



GARDEN LANDSCAPES FOR VENTURA COUNTY

AN ECOSYSTEM APPROACH TO CREATING A THRIVING AND WATER-WISE GARDEN LANDSCAPE

A SUSTAINABLE ECOSYSTEM APPROACH TO LANDSCAPING

If you're frustrated by a high-maintenance or lackluster yard, this guide is for you. This guide was created to inspire climate-appropriate, water-wise garden landscapes that are beautiful, low maintenance, and contribute to a healthy and balanced environment.

It comes down to planning and a change in perspective.

Regardless of any current drought conditions or landscaping trends, when you think of your landscape garden as an ecosystem, everyone (including your yard) benefits.

This is because a balanced garden ecosystem needs less water, herbicides, and pesticides and it also requires less maintenance – all while helping the environment beyond your own backyard. This guide will discuss the different dynamics that make your landscape unique, including soil, sun exposure, and the climate in your corner of Ventura County.

By following these guidelines, we can become responsible stewards of the environment and recognize that collectively reducing our water use is critical to our region.

OUR MEDITERRANEAN CLIMATE

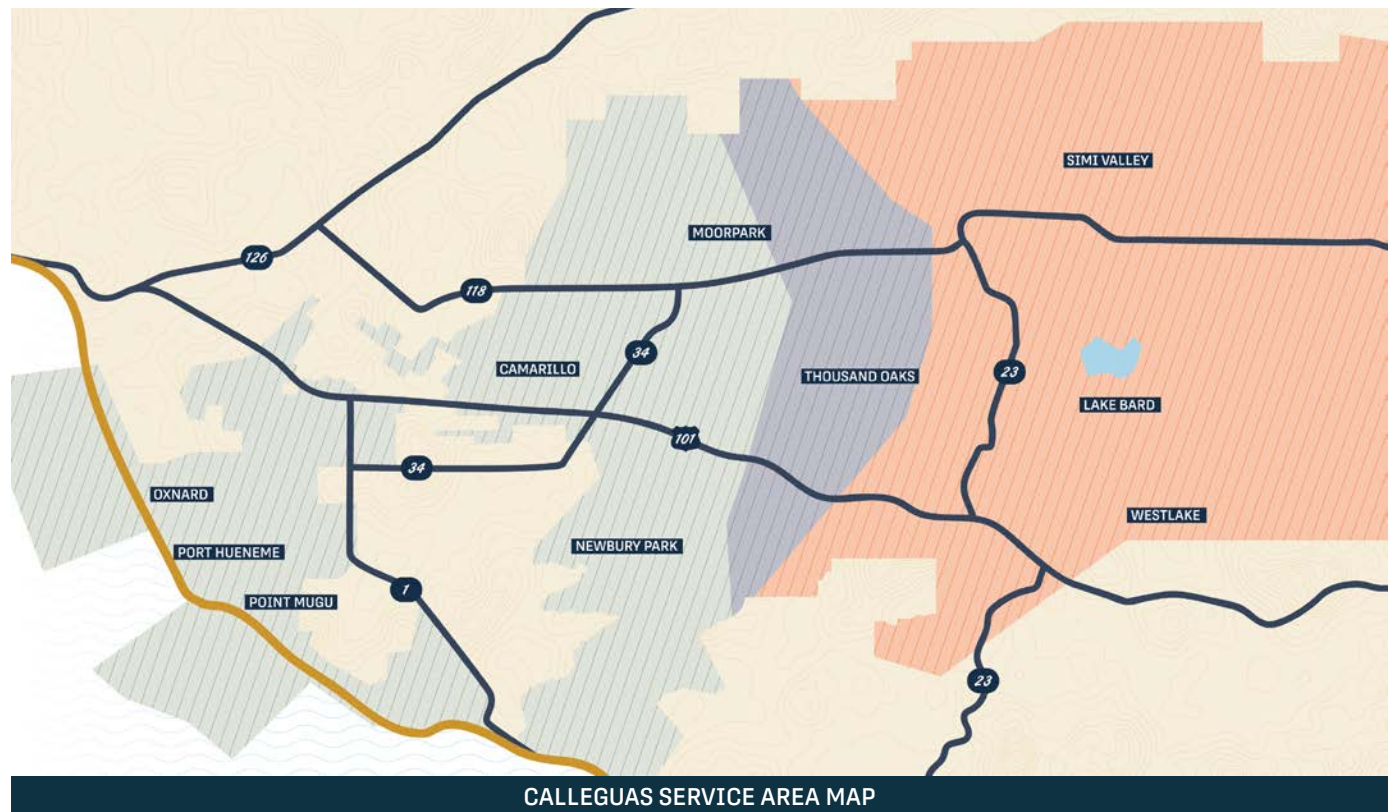
Ventura County enjoys a quintessential Mediterranean climate characterized by mild winters and dry summers. Our climate is not akin to the Mojave Desert or the tropics. In fact, only five areas on the planet share our Mediterranean climate,

and understanding our climate helps us make wise landscaping choices. Also understanding that our county includes several micro-climates helps us avoid the pitfalls of viewing our gardens with a one-size-fits-all mentality that can lead to failure and frustration.

Our Mediterranean climate includes two primary micro-climates: inland Mediterranean and coastal Mediterranean. And then there's everything in between, depending on the coastal influence.

