



Speakers

- **♦ Mary Welday**
 - Homeowner
- **♦ Lindsey Stuvick**
 - Sustainable Resources Officer, Moulton Niguel Water District
- **♦** Scott Kleinrock
 - Conservation Programs
 Manager, Chino Basin Water
 Conservation District

Moderator

- **♦** Cathy Pieroni
 - Acting Water Resources Manager, Inland Empire Utilities Agency



Per Metropolitan Water District...

Since 1990, Southern California consumers have reduced their use of water by 41 percent...

...from 220 gallons per person per day to 129 gallons in 2021



Banning NFT

(Non-Functional Turf)

- **♦** Regulatory Rulemaking for SB 606/AB 1668
- ◆ Assembly Bill 1572 (Friedman) Potable water: nonfunctional turf
- **♦** Governor's State of Emergency
- **♦** Incentives: Rebates and More...



Moderator's Note: Recycling is Conserving Indoor Water Uses

Figure 5 Municipal Recycled Water Use in California Since 1970

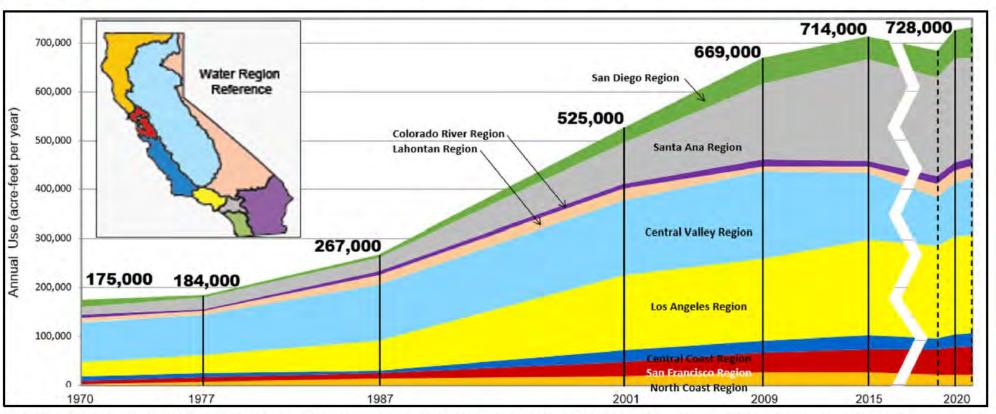


Figure 5 notes: (1) The break in the graph between 2015 and 2019 is because of changes made to recycled water data collection in 2019. (2) Dashed lines shown for 2019 and 2021 data are for reference.

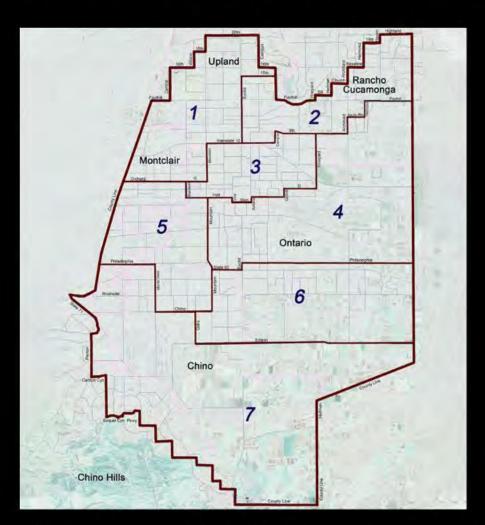
Lessons from the Field

Scott Kleinrock

Our Service Area



Waterwise Community Center



Urban Western Edge of San Bernardino County

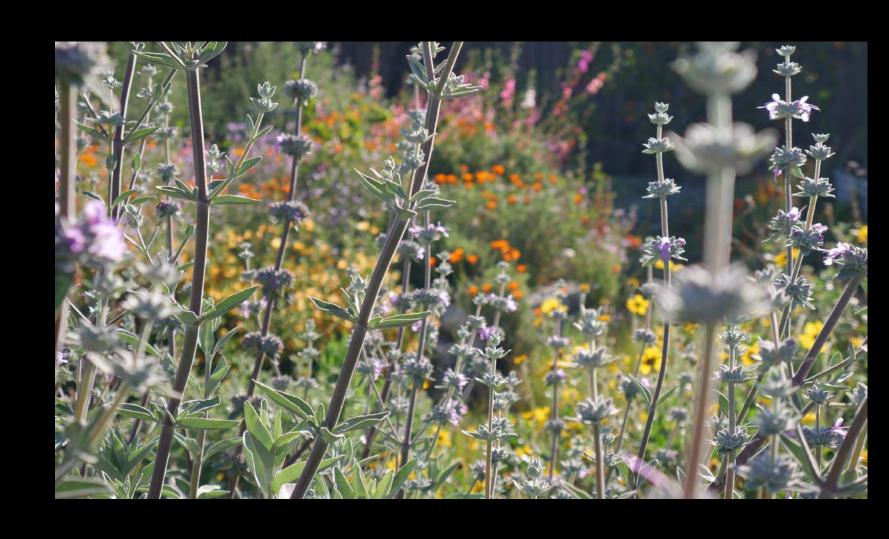


Protecting and Replenishing the Chino Groundwater Basin

- Our average program participants:
- Roughly 2/3 of program participants still have "quite green" or "greenish" lawns.
- Under 1/3 of participants have desiccated lawn, dirt, etc.
- Roughly 3-5% of participants have already removed all lawn

Main barriers to increased installation of low-water residential landscapes

- Inspiration
- Design
- Information
- Time
- Cost
- Who to hire?



