



*Planting
with Purpose:*

Landscaping after a fire

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About Metropolitan

The Metropolitan Water District of Southern California is a state-established cooperative of 26 member agencies – cities and public water agencies – that serve nearly 19 million people in six counties.

Metropolitan imports water from the Colorado River and Northern California to supplement local supplies and helps its members develop increased water conservation, recycling, storage and other resource management programs.

Planting with Purpose:

Landscaping after a fire

After a fire, the path toward recovery starts with the ground we walk on. While replanting a landscape is an essential step, restoring safety, stability and resilience is just as critical. From soil testing and erosion control to strategic planting and efficient watering, this guide helps residents and commercial property owners rebuild beautiful California Friendly® landscapes that allow us all to be better prepared for the future.

Step 1:

Remediate & restore

A wildfire can significantly affect the soil on your property. After a fire, soils may contain chemical and heavy metal contaminants, become more prone to erosion, and experience changes in nutrients, organic matter, water retention and pH. These impacts can modify overall soil performance and pose health risks to people and animals.

Urban properties are especially vulnerable, as buildings and everyday materials can release harmful contaminants into the soil when burned.

What is soil pH?

Soil pH describes how acidic or how basic the soil is. This affects how easily plants can absorb nutrients. If the pH is too high or too low, certain nutrients aren't available, which can limit plant growth. Soil pH is a key indicator of soil health and its ability to support plant life.

About the Turf Replacement Rebate Program

Create beautiful, sustainable, water-saving landscapes with the help of Metropolitan Water District's Turf Replacement Rebate Program. Residential and commercial customers can get money back for planting California Friendly® and native landscapes. Plus, applicants receive an extra \$100 per tree added to a turf replacement project (up to five trees).

Visit [bewaterwise.com/turf](https://www.bewaterwise.com/turf) for program details.

Assess your site's history for possible sources of contamination. While at-home soil test kits offer some information, laboratory testing provides more complete results for post-fire contaminant conditions.

If laboratory testing shows contaminant levels within acceptable limits, no additional steps are necessary.

If contaminant levels exceed acceptable limits, a range of soil remediation options are available.

- **Use raised beds or containers** with clean soil to reduce exposure to contaminants, especially when growing vegetables or other edible plants.
- **Boost soil health with amendments.** Mixing in clean, high-quality compost is most effective. Scrape and remove contaminated soil and replace it with compost and a clean soil mix.



Turf Replacement Rebate Program Tip

When creating garden beds or containers, leave them open to the ground to meet program requirements. Fill them with new soil and choose plants with roots that won't reach the original soil, preventing an uptake of contaminants.



Step 2:

Stabilize the slope

If your property is on or near a slope, look at the area on the incline above your building. If most or all vegetation has been lost, erosion can cause soil and water to move downhill.

FOR SLOPES LESS THAN 33%

(1 foot vertical to every 3 feet horizontal)

Apply bark or wood chip mulch to help stabilize the soil. Mulch adds organic matter as it breaks down, improving soil health, retaining water and feeding plants and soil life. Work up to 1 inch of mulch into the top few inches of soil.



Turf Replacement Rebate Program Tip

Mixing mulch into the soil will meet the mulch requirement for the program. Additional mulch around plants is not required in high fire severity zone areas.

FOR SLOPES LESS THAN 50%

(1 foot vertical to 2 feet horizontal)

Cover slopes with burlap, jute, or coconut fiber mesh to help keep soil in place. Install the material when planting non-invasive perennial grasses. Roll it out in the direction of water flow without stretching, and secure with U-shaped stakes or staples.

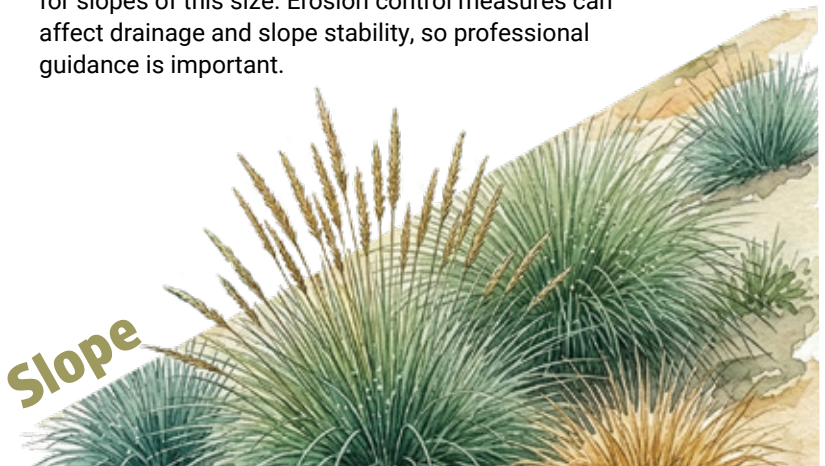


What is erosion?