Therefore, it is important to understand that what's "drought-tolerant" on the coast is not necessarily "drought-tolerant" in the dryer inland communities. That's why we prefer to refer to water-wise plants for your garden as "climate-appropriate" to your unique micro-climate.

- COASTAL ZONE
- CENTRAL ZONE
- INLAND ZONE



AN ECOSYSTEM FOR ALL

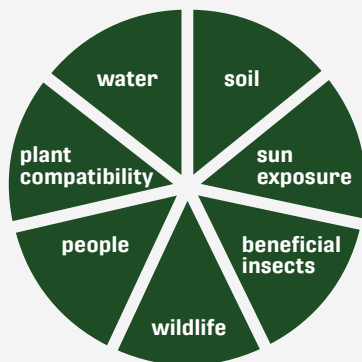
Thinking of your landscape garden as an ecosystem allows you to see how things can balance and interconnect, as well as experience the benefits when elements work together and are sustainable.

Imagine a thriving garden landscape that:

- Uses less water because you are choosing climate-appropriate plants and paying attention to your unique micro-climate, soil, sun exposure, etc.
- Avoids the regular use of herbicides and fungicides because plants are well suited for your particular soil and environment.
- Cultivates desirable habitats for birds, butterflies, bees, beneficial insects, and other welcomed guests that are critical to pollination and keeping pests at bay, thus eliminating the use of most pesticides.
- Incorporates a mixture of regionally native plants and Mediterranean plant varieties that will not only thrive but will add to the balance of your ecosystem.
- Requires less maintenance because you have chosen plants that are adapted to our local conditions, and fit the space and environment.
- Limits stormwater runoff by capturing and absorbing seasonal rainwater.

A HOLISTIC DESIGN

Elements to consider for ecosystem-focused landscaping:



KEY BENEFITS

Benefits of an ecosystem-focused landscape:

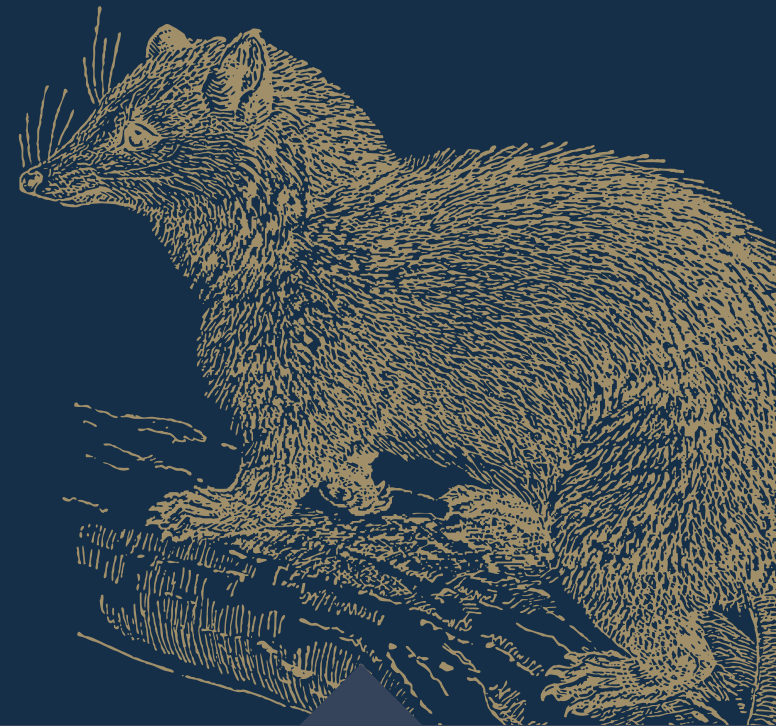
- Reduce water consumption
- Require less maintenance
- Improve water quality
- Prevent erosion and runoff
- Provide habitat for wildlife and beneficial insects
- Lessen need for toxic chemicals
- Improve regional ecological balance



**CERTIFIED WILDLIFE
HABITAT[®]**

Wildlife Habitat

An ecosystem approach to landscaping invites beneficial wildlife into your yard. Birds, frogs, and lizards are just a few of the animals that help manage pests and reduce the need for harmful pesticides. And of course, butterflies and bees are essential for pollination. Learn more about how to attract wildlife to your garden at www.nwf.org.



Possums help our ecosystem by eating snails, fleas, and ticks, and clean up decomposing materials like fallen fruit. They are immune to rabies and good for garden landscapes.



AN OVERVIEW: STEPS TO CREATING A SUSTAINABLE GARDEN ECOSYSTEM

1

Reduce water usage by installing efficient drip irrigation systems, reducing lawn size, or removing it altogether, and replacing it with climate-appropriate plants.

2

Compost for healthy soil and healthy plants.

3

Mulch to feed the soil, retain moisture, suppress weeds, and keep soil cool.

4

Consider your area's unique micro-climate when evaluating the suitability of a plant for your garden landscape.

5

Select the right plant for the right place in your garden.



6

Read plant labels. Believe plant labels. Allow space for mature sizes to lessen maintenance.

7

Practice integrated pest management to attract beneficial insects, and eliminate the need for toxic pest and disease control.

8

Consider your landscape's potential as an important habitat for birds, bees, butterflies, beneficial insects, and other local creatures that populate our landscapes (possums, lizards, and frogs are good for our garden landscapes.)