More people than ever are thinking about getting rid of their



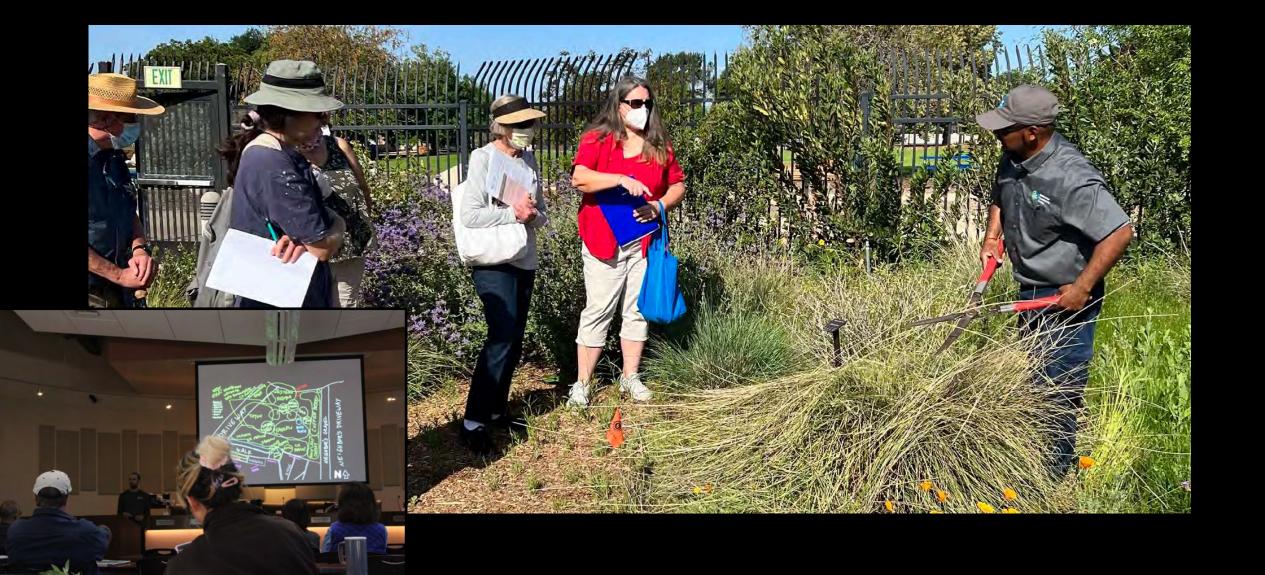




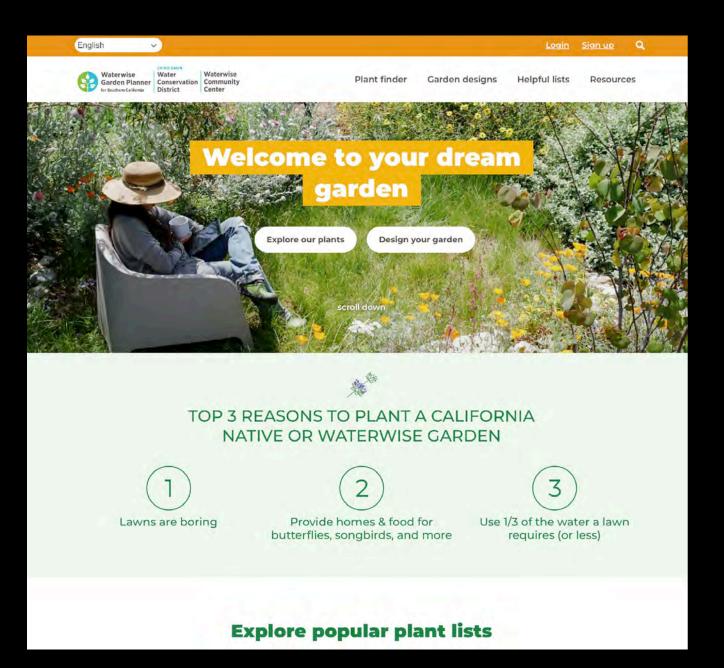
But MANY will still be the first on their block to do so

