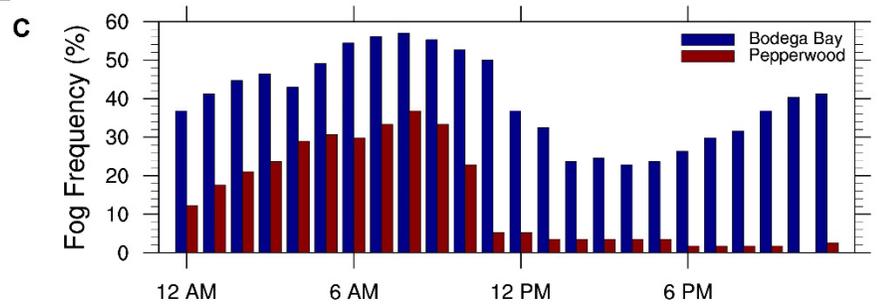


Climate information from SF Bay Area Fourth Climate Change Assessment 2018



Shoulder seasons warming faster:
<https://qz.com/1727717/what-climate-change-will-do-to-three-major-american-cities-by-2100/>

Fog decreasing, particularly inland:
https://eos.org/wp-content/uploads/2014/12/004776_TORREGROSA-F02_rgb_lc.jpg



Implications

- Plants will “experience” drought more
- Increased high degree-days mean people water more
- Compressed rainy season, less snowpack=storage shortage
- Loss of fog=increased summer demand in bay-side cities

Well-designed landscaping of yards, parkways, and green infrastructure can help with both demand management and flood risk reduction.

In three **Easy Steps**

Healthy **Living Soil** captures **Rainwater**.



Healthy living soil is made by adding compost to your soil, covering your garden with mulch, and by avoiding soil disturbance as much as possible. Compost boosts soil organisms that reduce diseases and pests. There's no need for adding fertilizers or pesticides on watershed wise gardens.

Maintaining 2" - 4" of small-size organic mulch on top of every open space in the landscape keeps the garden looking clean while slowly building the soil. The mulch holds in water, so less irrigation is required (see p. 40).

When downspouts are directed to these landscapes, living soil becomes a giant sponge that helps keep plants healthy and happy, whether it's raining or we're in a drought (see p. 42).

Climate-appropriate **Plants Reduce Irrigation** needs.



Selecting climate-appropriate plants like those from Mediterranean climates and, even better, from Marin County's own native plant communities, makes your garden automatically adapted to the seasonal summer drought, wet winter months, and various Marin microclimates (see p. 30). Many plants from the five Mediterranean climates, (South Africa, area around the Mediterranean Sea, Chile, Australia, and certain regions of California) are appropriate for our gardens.

Local native plants benefit the local native birds and insect species by providing food and nesting materials! There are many dry-adapted evergreen and long-flowering California native plants. When you use them in your garden, you get year-long interest and a garden filled with life, on reduced

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!

Water Use Classification of Landscape Species (WUCOLS)



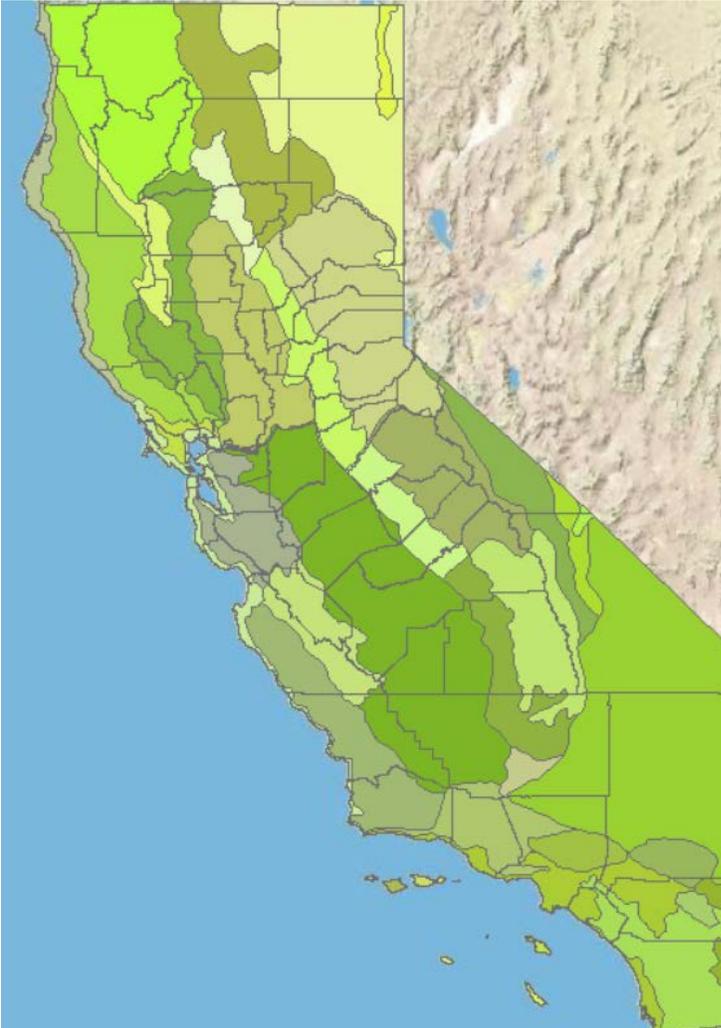
California is partitioned by WUCOLS into 6 Regions

- ❖ All of Alameda and Contra Costa are in the North Central Region
- ❖ Alameda and Contra Costa have 5 Evapotranspiration Zones
- ❖ WUCOLS is meant to determine irrigation needs of plantings
- ❖ **What if your plants were so adapted to the local climate they didn't need much, if any, irrigation?**

Purple needlegrass (*Stipa pulchra*) still green in mid-summer at the top of a south-facing slope