Erosion happens when soil is worn away by wind, water or other natural forces. For example, heavy rains on a bare slope can shift soil downhill.

FOR SLOPES GREATER THAN 50%

Consult a civil engineer and local building officials for slopes of this size. Erosion control measures can affect drainage and slope stability, so professional guidance is important.



Step 3:

Water wisely

Proper irrigation is key to keeping your plants healthy and reducing dried-out vegetation that can fuel fires. Choose water-efficient irrigation methods that minimize waste, runoff and evaporation while providing the moisture your plants need.

DRIP OR SUB-SURFACE IRRIGATION

saves water and reduces evaporation by delivering water directly to plant roots. Watering deeply and less often promotes strong roots and fire-resistant growth.

Turf Replacement Rebate Program Tip

Installing a drip system is one way to meet the rebate's efficient irrigation requirement.



A WEATHER-BASED “SMART” IRRIGATION CONTROLLER

uses weather patterns, slope sizes and plant information to determine the appropriate amount of water needed.

Turf Replacement Rebate Program Tip

You can get money back for purchasing a new smart controller.

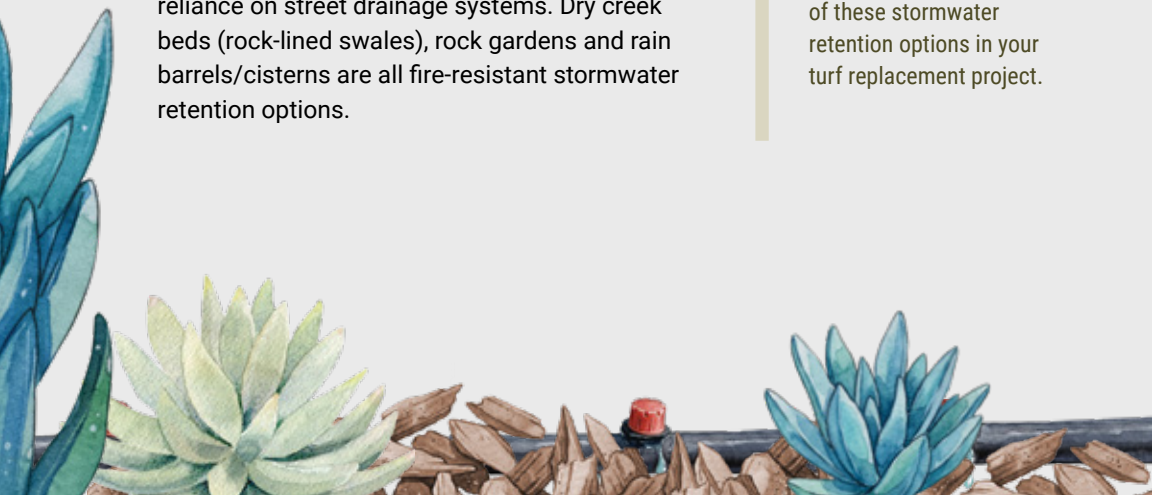


STORMWATER RETENTION

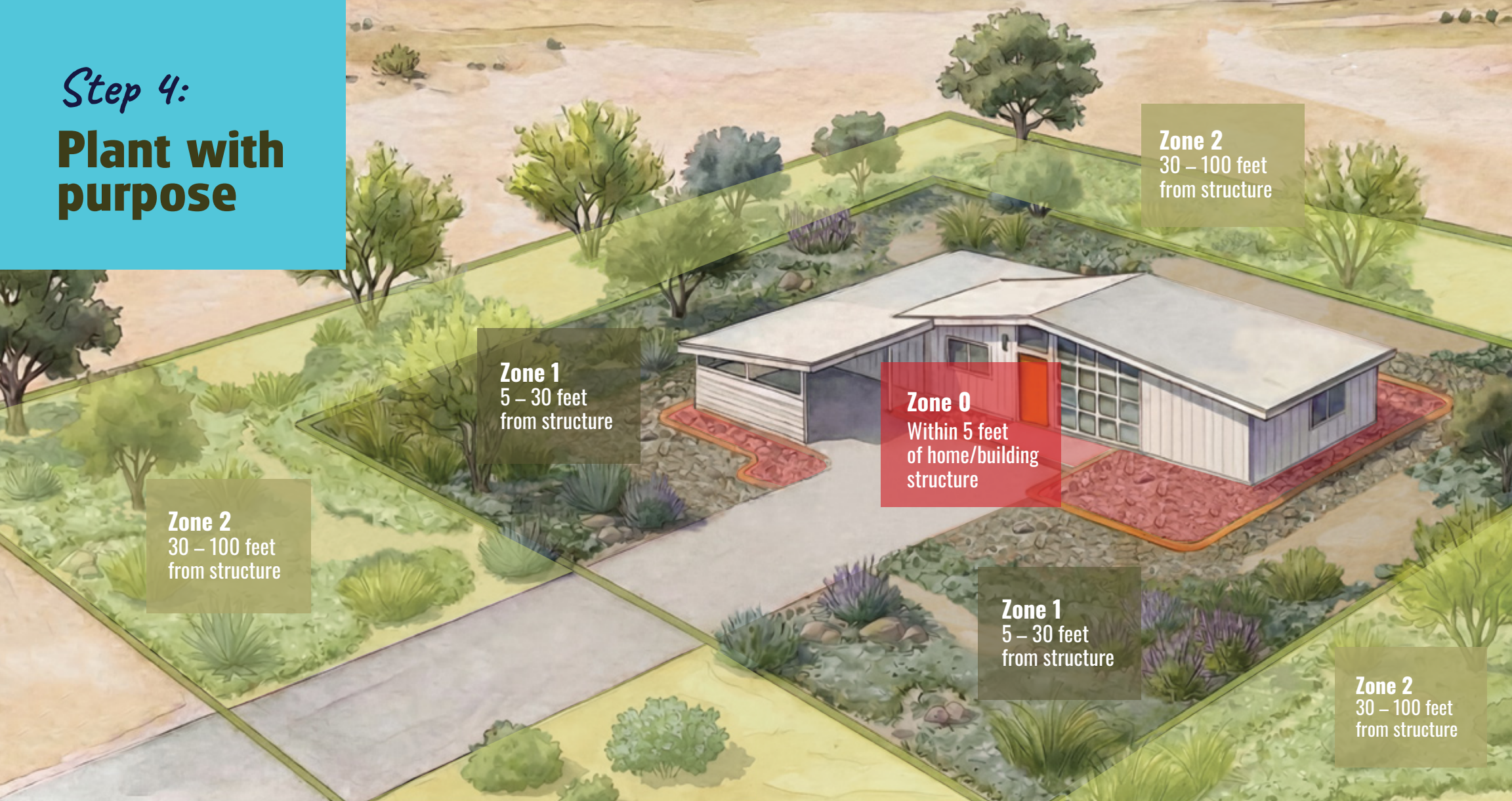