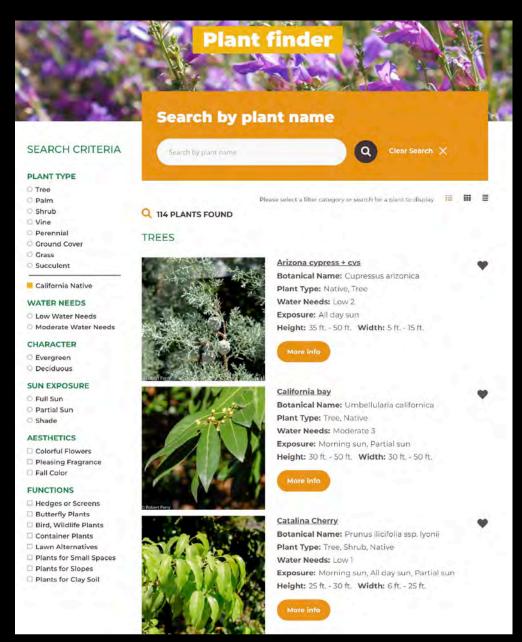


Free workshops: cbwcd.org/workshops

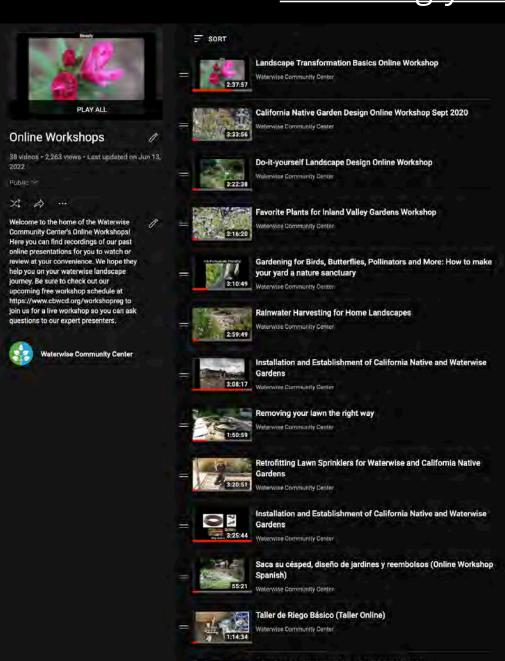


Website: Waterwise Garden Planner - waterwisegardenplanner.org





YouTube channel: cbwcd.org/youtube





Live chat replay is not av

Landscape T

Basics Online

California Na

Design Onlin

Waterwise Con

Do-it-yoursel

Design Onlin

Waterwise Con

Favorite Plan

Valley Garde

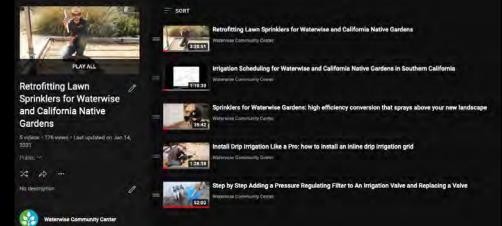
Waterwise Con

Gardening fo

Butterflies, P

Waterwise Con Rainwater Ha

3:33:56





Explore our garden design templates

Butterfly and Songbird Garden

California Native Color Garden

Colorful Desert Garden

Meadow Garden

Mediterranean Garden

Pollinator Garden

Succulent Sculpture Garden

Woodland Garden



People *SELF REPORT* that design is the most frequent barrier....

And they asked for help understanding how to assemble something that is not a jumble of random plants