9

Select permeable materials for patios, pathways, and other hardscapes to retain water on the property and replenish the water table.

10

Enjoy the water-saving, money-saving, and time-saving benefits of a balanced, climate-appropriate garden landscape.

WHAT'S IN A NAME?

Ecosystem

ec-o-sys-tem

Noun: ecosystem; plural noun: ecosystems; noun:

eco-system; plural noun: eco-systems

- A biological community of interacting organisms and their physical environment.
- (In general use) a complex network or interconnected system.

Source: Oxford Dictionary

Sustainable

sus-tain-able

Adjective: Policies and strategies that meet society's present needs without compromising the ability of future generations to meet their own needs.

Source: Environmental Protection Agency 1970

Sustainable Landscape

The creation of an attractive environment that moves us away from domination over nature and into a more harmonious relationship with our local environment and each other. A systematic approach of landscaping that prevents or reduces processes that degrade or pollute the environment, protects the regenerative capacity of ecosystems, encourages biodiversity, and prevents developments that are detrimental to human health or might diminish our quality of life.

Native Plants

na-tive

Plants that have adapted over hundreds of thousands of years to the geography, hydrology, and climate in a particular region. Provide the ecological benefits of supporting local wildlife while requiring minimal maintenance and water due to their adaptation to the local climate and soil conditions. Visit calflora.org to investigate climate-appropriate plants for your garden.

ELEMENTS OF AN ECOSYSTEM

RIGHT PLANT, RIGHT PLACE

Finding the right plant for the right place in your yard is at the heart of an ecosystem approach to landscaping. Not every plant can flourish just anywhere, and mistakenly assuming so often results in a garden that requires intensive maintenance and larger volumes of water. By picking appropriate plants that are well suited for your garden and fit the planned space, you can create an environment where plants can prosper without much intervention. Selecting complementary plants also supports the creation of your own mini ecosystem where plants, soil, birds, butterflies, bees, and other insects can help one another thrive.



Whether you hire a professional or do it yourself, proper planning is essential for your garden ecosystem to thrive. Consider the following elements:

- **Watering needs** – Many regionally native and Mediterranean plants do not need much water once established. Group plant varieties with similar water needs when planting, so you do not end up overirrigating one to save another. Native and Mediterranean plants expect rainfall during the winter months, particularly December through March. Many native plants (but not all) do not require any water during the summer months, so resist the temptation to increase water during those months. It may result in plant disease or even death. The best way to know if your plants need supplemental water is to become a good observer and look for signs of plant stress or wilting. Also, whenever you feel that the plants need supplemental water be sure to feel the soil 3-4 inches deep. If the soil is damp, do not add more water. These plants, in general, thrive best if they are given a chance to dry out between irrigation intervals and are not kept moist.

DROUGHT NOTE: When experiencing drought conditions during the winter months, increase the irrigation only then to mimic Mother Nature,

rather than increasing the water during the summer months.

- **Climate appropriate plants** – Ventura County's Mediterranean climate varies throughout the region, so make sure that you are selecting plants that will truly thrive in your garden landscape. We can identify two primary climates in our county. Inland Mediterranean (the Conejo Valley and Simi Valley) and Coastal Mediterranean (Oxnard Plain and Camarillo). Areas that are influenced by both climates include Newbury Park and Moorpark. For instance, what's drought-tolerant in the Oxnard Plain may not be drought-tolerant in Thousand Oaks due to the differences in dryness and heat. Your local nursery can help you with the right selections for your area.
- **Sun exposure** – Matching the unique sun exposure of your yard to your plants' sun and shade preferences is important to ensure their long-term health and water needs. Identifying these zones is important to grouping plants, selecting the right plants, and strategizing irrigation needs. For example, shaded areas don't dry out as much as sunny areas that receive afternoon heat; thus, they should be on a different irrigation schedule.



- **Soil type** – Drainage and healthy soil is extremely important to how well your plants will thrive and will influence plant selection and your irrigation strategy. Improving soil health through organic practices, such as repeated applications of compost and mulch, will encourage important organisms, and alter the tilth of the soil over time, especially for clay soils. You will also be able to eliminate the need for supplemental fertilizers. There are many sources on the web that provide easy instructions for testing your soil to determine what kind you have.
- **Plant type and size** – The key to having a low-maintenance garden landscape is selecting the right plant for every place. It is important to read the label to determine how big the plant will ultimately grow, as well as its required sun exposure and irrigation needs. And then...believe it! A plant that could grow up to 6-feet wide will be high maintenance if placed in a 3-feet wide bed. So, plan for the mature size of the plant. That way, your maintenance will only require seasonal pruning and cleaning.
- **Balance** – Creating a garden landscape that includes a diversity of plants and supports local wildlife is essential to having a balanced

ecosystem. For example, birds provide effective pest control, and bees and butterflies are important pollinators. Possums eat snails, ticks, and fleas, and clean up the decomposing fruit and other plants so they should be welcome visitors to any garden. Attracting the 90% of insects that are beneficial will control the pests and eliminate the need for harmful pesticides. Organic gardening practices and Integrated Pest Management are key to achieving the goal of a balanced ecosystem.

- **Aesthetics** – The color palettes and textures of Mediterranean plants and regionally native varieties are second to none. Once you have the lay of your land and soil data handy, venture to one of Ventura County's many local nurseries and find a plant for every corner of your landscape garden.