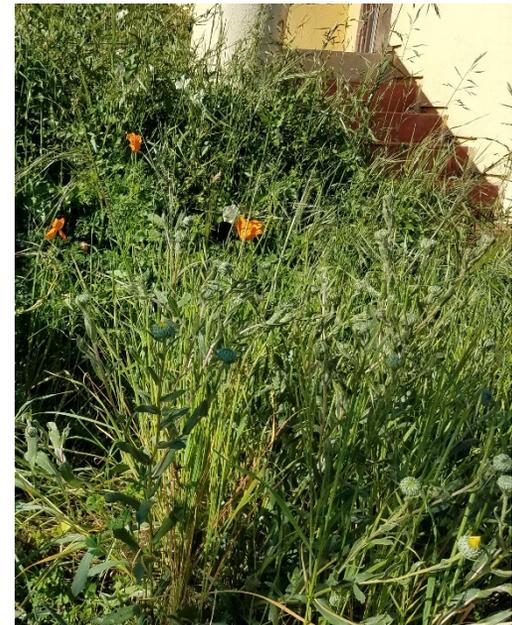
An Ecoregional Approach



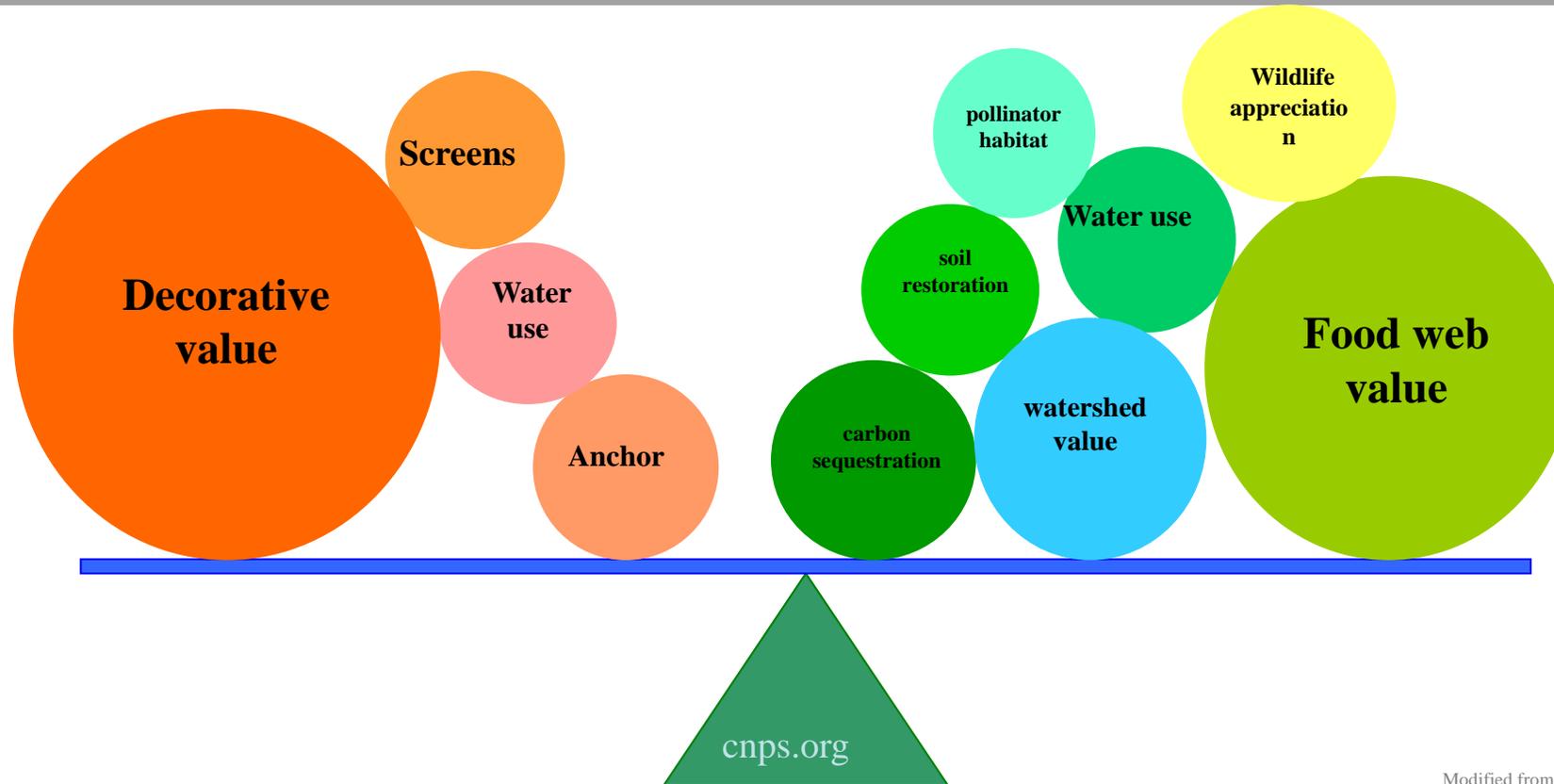
California is partitioned by the Jepson Manual of California Plants into 11 Regions, 33 SubRegions

- ❖ Coastal Alameda and Contra Costa are in the Center West Region; Inland are in the Great Valley Region
- ❖ Alameda and Contra Costa have Coastal, Central, Inland zones
- ❖ Plant communities shift along coastal-inland AND north-south gradients
- ❖ **An ecoregional approach adapts locally common plant communities and species to landscaping recommendations**

A meadow of California poppy, (*Eschscholzia californica*), purple needlegrass, California brome (*Bromus carinatus*), Valley gumplant (*Grindelia camporum*) contains many locally common, drought-tolerant, long-blooming plants in a Contra Costa County yard