...so we made this

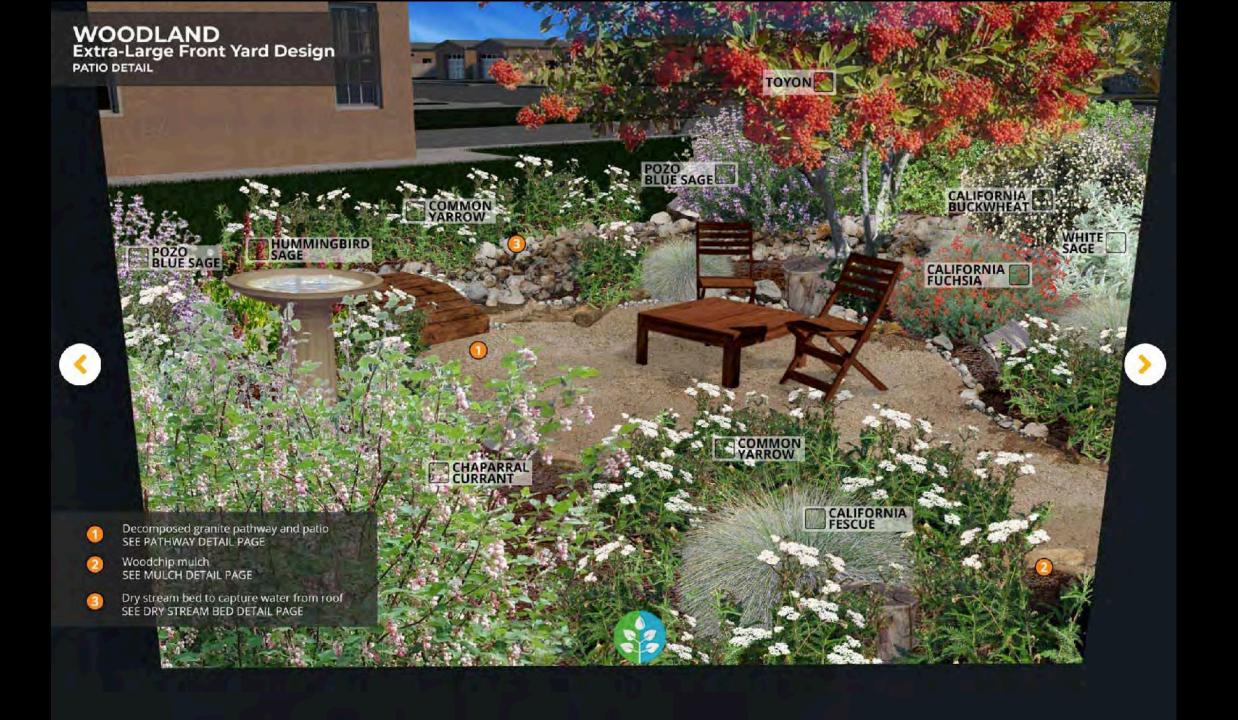


waterwisegardenplanner.org

Helping them find the vision



Landscape design examples that will be easy to emulate or that they can hand directly to a landscape contractor who understands waterwise plants.



Hummingbird sage

Salvia spathacea











Description

■ Download ♥ Save < Share</p>

The Hummingbird sage is a small ground hugging perennial typically growing 12-18 in. tall and can form small groups and spread many feet across. Large textured leaves grow 4-6 in. long; vigorous spikes with colorful deep magenta-red flowers occur in early spring.

Hummingbird sage is native to foothill regions from Orange County to the Bay Area. It frequently grows as an understory plant to native oaks and on grassy slopes in the southern oak woodland plant community. It develops strong rhizomes below ground that enables it to survive summer drought. Leaves and stems die back under drought stress. This species is a unique flowering and foliage accent plant that can be used along natural borders, under trees and in native plant gardens.

Plant properties

Water needs

Maintenance

Plant Type: Perennial, Native

Foliage Character: Drought deciduous, Evergreen

Habit: Clumping

Growth Rate: Moderate

Foliage Color: Medium green

Flower Color: Magenta Flower Season: Spring

Soil Adaptations: Well-draining soil, Deep soil, Clay

Exposure Adaptations: Morning sun, Moderate shade, Drought, Partial sun

Function: Wildlife value, Raised planters, Hummingbird plant, Flowering accent plant, Borders, Attracts butterflies,

Small spaces

Height: 12 in. - 18 in.

Width: 18 in. - 24 in. then slowly spreading



Landscape Elements



Groundcovers



Woodchip Mulch

Perrenials/Shrubs ≤ 4'



Achillea millefolium Common Yarrow - 18"



'Margarita BOP' Margarita Foothill Penstemon - 2'



Epilobium canum California Fuchsia - 3'

Penstemon heterophyllus



Salvia spathacea Hummingbird Sage - 3'

Trees & Large Shurbs

Heteromeles arbutifolia Toyon - 18'



Shrubs ≥ 5'



Leymus condensatus 'Canyon Prince' Canyon Prince Wild Rye - 5'



Arctostaphylos 'Sunset' Sunset Manzanita - 6'



Eriogonum fasciculatum California Buckwheat - 6'



Salvia 'Pozo blue' Pozo blue - 6'



Lepechinia fragrans Fragrant Pitcher Sage - 6'



Rhamnus californica Coffeeberry - 6'

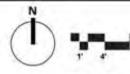
NOTES:



French drain at edge of landscape at sidewalk, to capture water running off SEE FRENCH DRAIN DETAIL PAGE



WOODLAND Small Front Yard Design **PLAN VIEW**











Boulders

Groundcover



Decomposed Granite



Woodchip Mulch

Perrenials/Shrubs ≤ 4'



Artemisia californica 'Montara' Montara Sagebrush - 5'



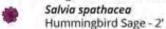
Eriogonum grande var. rubescens Red Buckwheat - 3'



Achillea millefolium Common Yarrow - 1.5'



Margarita Foothill Penstemon - 2'



Sisryinchium bellum Blue-Eyed Grass - 6"



Verbena Lilacina Lilac Verbena - 4'



Monardella villosa Coyote Mint-3'



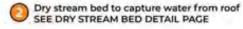
Epilobium canum California Fuchsia - 3'

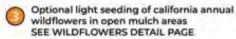


Penstemon Eatonii Firecracker Penstemon - 3'

NOTES:

Decomposed Granite pathway along curb for car door exit SEE DECOMPOSED GRANITE DETAIL PAGE





Shrubs ≥ 5'



Arctostaphylos 'Sunset' Sunset Manzanita - 5'



Eriogonum cinereum Ashyleaf Buckwheat - 6'



Leymus condensatus 'Canyon Prince' Canyon Prince Wild Rye - 5'



Muhlenbergia rigens Deer Grass - 6'



Salvia 'Allen Chickering' Allen Chickering Sage - 6'



Isomeris arborea Bladderpod - 5'



Calliandra Californica Baja Fariy Duster - 5'

Trees & Large Shurbs

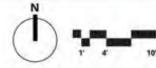
Chilopsis linearis Desert Willow - 20'





A program of the Chino Basin Water Conservation District

NATIVE COLOR Medium Front Yard Design **PLAN VIEW**



SCALE: 1/8" = APPX, 1' AT 11x17 PRINT

Use this chart to understand what time of year these plants bloom in Southern California gardens "Bloom seasons" show the main flower color of the plant, "Off bloom seasons" show the leaf color, which can also be useful in your planting design.