Design tip

Not all “native” plants are regionally appropriate. California hosts many climates, so what is native to a Northern California climate may not be suitable for our Southern California Mediterranean climate and soil. Choose your plants by region instead of by state lines. The Calscape website (calscape.org) has a wealth of information that will help you make appropriate selections for our area.



PROTECTING OUR WATERSHEDS

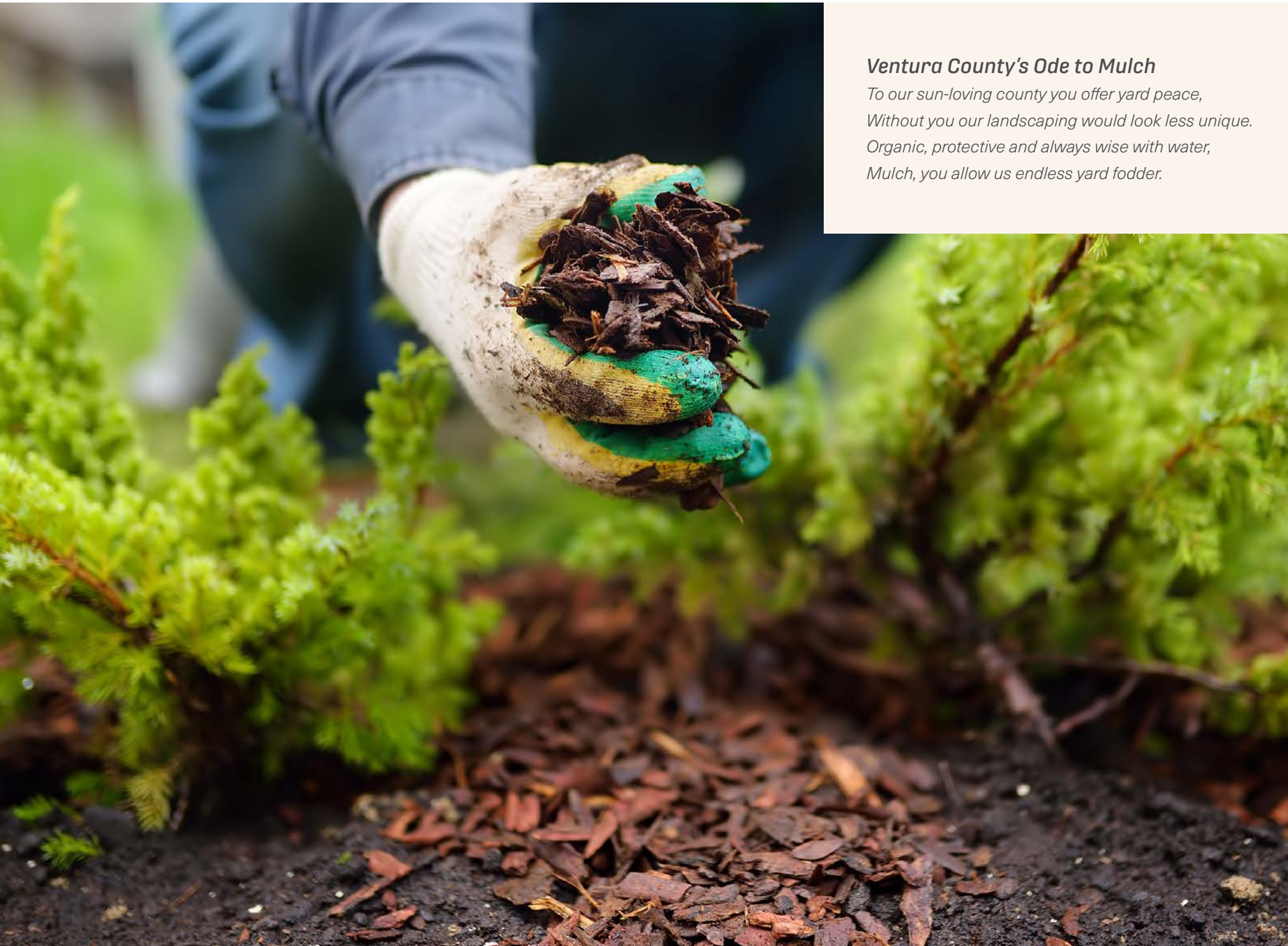
The number one cause of pollution in our watersheds and the ocean is untreated urban water run-off. The goal is to capture that valuable water from your downspouts and impermeable surfaces, rather than letting it go to waste into the streets and sewers. You can do this by creating areas that either collect the water in the form of a bioswale or “dry” stream bed, or you can install permeable surfaces for patios and other hard surfaces. The water can then be reabsorbed into your landscape and potentially replenish groundwater aquifers. In addition, consider installing rain barrels as an excellent source of water for irrigation.

MULCH, MULCH, MULCH

We cannot overstate the importance of mulching. It helps prevent evaporation, builds optimal soil conditions for plant health, suppresses weeds, and keeps the soil and plant roots cool in the summer. When selecting mulch choose one that is organic, does not contain weed seeds, and avoid mulch that contains coloring dye. If you have mulch that contains wood chips from eucalyptus or black walnut, avoid placing it around your landscape garden plants, and instead, focus it on areas where you want to suppress weeds. These trees produce compounds that can inhibit plant growth and prevent seed germination.