Habitat Revolution



Modified from: Doug Tallamy

New criteria for choosing plants for our landscapes

Support local wildlife



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

Reduce harmful runoff



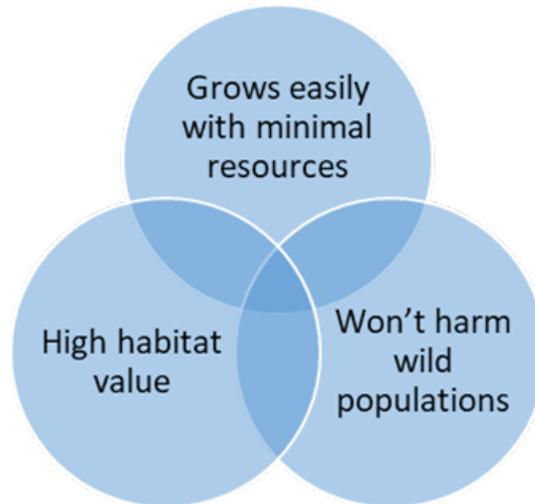
cnps.org

Photo: Tish Berge

Locally native plants are adapted to local conditions. That means fewer pesticides and fertilizers that can runoff into local waterways.

What are the necessary qualities?

- Grows well in a landscape setting
- Uses minimal water
- Locally common—in nurseries and in the wild
- Does not harbor pathogens
- As a collective list, provides floral resources to pollinators and wildlife benefit throughout the growing season
- Is not likely to intermix with area rare plant populations



- Low barrier to adopting native plants in the garden
- Plants with natural drought tolerance will be able to adapt in an uncertain climate future (Kew State of the World's Plants Report)
- Plants can be vectors for diseases or suffer from pathogens like *Phytophthora*
- Even relatively small yards can provide pollinator benefits

Why lists?

Lists can lower the “barrier to entry”

- People can trust certain organizations to do the background research for them
- They may not want to engage more deeply with databases or other info
- Simplicity can still allow for introducing broader concepts



Is gardening like cooking?

What ingredients go together?
How many portions?
What do you already have on hand?
Do you want local ingredients?
What’s your skill level?

Order out
Meal kit
Follow a recipe
Good cook
Master chef



List foundations

Major databases

- Calscape.org relies on specimen data and climate compatibility to make recommendations
- Calflora.org's "What Grows Here?" tool allows you to explore what wild plants are common in the area

← → ↻ calscape.org/search/?srchr=sc5f724dbdb3622

ABOUT CALSCAPE CONTACT CALSCAPE PLANTING GUIDE NURSERIES MY PLANT LISTS BUTTERFLIES CALSCAPE

CALIFORNIA NATIVE PLANT SOCIETY
Calscape
Restore Nature One Garden at a Time

Search for California native plants by name Q ADVANCED

HOME > ADVANCED SEARCH > SEARCH

Advanced Search Results Options Edit Search

131 Plants. Native to: richmond, ca. Water Requirement: **Extremely Low, Very Low, Low.** Ease of Care: **Very Easy, Moderately Easy.** Availability in nurseries: **Commonly Available Sometimes Available.**

1 Blueblossom Ceanothus thyrsiflorus	2 Blue Eyed Grass Sisyrinchium bellum	3 Hummingbird Sage Salvia spathacea	4 Coast Live Oak Quercus agrifolia	5 California Fuchsia Epilobium canum	6 Common Manzanita Arctostaphylos manzanita
7 Douglas Iris Iris douglasiana	8 California Aster Corethrogyne filaginifolia	9 Toyon Heteromeles arbutifolia	10 Western Columbine Aquilegia formosa	11 Golden Currant Ribes aureum	12 Silver Lupine Lupinus albus
13 Coffeeberry Frangula californica	14 Wavyleaf Sisktassel Gayuya elliptica	15 Giant Wildrye Elymus condensatus	16 Eastwood Manzanita Arctostaphylos glandulosa	17 Coyote Bush Baccharis pilularis	18 Black Sage Salvia mellifera
19 California Buckwheat Eriogonum fasciculatum	20 California Goldenrod Solidago velutina ssp. californica	21 Fuchsiaflower Gooseberry Ribes speciosum	22 Madrone Arbutus merzedesi	23 Seaside Fleabane Erigeron glaucus	24 Buck Brush Ceanothus cuneatus

Map Satellite

San Rafael San Pablo Richmond El Cerrito Berkeley Oakland Alameda San Leandro Hayward Union City San Mateo

San Francisco Daly City South San Francisco San Bruno Pacifica

Golden Gate National Recreation Area

San Ramon Dublin Livermore

Antioch

Google 37.85461, -122.27806

Map data ©2020 Google 5 km Terms of Use Report a map error

Jepson: Central Coast Subregion

← → ↻ calflora.org/entry/wgh.html

Calflora What Grows Here

MAP TOOLS

Criteria

Low water tolerant

Riparian

Shade tolerant

Commercially available

▶ PLANT FILTER

SEARCH

RESULTS

PLANT NAMES

AREA

in map area

in selected background

in polygon

DRAW A POLYGON

start drawing

SAVED SEARCH POLYGONS

POINTS

LOCATION

enter location name

List refinement

- Comparison of downloaded lists shows overlapping species
- 'Pests and Pathogens' database reveals potentially problematic plants
- Understanding of species biology allows for refining based on fire-related characteristics (flammability, thatch production, need for pruning)
- Understanding of ecology and local plant communities allows for groupings based on vegetation type

Coastal prairie and woodland
at Point Molate, Richmond

Photo by David Amme



Sample lists

- Coastal Contra Costa, Alameda: Representatives of coastal prairie and woodland
- Shrubs and smaller trees, vines, grasses, groundcovers, perennial and annual flowers