features help capture rainwater, and keep it in your yard to naturally irrigate plants. These features also help prevent flooding by reducing reliance on street drainage systems. Dry creek beds (rock-lined swales), rock gardens and rain barrels/cisterns are all fire-resistant stormwater retention options.

Turf Replacement Rebate Program Tip

You can include any of these stormwater retention options in your turf replacement project.



Step 4: Plant with purpose



Zone 2
30 – 100 feet
from structure

Zone 1
5 – 30 feet
from structure

Zone 0
Within 5 feet
of home/building
structure

Zone 2
30 – 100 feet
from structure

Zone 1
5 – 30 feet
from structure

Zone 2
30 – 100 feet
from structure

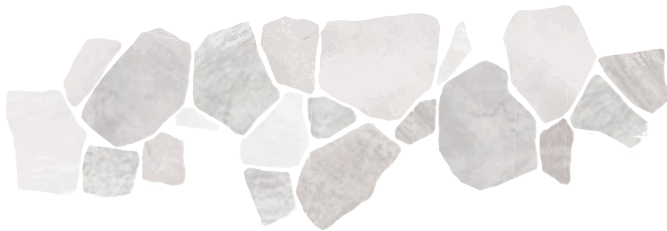
A defensible space serves as a buffer between a structure and surrounding vegetation. This section outlines how to design with defensible planting zones in mind to help minimize fire risk,

including recommended distances from buildings and structures and plant spacing. You'll also learn about climate-appropriate and fire-resilient plant species best suited for the region.

Zone 0

Within 5 feet
of home/building
structure

- Do not plant any vegetation within 5 feet of your structure (even fire-resistant vegetation).
- Install hardscape such as gravel and pervious pavers.
 - Light-colored options will mitigate heat gain and help keep your structure cool.
 - Permeable materials allow stormwater to seep into the ground and reduce flooding.