FIRE-WISE IS WATER-WISE

Many plants that are well-suited or native to Ventura County’s climate are naturally fire resistant, or they have a low ignition rate because they are adapted to our fire-prone environment. Overgrown, dead, damaged, or diseased plants, on the other hand, can certainly be flammable, so keeping your plants well maintained is essential. Plants that have high ignition rates are particularly problematic, such as eucalyptus and palm trees, so if you live in a high-risk area for fire be particularly careful about your plant selection. Defensible space and weed removal are also extremely important. Consult the many local resources available to determine ignition rates of various plants and a planting strategy for fire abatement.



Ventura County's Ode to Mulch

*To our sun-loving county you offer yard peace,
Without you our landscaping would look less unique.
Organic, protective and always wise with water,
Mulch, you allow us endless yard fodder.*

NATIVE, MEET MEDITERRANEAN

Ventura County is one of the few lucky regions to be able to draw on the gorgeous and diverse Mediterranean plant palette successfully. We encourage the blended use of non-invasive plants appropriate for our region and those that are known to do well in the five Mediterranean climates around the world (Southern California, Mediterranean, South Africa, South Australia and Chile).





ECOSYSTEM INSPIRATION

The plants highlighted here are not necessarily appropriate for every landscape in Ventura County, but they are generally well-suited for our region. We can't stress enough that the key to reducing water and maintenance is to choose plants that are climate-appropriate, fit the space, and are suited to their native soil and sun exposure.

A great way to make good choices and see the plants at maturity is to visit some of our premier local botanical gardens including the Thousand Oaks Botanic Garden, Ventura Botanic Garden or the Santa Barbara Botanic Garden. The California True Colors Garden, located in front of the Goebel Center at 1385 E. Janss Road in Thousand Oaks, showcases plants from various Mediterranean climates and provides inspiration for climate-appropriate landscaping.

Consult a landscape professional, the Ventura County Master Gardeners (www.ucanr.edu/sites/VCMG/), or visit a local Ventura County nursery for more specific recommendations.

Refer to the Calscape website at calscape.org for a wealth of information that will help you make appropriate native selections for our area. For other climate-appropriate plant ideas, how-to guides, and garden inspiration, consult the *Water Wise Gardening in Ventura County* website at venturacountygardening.com.

Design tip

Don't forget to plant native milkweed! It is the host plant for monarch butterflies and provides nectar to many other pollinators including other butterflies, bees, and hummingbirds. Historically, most nurseries have non-native tropical milkweed (*Asclepias curassavica*), but Ventura County is changing that. However, if you already have tropical milkweed in your yard, be sure to cut it down completely in the winter to encourage Monarch butterfly health and successful migration.



Autumn sage

Eastern redbud

California lilac

California fuchsia

Palo verde

Milkweed

Bottlebrush

TREES

<i>Acacia</i>	
<i>Arbutus 'marina'</i>	Strawberry tree
<i>Cercis canadensis 'forest pansy'</i>	Eastern redbud
<i>Olea europaea</i>	Olive
<i>Chitalpa tashkentensis</i>	
<i>Cercis occidentalis</i> *	Western redbud
<i>Lyonothamnus floribundus</i> *	Santa Cruz island ironwood
<i>Platanus racemosa</i> *	Western sycamore
<i>Agonis</i>	Peppermint tree
<i>Chilopsis linearis</i> *	Desert willow
<i>Cercidium 'desert museum'</i> *	Palo verde
<i>Melaleuca nesophila</i>	Pink melaluca

MEDIUM SHRUBS

<i>Carpinteria californica</i> *	Bush anemone
<i>Leonotis leonurus</i>	Lion's tail
<i>Phlomis fruticosa</i>	Jerusalem sage
<i>Abutilon palmeri</i> *	Indian mallow
<i>Westringia</i>	Australian rosemary
<i>Correa</i>	Australian fuchsia
<i>Galvezia speciosa</i> *	Island snapdragon
<i>Pentas</i>	
<i>Zauschneria (epilobium)</i> *	California fuchsia
<i>Centaurea gymnocarpa</i>	Velvet centaurea
<i>Sphaeralcea</i> *	Desert mallow
<i>Verbena lilacina</i> *	Verbena lilacina*

*Native plant

LARGE SHRUBS

<i>Ceanothus</i> *	California lilac
<i>Arctostaphylos</i> *	Manzanita
<i>Dodonea viscosa 'purpurea'</i>	Hop bush
<i>Romneya coulteri</i> *	Matilija poppy
<i>Cistus</i>	Rock rose
<i>Fremontodendron</i> *	Flannel bush
<i>Lavatera maritima or assurgentiflora</i> *	Tree mallow
<i>Buddleja ('buzz' series)</i>	Butterfly bush
<i>Leucadendron</i>	Conebush
<i>Rhamnus californica</i> *	Coffeeberry
<i>Callistemon</i>	Bottlebrush
<i>Rhus integrifolia or ovata</i> *	Lemonade berry or sugar bush

SALVIAS (SAGE)

<i>Salvia apiana</i> *	White Mountain sage
<i>Salvia clevelandii</i> *	Cleveland sage
<i>Salvia leucantha</i>	Mexican sage
<i>Salvia greggii</i>	Autumn sage
<i>Salvia chamaedryoides</i>	Germander sage
<i>Salvia spathacea</i> *	Hummingbird sage
<i>Salvia 'bee's bliss'</i> *	Bee's bliss sage