Draft East Bay Coastal list

30 plants

Options

1	 +	Common Yarrow <i>Achillea millefolium</i>	2	 +	California Buckeye <i>Aesculus californica</i>	3	 +	Douglas' Sagewort <i>Artemisia douglasiana</i>	4	 +	Coyote Bush <i>Baccharis pilularis</i>	5	 +	California Brome Grass <i>Bromus carinatus</i>	6	 +	Purple Western Morning Glory <i>Calystegia purpurata</i> ssp. <i>purpurata</i>
7	 +	Purple Clarkia <i>Clarkia purpurea</i>	8	 +	California Aster <i>Corethrogyne flaginifolia</i>	9	 +	California Oatgrass <i>Danthonia californica</i>	10	 +	Nude Buckwheat <i>Eriogonum nudum</i>	11	 +	California Poppy <i>Eschscholzia californica</i>	12	 +	Woodland Strawberry <i>Fragaria vesca</i>
13	 +	Wavyleaf Silktassel <i>Garrya elliptica</i>	14	 +	Great Valley Gumweed <i>Grindelia camporum</i>	15	 +	Telegraph Weed <i>Heterotheca grandiflora</i>	16	 +	Bolander's Goldenaster <i>Heterotheca sessiliflora</i> ssp. <i>bolanderi</i>	17	 +	Cream Bush <i>Holodiscus discolor</i>	18	 +	Hairy Honeysuckle <i>Lonicera hispidula</i>
19	 +	Silver Bush Lupine <i>Lupinus albifrons</i> var. <i>collinus</i>	20	 +	Dense Flowered Platycarpus <i>Lupinus microcarpus</i> var. <i>densiflorus</i>	21	 +	California Melicgrass <i>Melica californica</i>	22	 +	Bush Monkey Flower <i>Mimulus aurantiacus</i>	23	 +	Coast Live Oak <i>Quercus agrifolia</i>	24	 +	Valley Oak <i>Quercus lobata</i>
25	 +	Blood Currant <i>Ribes sanguineum</i> var. <i>glutinsum</i>	26	 +	Black Elderberry <i>Sambucus nigra</i>	27	 +	Bluewitch Nightshade <i>Solanum umbelliferum</i>	28	 +	Purple Needlegrass <i>Stipa pulchra</i>	29	 +	Tomcat Clover <i>Trifolium willdenovii</i>	30	 +	Narrow Leaf Mule Ears <i>Wyethia angustifolia</i>

- Inland Contra Costa: More chaparral, oak woodlands; some overlap with coastal
- Presumes more spacing and hardscape for fire safety

Draft Inland CoCo

30 plants

Options

1		Common Yarrow <i>Achillea millefolium</i>	2		California Buckeye <i>Aesculus californica</i>	3		Dutchmans Pipe <i>Aristolochia californica</i>	4		Mountain Mahogany <i>Cercocarpus betuloides</i>	5		Elegant Clarkia <i>Clarkia unguiculata</i>	6		Chaparral Clematis <i>Clematis lasiantha</i>
7		Blue Wildrye <i>Elymus glaucus</i>	8		Big Squirreltail <i>Elymus multisetus</i>	9		California Fuchsia <i>Epilobium canum</i>	10		California Poppy <i>Eschscholzia californica</i>	11		Great Valley Gumweed <i>Grindelia camporum</i>	12		Cream Bush <i>Holodiscus discolor</i>
13		Junegrass <i>Koeleria macrantha</i>	14		White Pitcher Sage <i>Lepechinia calycina</i>	15		Hairy Honeysuckle <i>Lonicera hispidula</i>	16		Sky Lupine <i>Lupinus nanus</i>	17		Spring Madia <i>Madia elegans</i>	18		California Melicgrass <i>Melica californica</i>
19		Foothill Penstemon <i>Penstemon heterophyllus</i>	20		Lacy Phacelia <i>Phacelia tanacetifolia</i>	21		One Sided Blue Grass <i>Poa secunda</i>	22		Blue Oak <i>Quercus douglasii</i>	23		Valley Oak <i>Quercus lobata</i>	24		Hollyleaf Redberry <i>Rhamnus ilicifolia</i>
25		Black Sage <i>Salvia mellifera</i>	26		Yellow Stonecrop <i>Sedum spatulifolium</i>	27		Blue Eyed Grass <i>Sisyrinchium bellum</i>	28		Bluewitch Nightshade <i>Solanum umbelliferum</i>	29		California Goldenrod <i>Solidago velutina</i> ssp. <i>californica</i>	30		Purple Needlegrass <i>Stipa pulchra</i>

Questions about potential plants

- Purple needlegrass, yarrow, California poppy: broadly useful
- Buckeye, ceanothus: good for pollinators but can be finicky
- Coast live oak, toyon: excellent wildlife supporters but prone to pathogens
- Coastal sage, coyote bush: needs pruning to lower fire risk
- California aster, silver bush lupine: Subspecies make all the difference



2015 Zoya Akulova

Lupinus
albifrons:
var. collinus
(left); var.
albifrons
(right)