We encourage adding value for the birds, butterflies, and pollinators by having blooms throughout the seasons!

BOXES WITH ICON:
MEANS IT IS USUALLY IN
BLOOM SOMETIME THIS SEASON

garden style:

CA NATIVE COLOR

COLORFUL COLLECTION OF UNIQUE CALIFORNIA NATIVES

With focus on color, this style creates great food sources for a diverse group of pollinators, butterflies, and birds!

PLANT NAME	SPRING	SUMMER	FALL	WINTER
TOYON	8			
WESTERN REDBUD	•	•	•	
ALLEN CHICKERING SAGE	•	8		
MARGARITA FOOTHILL PENSTEMON	•	(3)		
SUNSET MANZANITA	•			•
MONTARA SAGEBRUSH		•	●	
CANYON PRINCE WILD RYE	•	•		
ASHYLEAF BUCKWHEAT	•	•	€	
RED BUCKWHEAT	•	8	•	
HUMMINGBIRD SAGE		*		
BLUE-EYED GRASS	(3)			3
DEER GRASS	•	•		
LILAC VERBENA	•	•		3
COMMON YARROW	•	•		
BAJA FAIRY DUSTER		•		8
DESERT WILLOW	•	•	•	
CALIFORNIA FUSCHIA		•	•	
BLADDERPOD	•	•	•	•
COYOTE MINT		•		

PLANT TEXTURES
Photography credit
for plant images:















Native "Formal Looking" Top Trees and Shrubs

Description

Download Share

One way to help a California native garden "look good" in a conventional sense throughout the entire year is to have a balance of "evergreen" plants that appear green and relatively lush looking year-round combined with colorful spring blooming plants like sages and wildflowers.

This list features our top natives that can be used for that evergreen backbone of a garden, whether it be for a more formal design using California native plants or to "balance" the look of a space when combined with wilder looking or seasonally dormant native plants.

These would also be our top recommendations to start with for people who like the idea of working with native plants but prefer a "traditional" look for their landscape.



waterwisegardenplanner.org

Plant List

TREES





TREES

Catalina Cherry

Coast live oak

Engelmann oak

SHRUBS

Coffeeberry + cultivars

Creeping barberry

Golden Abundance barberry

Hollyleaf cherry

Lemonade berry

McMinn manzanita

Pigeon Point Coyote brush

Santa Cruz Island buckwheat

Sugar bush

Sunset manzanita

Toyon



On demand workshops

Check out our in-depth workshop recordings on a variety of DIY topics including garden design, installation, landscape care, water capture, irrigation, and more!







California Native Garden Design



Installation and Establishment

See our full workshop Youtube playlist

UPCOMING FREE LIVE WORKSHOPS

Join our expert staff for an empowering learning experience. You can do this, and we are here to teach you how! Workshops are offered at the Waterwise Community

Center in Montclair and online.

See our schedule and register

Sign up for workshop announcements and more

Details for installation and planning



Proper Planting

Simple techniques for getting your waterwise plants into the ground and off to a great start.



Mulch

Woodchips? Gravel? Decomposed granite? See the most common ways to cover soil and their benefits.



Dry Streambeds

Wildflowers

The most attractive and practical way to capture rain while helping your garden and the environment!

Annual wildflowers can be a

fun and beautiful way to add

extra seasonal beauty and

habitat value to your space.



French Drains

A compact method to capture rainfall that can be a good solution when you have limited options.



Pathways

Robust methods for constructing gravel and decomposed granite paths though the garden.

WHERE TO BUY PLANTS AND LANDSCAPE MATERIALS

We share a Local Landscape Suppliers list of business that sell waterwise and California native plants, landscape construction materials, mulch materials, and irrigation supplies to our local communities.