NOTES

plan for your own landscape here



Echeveria

Coral bells

Kangaroo paw

Lantana

Santa Barbara daisy

FOREGROUND PLANTS

<i>Achillea</i> *	Yarrow
<i>Dianella</i>	
<i>Penstemon eatonii</i> *	
<i>Convolvulus mauritanicus</i>	Ground morninglory
<i>Erigeron karvinskianus</i>	Santa Barbara daisy
<i>Teucrium cossonii (majoricum)</i>	
<i>Erigeron glaucus</i> *	Beach aster
<i>Calylophus drummondii</i>	Sundrops
<i>Eriogonum</i> *	Buckwheat
<i>Heuchera</i> *	Coral bells
<i>Anigozanthos</i>	Kangaroo paw
<i>Nepeta</i>	Catmint
<i>Chondropetalum</i>	Cape rush
<i>Muhlenbergia</i>	Muhly/deer grass
<i>Mimulus (diplacus)</i> *	Monkeyflower
<i>Monardella</i> *	Coyote mint

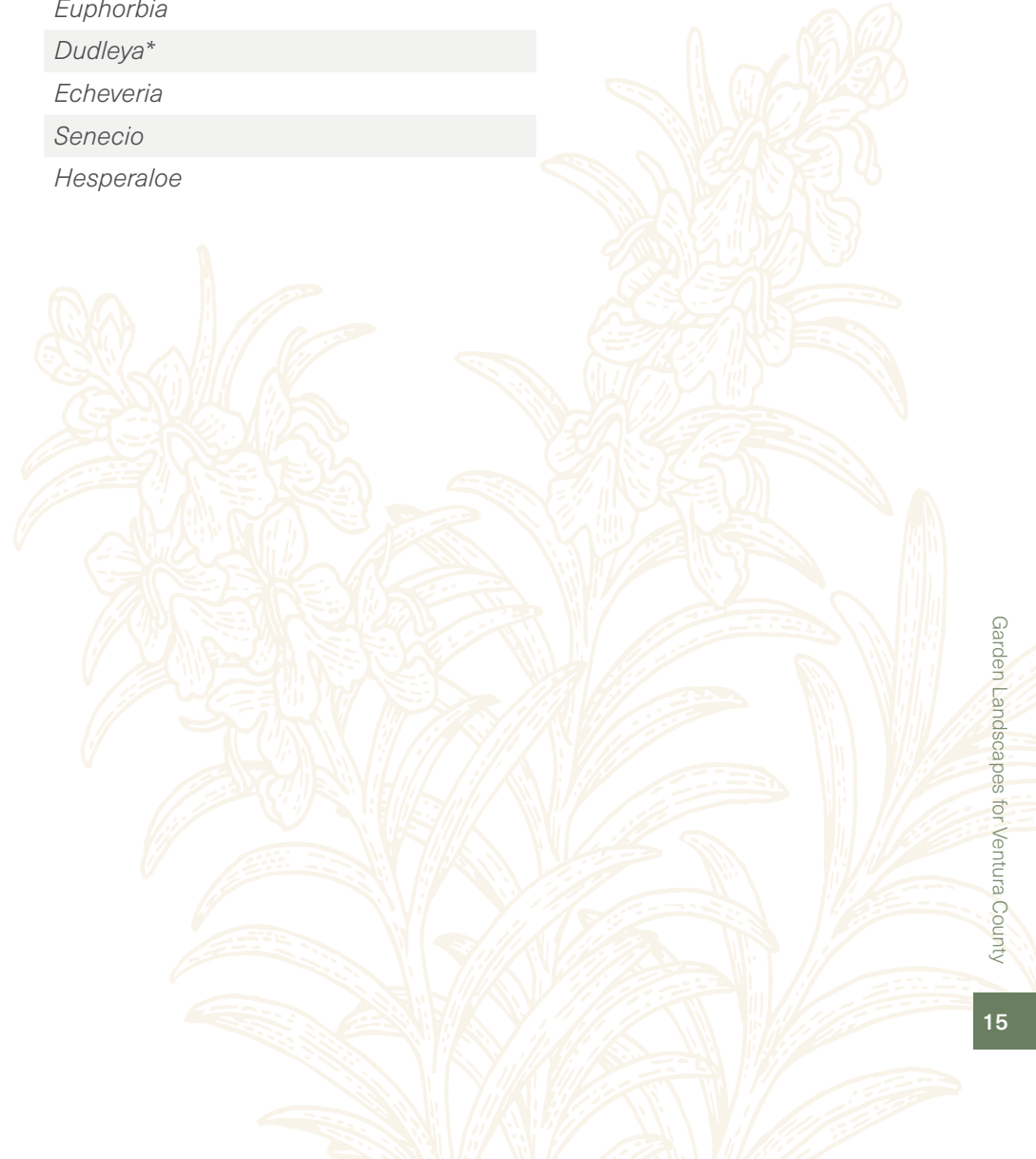
GROUNDCOVER

<i>Lantana</i>	Lantana
<i>Rosmarinus officinalis 'Prostratus'</i>	Prostrate rosemary
<i>Senecio</i>	Succulents
<i>Gazania</i>	
<i>Ribes viburnifolium</i>	Catalina perfume, evergreen current
<i>Carex pansa or praeegracilis</i> *	Sedge
<i>Ceanothus 'Yankee Point'</i> *	California lilac

*Native plant

SUCCULENTS

<i>Aeonium</i>
<i>Aloe</i>
<i>Agave</i>
<i>Euphorbia</i>
<i>Dudleya</i> *
<i>Echeveria</i>
<i>Senecio</i>
<i>Hesperaloe</i>



MAINTAINING YOUR ECOSYSTEM

The joy of an ecosystem-based landscape is that your maintenance needs and water use should reduce dramatically. There are a few things that you may need to address here and there, but generally speaking, you should get some of your weekend time back.