2010 Barry Breckling

Calscape.org

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

California

7095 plants native to California



All Plants
7095



Trees
197



Shrubs
1054



Perennials
3310



Annuals
2180



Grasses
608



Succulents
179



Vines
84



Ferns
111



Sun
2103



Shade
290



Part Shade
1584



Groundcovers
253



Deer Resistant
488



Hedges
240



Bank Stabilization
217



Low Water
878



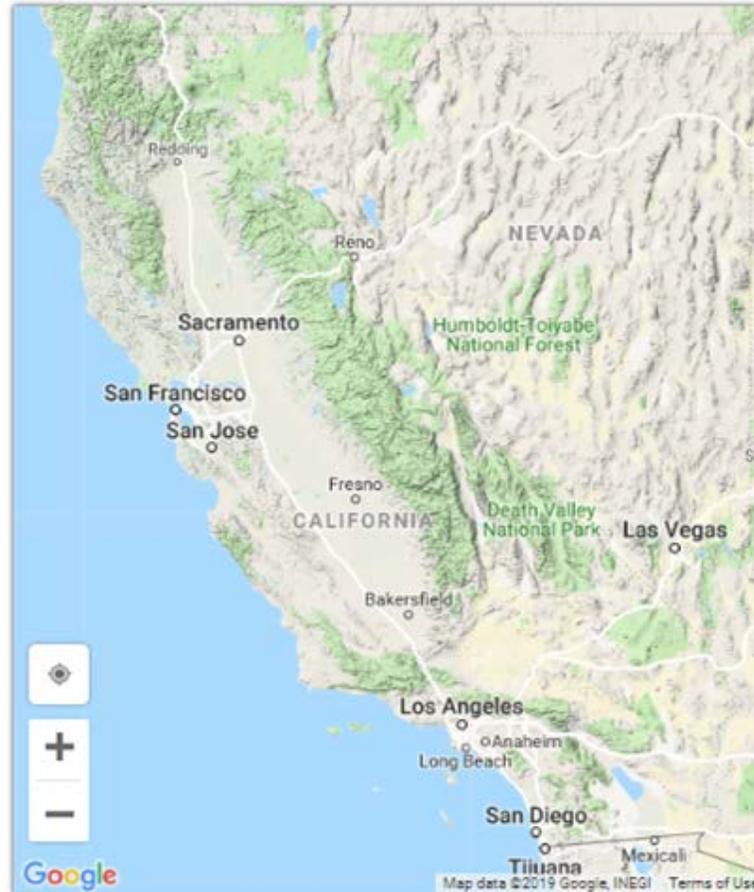
Very Low Water
497



Damp Soils
306



Very Easy
227



✓ Enter any address to learn what plants are native to that location

✓ Detailed plant profiles and characteristics

✓ Thousands of photographs

✓ Gardening information

✓ Nursery availability

cnps.org



Search for California native plants by name

ADVANCED SEARCH

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

California

7095 plants native to California



All Plants
7095



Trees
197



Shrubs
1054



Perennials
3310



Annuals
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Grasses
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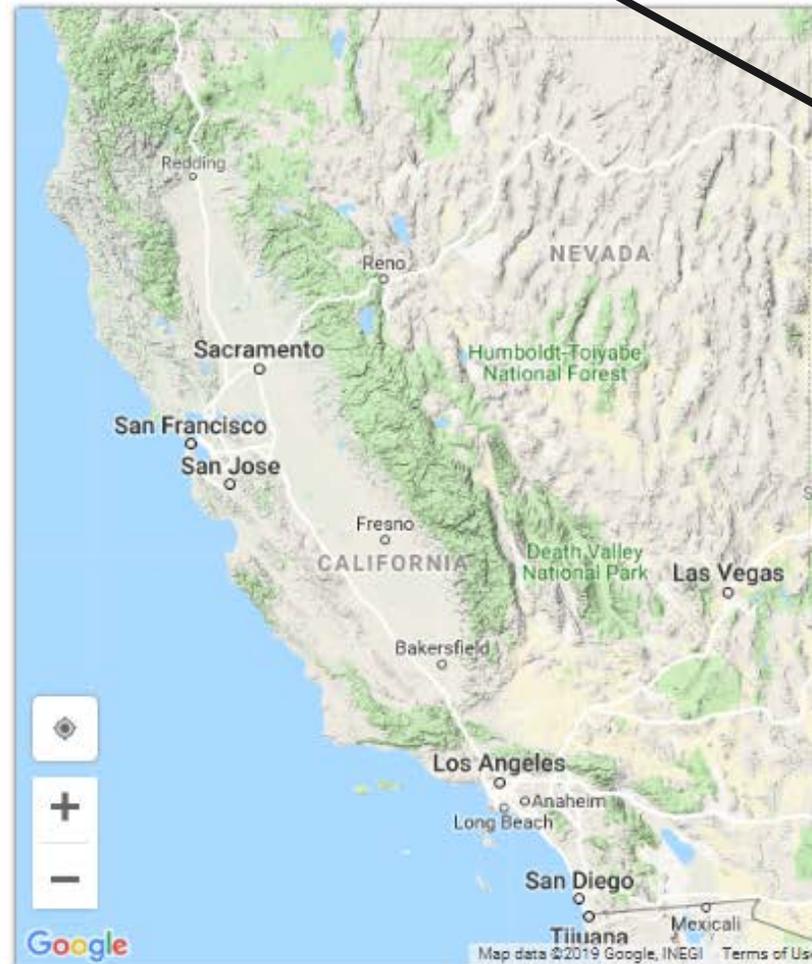
Very Low Water
497