Plants

Soil, Mulch, Rock, Decomposed Granite, Hardscape Materials

Irrigation, Tools, Landscape Materials

Grow Native Nursery at the California Botanic Garden

1500 N. College Ave., Claremont CA 91711 phone (909) 625-8767 (California native plants, huge selection, nursery closed summer)

Garrison Foothill Nursery

679 East 16th St., Upland CA 91784 phone (909) 949-9878 (California Native Plants, Southwest Native Plants, and Other Ornamental Plants)

Glendora Gardens

1132 S. Grand Ave., Glendora CA 91740 phone (626) 914-6718 (General Nursery with Waterwise Plants)

Theodore Payne Foundation

10459 Tuxford St., Sun Valley, CA 91352 phone (818) 768-1802 (California Native Plants, Huge Selection, Demonstration Plantings)

Cal Poly Pomona Nursery at The Cal Poly

4102 South University Drive, Pomona, CA 91768

phone (909) 869-2299 (Primarily Culinary Herbs and Fruit Trees)

Tree of Life Nursery

33201 Ortega Highway, San Juan Capistrano CA 92675 phone (949)-728-0685 (Primarily California Native Plants with additional interesting selections from the southwest, seasonal vegetable starts, demonstration plantings)

Plant Material

3350 Eagle Rock Blvd, Los Angeles CA 90065 phone (323) 474-6842 (California Native and Waterwise Plants, Vegetables and Herbs, Specialty Garden Tools)

Demonstration garden and public park Three acres of demonstration landscapes open Mon-Sat in Montclair











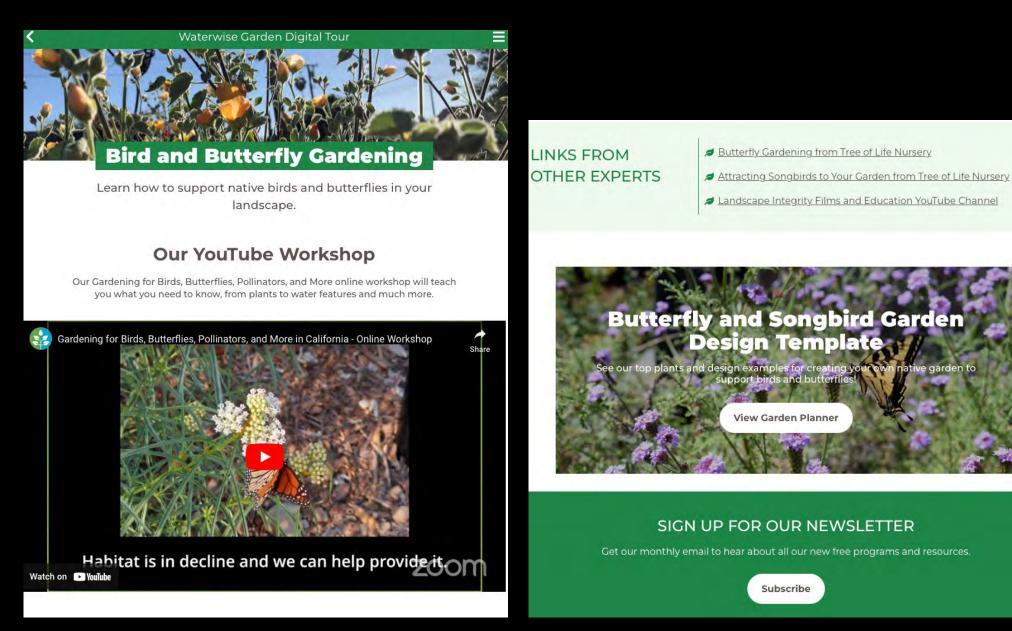


A matching interpretive experience





With Enhanced Online Resources



"Where can I find someone to hire?"









Online Job Portal

 Connects community members and professionals while allowing CBWCD to stay out of contractor recommendations



THRIVE IN TODAY'S PROFESSIONAL LANDSCAPE

California Native Plant Landscaper Certificate Progr

Whether you're a seasoned landscape professional or just moving the field, get an edge on the competition by learning more about the growing field of native gardening.

LEARN MORE

SEE PROGRAM OUTLINE

Find The Best Landscape Professionals

The PEP job board connects ecologically and sustainably-minded landscapers with companies and clients committed to the same goals. Jobs can be posted by anyone with an opportunity in Southern California. Job opportunities are only viewable to PEP members.

POST A JOB

LOG IN TO SEE JOB POSTINGS

Do Low Water Demand Plants = A Low Water Use Landscape?

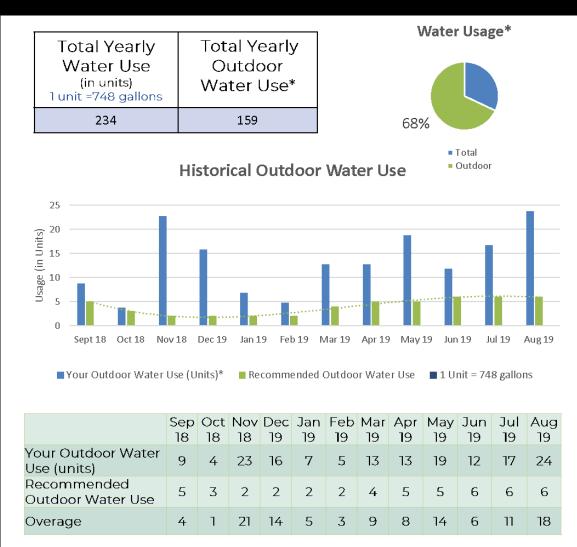
Free Sprinkler Checkup Program / Water Efficiency Consultations





cbwcd.org/consultation

Personalized reports from site collected and water use data



^{*}Outdoor water use is an estimated calculation based on the landscaped area and number of residents in your home