IRRIGATION ADJUSTMENTS

Your yard's water needs vary from season to season. It's important to tweak your watering schedule based on seasonal rainfall, temperatures, and humidity, so you're not over- or underwatering. Typically, overwatering drought-tolerant plants is more detrimental to the health of the plants than underwatering. Although it will still need monitoring, consider getting a smart irrigation controller that will assist you in automatically making those adjustments.

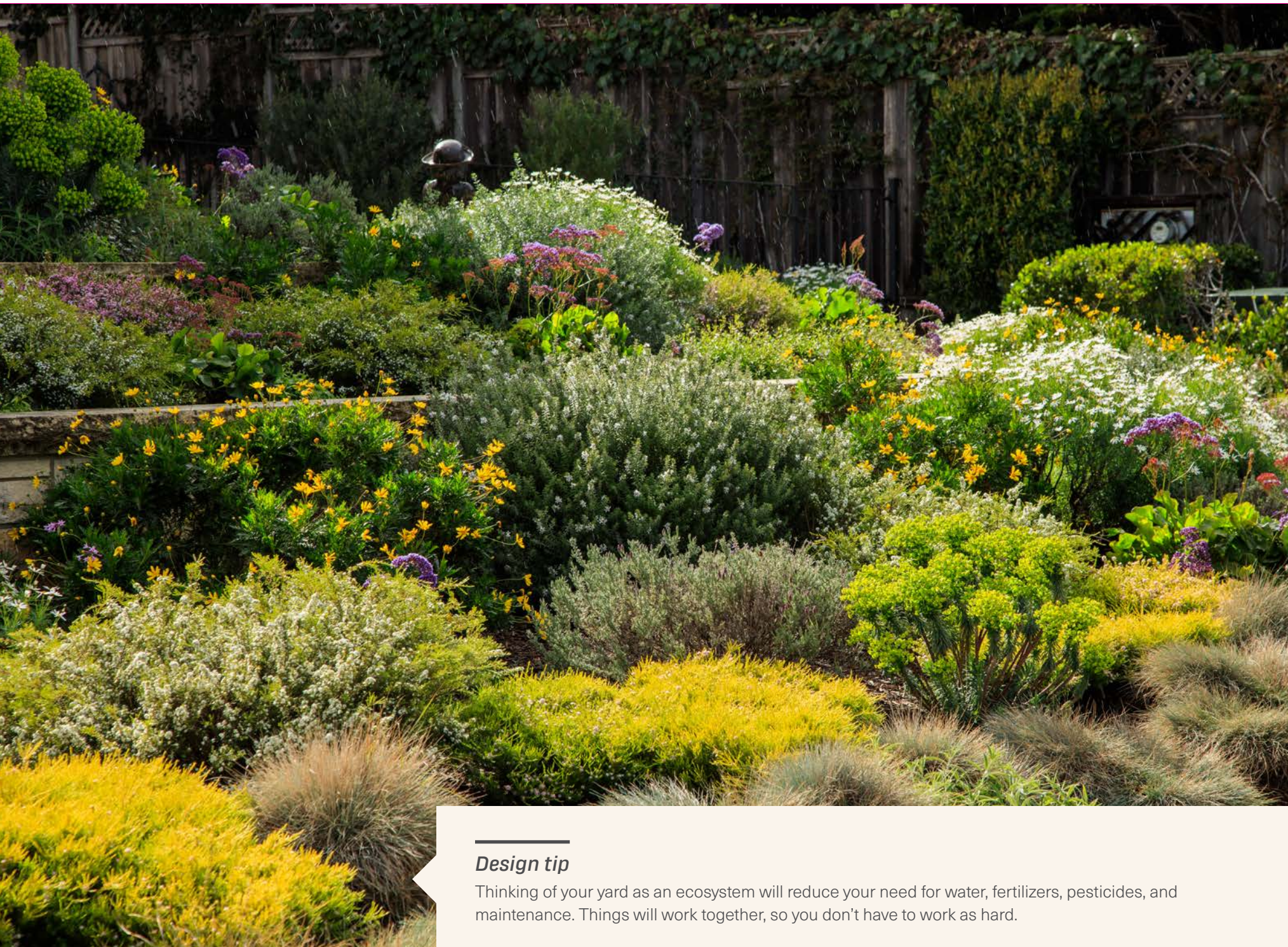
SEASONAL PRUNING

Pruning is important for keeping your plants looking great and well kempt, and many plants bloom more vigorously when pruned appropriately. Research when and how often your selected plant varieties should be cut back to keep them the size and shape you like. Usually, it is best to prune your plants when they finish flowering or putting out new growth, ordinarily in the fall or winter.