Damp Soils
306



Very Easy
227



Search for a specific plant

Or enter your address, city, or zip code

Search for California native plants by name

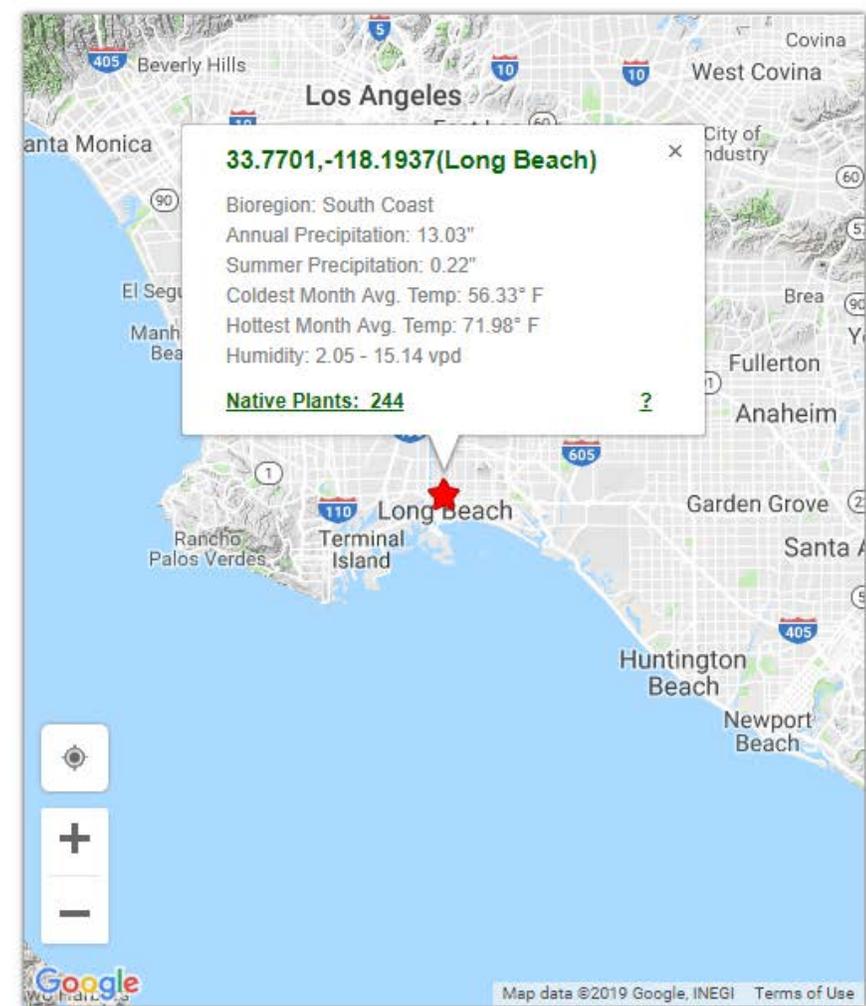
ADVANCED SEARCH

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

Long Beach

244 plants native to 33.7701,-118.1937 (Long Beach)

-  All Plants 244
-  Trees 7
-  Shrubs 53
-  Perennials 93
-  Annuals 86
-  Grasses 30
-  Succulents 5
-  Vines 7
-  Ferns 1
-  Sun 163
-  Shade 5
-  Part Shade 49
-  Groundcovers 34
-  Deer Resistant 36
-  Hedges 16
-  Bank Stabilization 13
-  Low Water 109
-  Very Low Water 66
-  Damp Soils 52
-  Very Easy 42

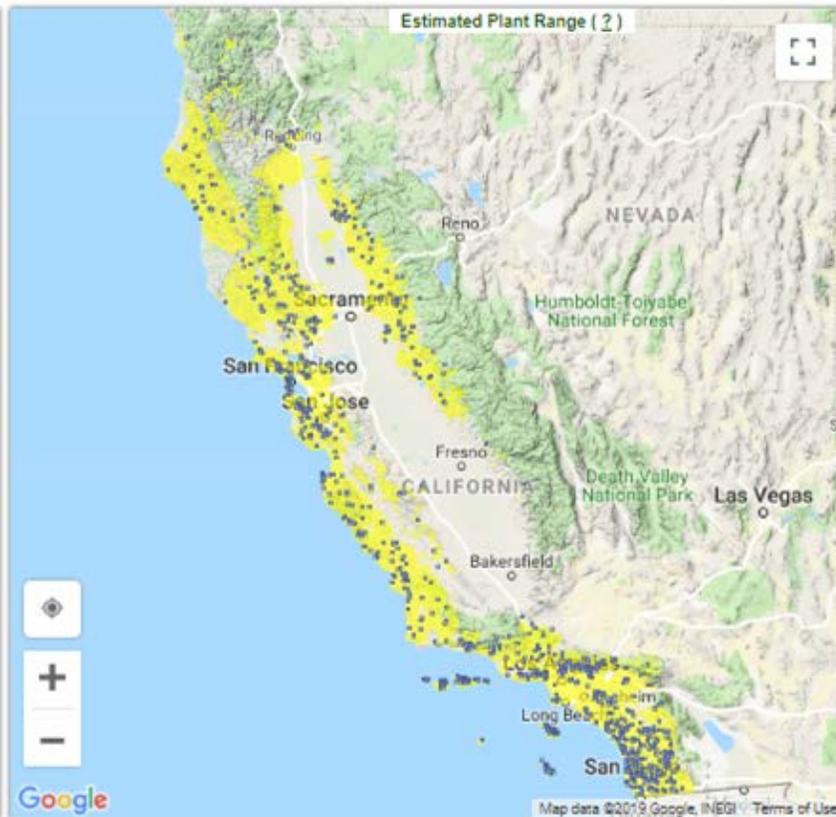


Generates helpful lists of regionally appropriate plants.

Heteromeles arbutifolia



[Show all photos](#)



[DETAILED MAP >](#)

About Toyon (*Heteromeles arbutifolia*)

Toyon is a beautiful perennial shrub native throughout the western part of California and the Sierra foothills. It is a prominent component of the coastal sage scrub plant community, and is a part of drought-adapted chaparral and mixed oak woodland habitats. It is also known by the common names Christmas berry and California Holly from the bright red berries it produces. The city of Hollywood was named for this plant.

It often grows to about 8 feet tall, but there are some spectacular specimens in the Los Padres National Forest that are over 30 feet tall. Its leaves are evergreen, alternate, sharply toothed, and are 5 cm in length and 2 cm wide. In the early summer it produces small white flowers 6mm diameter in dense bunches. The five petals are rounded. The fruit is small, bright red and berry-like, produced in large quantities, maturing in the fall and persisting well into the winter. The flowers are visited by butterflies and other insects, and have a mild, hawthorn-like scent. The berries are consumed by birds, including mockingbirds, American robins, and cedar waxwings. Mammals including coyotes and bears also eat and disperse the berries. Note that the berries contain a cyanide compound that is toxic to humans.

Toyons are beautiful plants and easy to grow. If properly situated, they can grow very quickly, up to 10 feet in three years. They like sun or part shade, though they tend to do better in part shade in the southern, drier part of their geographic range. They can handle a wide variety of soils, including clay, sand and serpentine, but need more moisture than most chaparral shrubs. They do well near seasonal creeks, seeps, bottom of slopes, or near irrigated areas. These plants tolerate a fair amount of summer water, up to 1x per week if the drainage is good. Toyon can be planted near houses since they are fire retardant when given enough moisture. They are an excellent hedge plant.