Zone 1

5 to 30 feet
from structure

- Plant low-flammability, drought-tolerant plants with plenty of space between them. You can plant them closer together as you move farther from your home or structure.
 - Choose plant species native to California. These plants support local habitat and thrive in the state's climate and drought cycles. If selecting non-native plants, look for those with moisture-retaining leaves, an open growth structure with branches or leaves spaced apart, and minimal leaf or bark shedding.
 - Choose shrubs that grow and spread horizontally instead of vertically. The height of a mature shrub should be 18 inches or less.
-



10- FEET

**6-FOOT
MINIMUM
CLEARANCE**



- Plant trees at least 10 feet from your home and 10 feet apart from each other. Trim branches to keep at least 6 feet of clearance from the ground and keep shrubs far enough away – about three times their mature height – from the lowest tree branches.
- Mulch can be used between plants at least 10 feet from the structure. Do NOT use rubber or plastic-based mulch, as it ignites easily and burns intensely.

Turf Replacement Rebate Program Tip

Add trees to your turf replacement rebate project and receive an additional \$100 rebate per tree planted (up to five trees).

**Plants native to California
support local habitat.**



Zone 2

30-100 feet from structure

Turf Replacement Rebate Program Tip

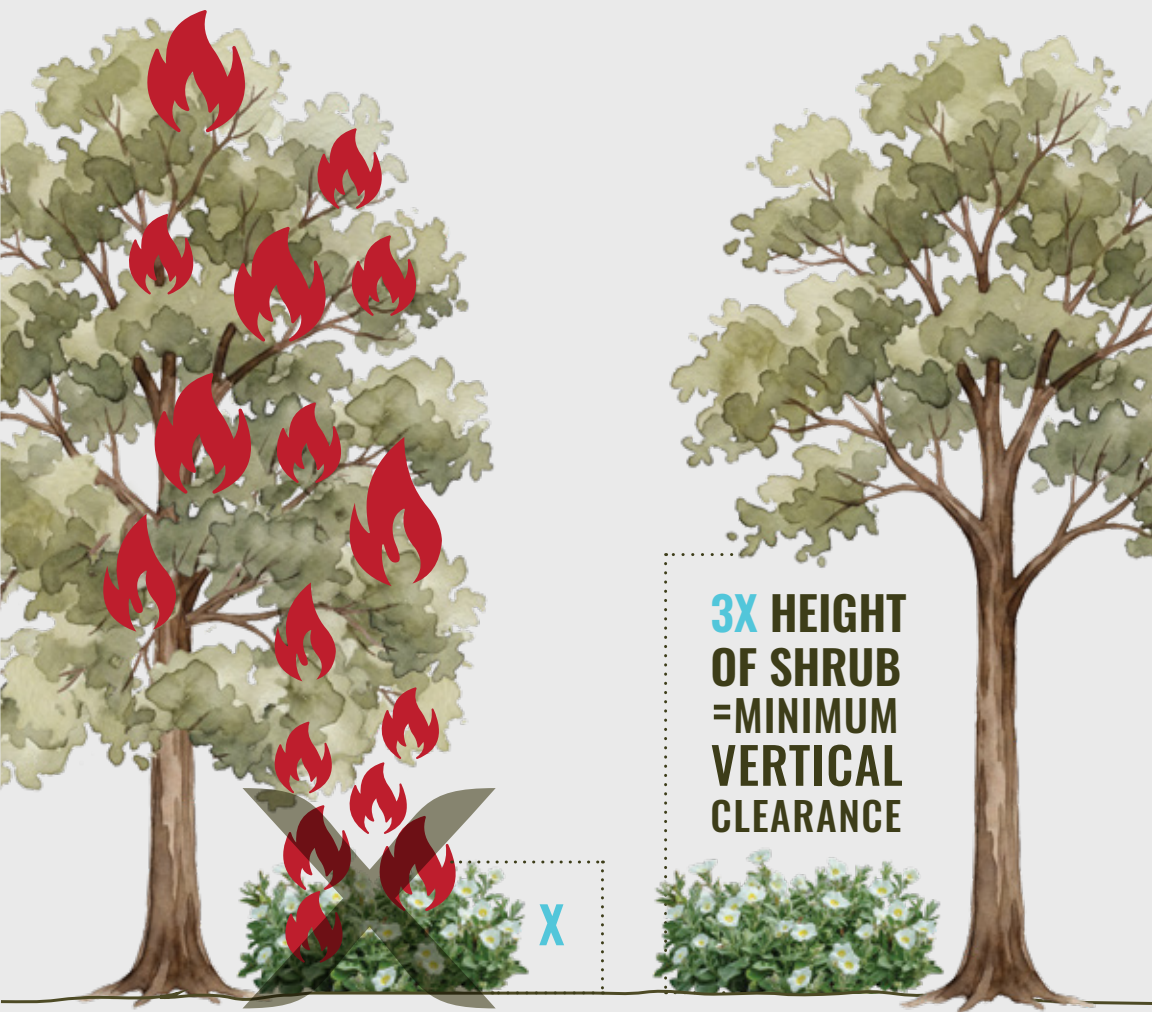
Groundcovers and trees are a great way to meet the minimum plant count requirement for the rebate. Each groundcover plug counts as a plant and each new tree counts as three plants.