MULCH REPLENISHMENT

Add more mulch to your landscaping regularly to replenish it as needed. Keeping mulch fresh maintains your soil's health and preserves its weed-stopping, water-balancing wonder powers. Note: To prevent disease and root rot, avoid placing the mulch up against the crown of the plant by allowing a clear zone of at least 4-6" around the plant.





Design tip

Thinking of your yard as an ecosystem will reduce your need for water, fertilizers, pesticides, and maintenance. Things will work together, so you don't have to work as hard.

STEPS TO GET STARTED

Whether you do it yourself or hire a professional, plan your garden with intention of how you want to use the space, commitment in the long term, and budget. Don't be afraid to experiment and explore. A garden is never really finished, so it can be changed and supplemented over time. And when properly planned and implemented, it will give you years of enjoyment. Once you have decided to pursue creating your very own garden landscape ecosystem, consider the following options.



1

DO IT YOURSELF

You know your limitations, what you like, and you know your woes, so feel free to cultivate your own ecosystem. Do the research and start by keeping it simple. This way, you can manage the project without being overwhelmed. Go to **BeWaterWise.com** for helpful guides and classes that will teach you exactly how to design and implement your new ecosystem.



2

DESIGN SUPPORT

Landscape design professionals are available to help refine your ecosystem plan with site plans, renderings, and customized plant palettes. From here, you can take over with implementation, or you can hire experienced installation professionals to help you bring your design to life.



3

FULL SERVICE

To maximize the greatest success for your garden landscape, consider working with a landscape professional you can rely on for their regional experience and working knowledge of climate-appropriate plants; site challenges, such as drainage; irrigation strategies; hardscapes, such as patios and pathways; and other impressive skills. A knowledge of creating water-wise, holistic ecosystem designs is also helpful.

Design tip

Summer + Winter: Best time to plan and prepare
Fall + Spring: Best time to plant and cultivate

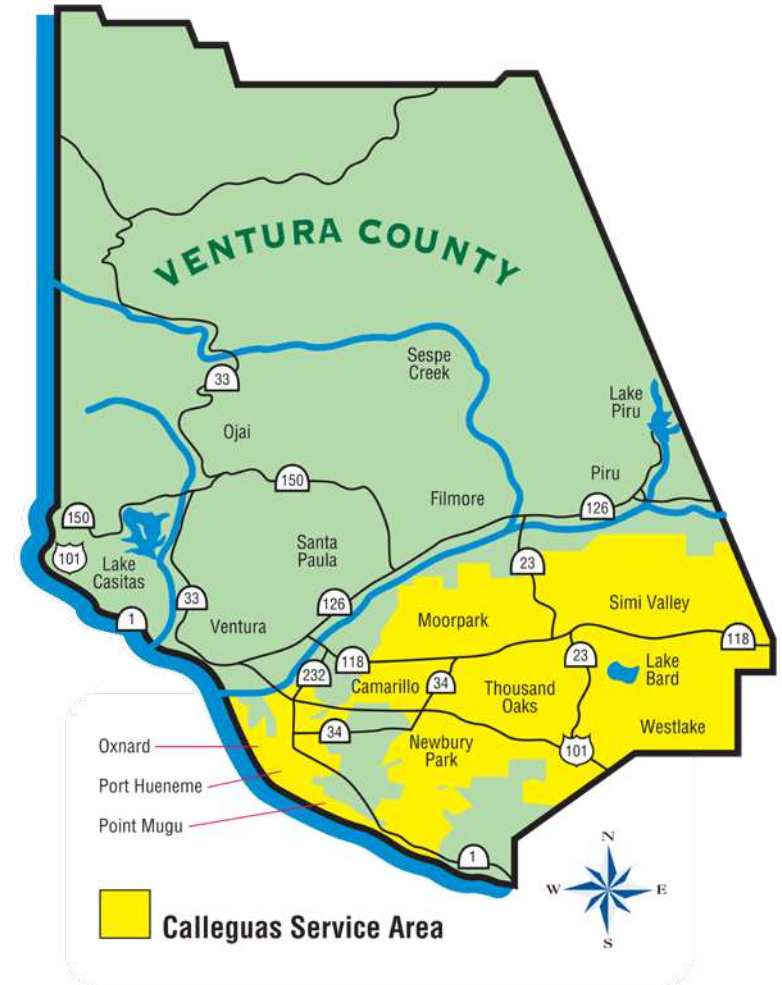
ABOUT CALLEGUAS MUNICIPAL WATER DISTRICT

Our mission is to provide the service area with a reliable supplemental supply of regional and locally developed water in an environmentally and economically responsible manner. As one of 26 member agencies of the Metropolitan Water District of Southern California, Calleguas is a wholesale provider of imported water primarily from the State Water Project from northern California. To increase reliability, Calleguas also maintains local storage in Bard Lake and the Las Posas Well Field.

Roughly three quarters of Ventura County residents use water purchased by their retail purveyors from Calleguas' distribution system. Some purveyors have wells and blend water from Calleguas with groundwater. Others rely exclusively on Calleguas. Calleguas does not deliver water directly to consumers. Most questions about water quality or service changes are best answered by your local retail purveyor.

REGIONAL REBATES AND MORE

Go to BeWaterWise.com for water-saving tips, educational materials, how-to guides, and a current list of available rebates that could assist with your new ecosystem-based landscaping.





bewaterwise.com[®]