Plant Description

Plant Type Shrub
 Max. Height 6 - 30 ft (1.8 - 9.1 m)

Detailed plant profiles



Search for California native plants by name

ADVANCED SEARCH

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

California

7990 plants native to California



All Plants 7990



Trees 216



Shrubs 1453



Perennials 3700



Annuals 2216



Grasses 646



Succulents 188



Vines 92



Ferns 113



Sun 2846



Shade 587



Part Shade 2280



Groundcovers



Butterfly Hosts



Hedges



Bank Stabilization



You can filter your search with Advanced search.

Advanced Search

Select desired plant characteristics and then click 'Search' to see matching plants

Native To 

- Type
- Annual herb
 - Fern
 - Grass
 - Perennial herb
 - Shrub
 - Succulent
 - Tree
 - Vine

- Sun
- Full Sun
 - Part Shade
 - Full Shade

- Drainage
- Fast
 - Medium
 - Slow
 - Standing

- Water Requirement
- Extremely Low
 - Very Low
 - Low
 - Moderate - High

- Ease of Care
- Very Easy
 - Moderately Easy
 - Fairly Difficult
 - Very Difficult

- Common Uses
- Bank Stabilization
 - Bee Gardens

Common Uses

- Bank Stabilization
- Bee Gardens
- Bird Gardens
- Bogs and Ponds
- Butterfly Gardens
- Butterfly Host Plants
- Deer Resistant
- Groundcovers
- Hedges
- Hummingbird Gardens

Availability in Nurseries

- Commonly Available
- Sometimes Available
- Rarely Available
- Never or Almost Never Available
- Available Through Seed Stores

Nurseries

- 3 Rivers Blooms
- Ackerman Native Plant Nursery
- Annie's Annuals and Perennials
- Antelope Valley Resource Conservation Nursery
- Artemisia Nursery
- Aspen Hollow Nursery
- Back to Natives Nursery @ Santiago Park
- Bay Natives
- Baylands Nursery
- Belmont Nursery
- Berkeley Horticultural Nursery
- Blossom Hill California Native Plants
- C.N.I. Native Plant Nursery

Fragrance

- Fragrant - Pleasant
- Fragrant - Unpleasant
- None
- Slight

Flower Color

- Black
- Blue
- Brown
- Cream
- Green
- Lavender
- Orange
- Pink
- Purple
- Red
- White
- Yellow

Flowering Season

- Spring
- Summer
- Fall
- Winter

Height

- Feet Inches

Genus

You can filter the plants by a variety of traits

Search for native butterflies by name

Enter a California address to see butterflies & moths native to that location

California

1368 butterflies & moths native to California

Select any species to see host plant info

Options

Host Plants

[What is a host plant?](#)

1		Monarch	2		Painted Lady Vanessa cardui	3		Common Buckeye Junonia coenia	4		Anise Swallowtail Papilio zelicaon	5		Variable Checkerspot Euphydryas chalcedona
7		Gray Hairstreak Strymon melinus	8		Red Admiral Vanessa atalanta	9		Mylitta Crescent Phyciodes mylitta	10		Common Checkered-Skipper Pyrgus communis	11		Acmon Blue
13		Boisduval's Blue	14		Pale Tiger Swallowtail Papilio eurymedon	15		Mourning Cloak Nymphalis antiopa	16		Hoary Comma Polygonia gracilis	17		Northern Checkerspot Chlosyne palla
19		Lorquin's Admiral Limenitis lorquini	20		Queen Danaus gilippus	21		California Sister	22		Silvery Blue	23		Edith's Copper Lycaena editha
25		Checkered White	26		Umber Skipper	27		Hydaspe Fritillary Speyeria hydaspe	28		California Tortoiseshell Nymphalis californica	29		Clodius Parnassian Parnassius clodius

You can also see local pollinators and host plants!



Search for California native plants by name

ADVANCED SEARCH

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- Deer Resistant 36
- Hedges 16
- Bank Stat 13
- Low Water 109
- Very Low Water 66
- Damp Soils 52
- Very E 42

33.7701,-118.1937(Long Beach)

Bioregion: South Coast
 Annual Precipitation: 13.03"
 Summer Precipitation: 0.22"
 Coldest Month Avg. Temp: 56.33° F
 Hottest Month Avg. Temp: 71.98° F
 Humidity: 2.05 - 15.14 vpd

Native Plants: 244

Blue Eyed Grass
Sisyrinchium bellum

Add to My Plant List



Create a Calscape account

then...

Create a customizable "My Plants" lists by adding plants.

for My Yard

Options

- Edit plant list
- Photos & Info
- Order by Popularity
- Order By Common Name
- Order by Scientific Name
- Order by # of Butterflies Hosted
- Show nursery cultivars
- Hide nursery cultivars
- Show plants not in nurseries
- Hide plants not in nurseries
- Grid view
- List view
- Text view
- Export to spreadsheet**
- Export to spreadsheet (Detailed)
- Add All to Plant List
- Print plant labels (current page only)
- Print plant signs (current page only)
- Copy iframe code to clipboard
- Copy url to clipboard

1

3		Toyon Heteromeles arbutifolia
4		Blue Elderberry Sambucus nigra ssp. caerulea
9		Bush Monkey Flower Mimulus aurantiacus
10		Giant Chain Fern Woodwardia fimbriata
15		Hairy Honeysuckle Lonicera hispidula
16		Bigflower Tellima Tellima grandiflora

2

Here is how to export your plant list to an excel spreadsheet to print and bring to your local nursery