Your Current Watering Schedule

Station	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
٦	26	26	26	26	26	26	26
2	30	30	30	30	30	30	30
3	26	26	26	26	26	26	26
4	26	26	26	26	26	26	26
5	26	26	26	26	26	26	26
6	28	28	28	28	28	28	28

Total Min per Week 1134

March thru September Suggested Summer Water Schedule

Stations	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday				
7	6		6		6		6				
2	5		5		5		5				
3		N/A									
4	6		6		6		6				
5	5		5		5		5				
6	10		10		10		10				

Total Min 12 per Week	28
-----------------------	----

On Site Observations

A great way to save water and maintain a healthy landscape is by keeping up with repairs. Here are some areas that are in need of attention.



Valve Leaks

The irrigation valve pictured is leaking during operation. Our technicians diagnosed the diaphragm to be the most likely cause of damage. You may be able to avoid replacing the whole valve by replacing the diaphragm. Damaged valves do effect the rest of your system and should be repaired



Line Breaks

There is a break in the lateral line in this zone. Broken irrigation lines can cause a significant amount of water loss in a very short time. This needs to be repaired before resuming operation of the system automatically. Check your landscape often for signs of line breaks and check your water meter if you believe there may be a leak.



Overspray

The sprinkler pictured is causing overspray to the driveway. You can manually adjust the distance that each nozzle can reach by adjusting the velocity screw on the top of your sprinklers. If that isn't effective, consider using sprinkler nozzles with a shorter radius or changing the layout of your sprinklers.

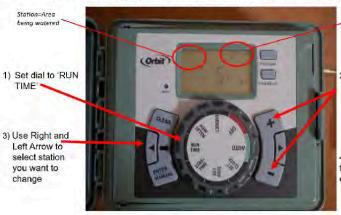
Making Changes It is easier than you think!

During our audit we observed that you have an Orbit irrigation controller. If you need help making basic changes, these instructions may prove useful. While this may not be your exact controller, the functions should be similar.

Programs- Review your controllers "Programs" as you may have additional time on one of you stations or zones

Stations/Zones- Is the area of lawn being water and will have a corresponding number in the controller.

How to Change your Watering Schedule: Minutes per week



1) Move dial to

3) Move dial to

'AUTO' to run

HOW

Program= A way to store settings and run a station at different days and

- Use + , keys to change number of minutes station will run
- Set dial to 'AUTO'
 to return to normal
 operating mode

How to Change your Watering Schedule: Days to Water



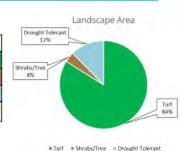
- 2) Use + , keys to select days, selected days will be in boxes This will set days for all stations
- *To turn off the timer completely during a rain event just move the dial to 'OFF'

Site Evaluation Data



Here is an overview of the landscape at your site. During the landscape evaluation our team mapped the square footage of your site and classified the landscape into three categories: high, medium, and low water use plant material. This data is used to create the customized water budget.

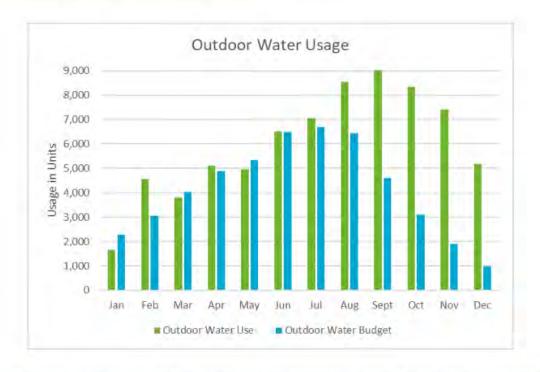
Total	1,033,353	Overall L - Factor	0.64	
Low Water Use	127566	0.3	12%	
Medium Water Use	38,832	0.5	4%	
High Water Use	866,955	0.7	84%	
Type	Square Feet	Landscape Factor	Over All %	



2022 Summary of Water Use

Water Usage and Site Evaluation Data						
YTD Landscape Usage	72,165 Units					
Annual Landscape Water Budget	49,757 Units					
Irrigated Landscaped Area	1,033,353 Sq. Ft.					

Potential S	avings
Total Water Over Landscape Budget	22,408 Units
Total Water Over Landscape Budget	16,761,184 gallons