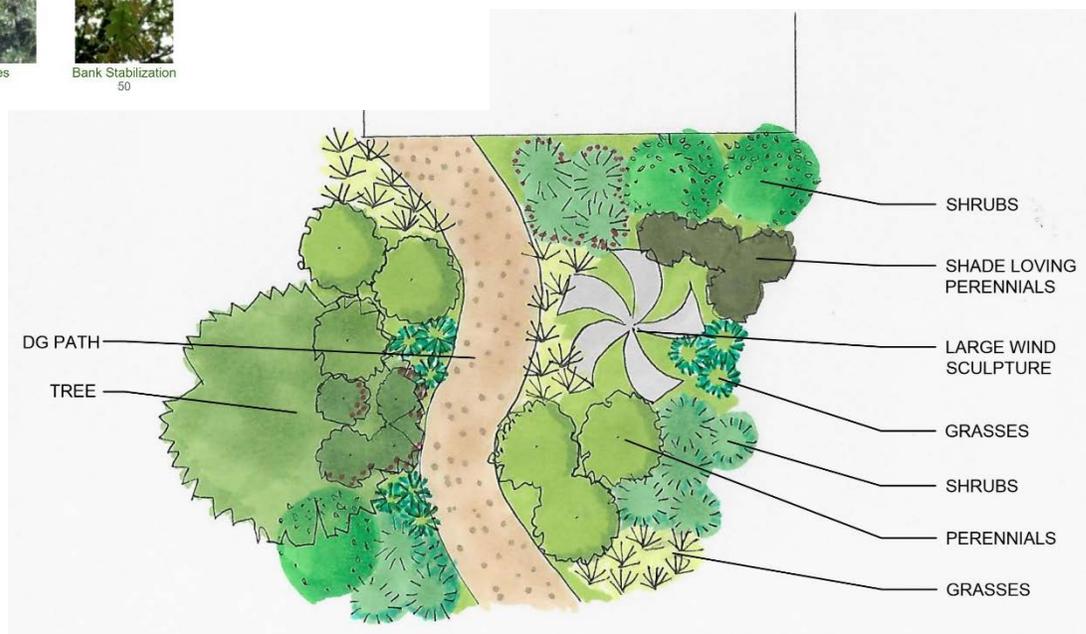
Enter a California address or click the map to see plants native to that location

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!

Graphic representations: Plants in context

Trees

- Coast live oak / *Quercus agrifolia* 19.7-82' x 40'
- Canyon live oak / *Quercus chrysolepis* 30-90' x 60'
- Western sycamore / *Platanus racemosa* 20-115' x 50'

Large Shrubs

- Bigberry manzanita / *Arctostaphylos glauca* 6-24' x 6-24'
- Toyon / *Heteromeles arbutifolia* 6.5-25' x 6-25'
- Hollyleaf cherry / *Prunus ilicifolia* 3-24' x 15'
- Sugarbush / *Rhus ovata* 6-30' x 6-30'

Medium Shrubs

- Concha ceanothus / *Ceanothus 'Concha'* 3-6' x 3-6'
- Spiny redberry / *Rhamnus crocea* 3.3-7' x 3-7'
- Chaparral currant / *Ribes malvaecum* ssp. *viridifolium* 4'-6' x 4'-6'
- White sage / *Salvia apiana* 3-6' x 3-6'

Vines

- Southern honeysuckle / *Lonicera subspicata* var. *denudata* 4-8' x 20'
- Roger's Red grape / *Vitis californica* 'Roger's Red' 20-40' x 20-40'

Small Shrubs / Perennials

- Narrowleaf milkweed / *Asclepias fascicularis* 1-4' - spreads
- California monarch milkweed / *Asclepias eriocarpa* 1-3' x 1'
- Brittlebush / *Encelia farinosa* 1-5' x 4'
- Southern bush monkeyflower / *Diplazis longiflorus* 1.5-4.5' x 1.5-4.5'
- Grape soda lupine / *Lupinus excubitus* 2-4' x 2-4'
- Scarlet bugler / *Penstemon centranthifolius* 2-4' x 1'
- Showy penstemon / *Penstemon spectabilis* 2-4' x 3-4'
- Inland Calif. Buckwheat / *Eriogonum fasciculatum* var. *heliolosum* 2-4' x 3-5'
- Mountain desert sage / *Salvia pachyphylla* 1-2' x 2-3'

Groundcover

- California goldenrod / *Solidago velutina* ssp. *californica* 1.5-5' x spreads
- Bluwitch nightshade / *Solanum umbelliferum* 1-3.3' x 3'
- California fuchsia / *Epilobium canum* 1-2' x 2-3' spreads
- Blue-eyed grass / *Sisynchium bellum* 1-2' x 1'

Grasses

- Deergrass / *Muhlenbergia rigens* 3-4' x 3'
- Giant needlegrass / *Stipa coronata* 3.5-7' x 4'

Succulents

- Lanceleaf liveforever / *Dudleya lanceolata* 3-7.5' x 5-1'
- Chaparral yucca / *Hesperoyucca whipplei* 2-3' x 2-3'

Plants in Context: Concha ceanothus, Inland California buckwheat, Brittlebush, California fuchsia, Lanceleaf liveforever, Deergrass, Grape soda lupine, Southern bush monkeyflower, Chaparral yucca, White sage.

Legend: local, summer dormant, evergreen, deciduous, shade, part sun, sun, medium, low, very low, bloom time, flower color.

Callout: All the plants on this list attract at least one type of important wildlife! Go to CalScape.org to learn more.

Southern California work

- Showing recommended plants in a garden setting
- Providing useful information in stylized form

Supporting more work

- More ecoregional lists, fire/defensible space recommendations
- Calscape improvements
- NorCal Nursery and Landscaper Trainings
- Increasing availability of native plants and promoting their use



Pictured above: American lady on coyote mint (*Monardella villosa*). Photo by Pete Veilleux

Thanks for your time, attention, and appreciation of plants!

Andrea Williams, Director of Plant Science

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Support CNPS now and into the future with your annual membership.

END

Photo: Richard Jones