						-	-			- 01	
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1,664	4,548	3,797	5,109	4,955	6,511	7,055	8,544	9,016	8,354	7,419	5,193
2,276	3,053	4,035	4,876	5,332	6,478	6,677	6,448	4,606	3,097	1,896	983
-612	1,495	-238	233	-377	33	378	2,096	4,410	5,257	5,523	4,210
	1,664 2,276	1,664 4,548 2,276 3,053	1,664 4,548 3,797 2,276 3,053 4,035	1,664 4,548 3,797 5,109 2,276 3,053 4,035 4,876	1,664 4,548 3,797 5,109 4,955 2,276 3,053 4,035 4,876 5,332	1,664 4,548 3,797 5,109 4,955 6,511 2,276 3,053 4,035 4,876 5,332 6,478	1,664 4,548 3,797 5,109 4,955 6,511 7,055 2,276 3,053 4,035 4,876 5,332 6,478 6,677	1,664 4,548 3,797 5,109 4,955 6,511 7,055 8,544 2,276 3,053 4,035 4,876 5,332 6,478 6,677 6,448	1,664 4,548 3,797 5,109 4,955 6,511 7,055 8,544 9,016 2,276 3,053 4,035 4,876 5,332 6,478 6,677 6,448 4,606	1,664 4,548 3,797 5,109 4,955 6,511 7,055 8,544 9,016 8,354 2,276 3,053 4,035 4,876 5,332 6,478 6,677 6,448 4,606 3,097	1,664 4,548 3,797 5,109 4,955 6,511 7,055 8,544 9,016 8,354 7,419 2,276 3,053 4,035 4,876 5,332 6,478 6,677 6,448 4,606 3,097 1,896

Current Schedule

	Contro	ller#2		Sche	dule P	rior to A	Irrigation Type	Program	
Stations	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday		
1	45	45	45	45	45	45	45	Drip	Α
2	30	30	30	30	30	30	30	Drip	Α
3	25	25	25	25	25	25	25	Drip	Α
4	25	25	25	25	25	25	25	Drip	Α
5	30	30	30	30	30	30	30	Drip	Α
6	30	30	30	30	30	30	30	Drip	Α
7	30	30	30	30	30	30	30	Drip	Α
8	30	30	30	30	30	30	30	Drip	Α
9	30	30	30	30	30	30	30	Drip	Α
10	30	30	30	30	30	30	30	Drip	Α
11	25	25	25	25	25	25	25	Drip	Α
12	25	25	25	25	25	25	25	Drip	Α
13	25	25	25	25	25	25	25	Drip	Α
14	25	25	25	25	25	25	25	Drip	Α
	V	Veekly Ru	ntime Total:	283	5		Month	ly Runtime Total:	11340

Recommended Schedule

	Con	troller #2		Sugg	gested S	Summer So	Irrigation Type	Program		
Stations	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	51. 3 5-41.737-	1,23,711	
1	60							Drip	3	
2	60			1				Drip	3	
3	60	-				- In		Drip	3	
4	60	11						Drip	3	
5	60			+				Drip	3	
6	60							Drip	3	
7	60							Drip	3	
8	60							Drip	3	
9	60							Drip	3	
10	60							Drip	3	
11	60						15	Drip	3	
12	60							Drip	3	
13	60						10	Drip	3	
14	60							Drip	3	
Weekly Runtime Total:				840 Monthly Run				time Total: 3360		

Recent consultation for an HOA's "Low Water" Landscape

Landscape zones post turf replacement were being watered during a cool spring at 337% of our recommended *July* watering schedule for those zones



Scott Kleinrock
Conservation Programs Manager
Chino Basin Water Conservation District
skleinrock@cbwcd.org

links referenced in presentation:
waterwisegardenplanner.org
cbwcd.org/youtube
cbwcd.org



Waterwise Community Center Waterwise Garden Planner for Southern California



Scott Kleinrock
Conservation Programs Manager
Chino Basin Water Conservation District
skleinrock@cbwcd.org

links referenced in presentation:
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cbwcd.org/youtube
cbwcd.org



Waterwise Community Center Waterwise Garden Planner for Southern California

Renovating a 1930 Bungalow

Mary Welday



Before



After

Winner of Cucamonga Valley Water District's Landscape Contest (2021)



HOA Education & Water Savings Programs

August 11, 2023

H2O for HOAs



FREE EDUCATION AND NETWORKING EVENT

Light breakfast will be provided

THURSDAY OCT 26 8AM - 12NOON

Norman P. Murray Community Center

24932 Veterans Way, Mission Viejo, CA 92692

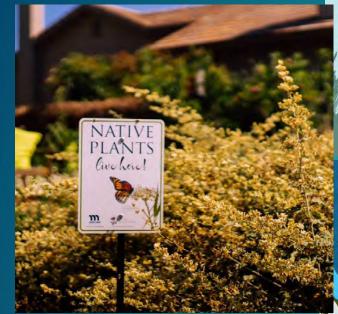






More HOA Education & Water Savings Programs

- H2O Pro Water Management Program
- Professional Landscaper Trainings
- Turf Removal & Pilot Stacked Incentive
- Numerous Water Savings Rebates
- MNWD Demonstration Garden
- Recycled Water





DUAL CERTIFICATION WORKSHOP



Contact Us

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Phone: 949-831-2500

www.mnwd.com 26161 Gordon Rd., Laguna Hills, CA 92653

FOLLOW US ONLINE!







Discussion Wrap Up

- Conservation Improves Resilience Against Drought
- New Legislation
 Banning NFT Irrigation
 in CII Properties –
 Enforcement
 Challenges
- The Cost of Making Conservation a California Way of Life