- **Plant groundcovers, shrubs and trees** with the appropriate amount of vertical and horizontal spacing (see diagrams). High moisture content groundcovers under 6 inches of height create low fuel areas between shrubs and trees.
- **Plant larger shade trees in this zone.** Trees need at least 10 feet of horizontal spacing between the branches of other trees or decks, garages, and sheds. Do not plant large trees under or near utility lines. Low-branching or wide-tree species shouldn't be planted near roads and driveways; they can impede emergency vehicle access.
- **Plant primarily native species** which support local ecosystems and wildlife and are well-adapted to the local climate and drought cycles. Non-native plants with leaves that retain moisture, an open growth structure, and minimal leaf or bark shedding are excellent options as well.



**Turf Replacement
Rebate Program Tip**

Check the **Sustainable Defensible Space** invasive species list for details on non-native species that can harm local ecosystems.



Step 5:

Maintain

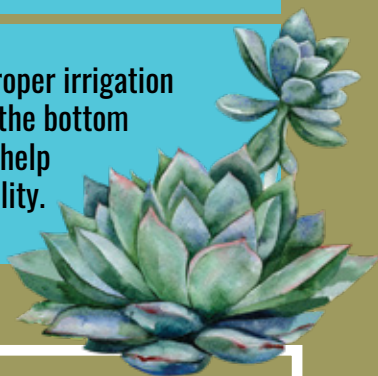
A resilient landscape isn't just planted once, it's maintained over time. Routine pruning, debris removal and appropriate watering reduce excess fuel and help plants stay healthy year-round.

Give plants the water they need, but do not overwater them.

Remove litter under trees and shrubs and prune dead or excessive growth. Remove dry portions of groundcover and succulent plants.

Replant barren areas on slopes to help mitigate erosion.

Check for proper irrigation drainage at the bottom of slopes to help ensure stability.

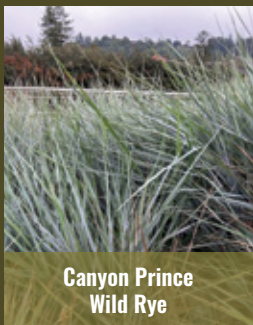


Plants to avoid

- Pampas Grass
- Cypress
- Italian Jasmine
- Pine
- Cape Plumbago
- Cape Honeysuckle
- Eucalyptus
- Cedar
- Acacia
- Juniper
- Other invasives

Top Plants for Your Waterwise Garden

Grasses



Canyon Prince
Wild Rye



Penstemon



Thrifts

Groundcovers



Aaron's Beard



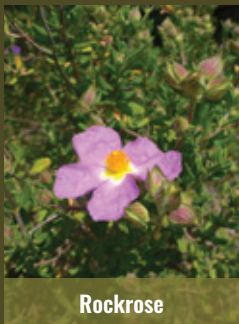
Creeping Sage



Woolly Yarrow



Manzanita



Rockrose



CA Fuchsia

Photos courtesy of:

California Native Plant Society,
calscape.org.

Urban Forest Ecosystems
Institute at Cal Poly

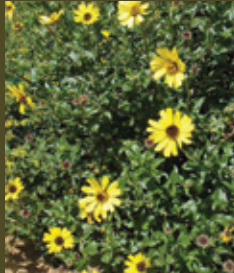
Shrubs



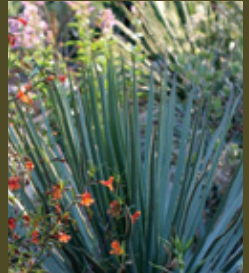
Matilija Poppy



Lavender-Cotton



Coast Sunflower



Yucca

Trees



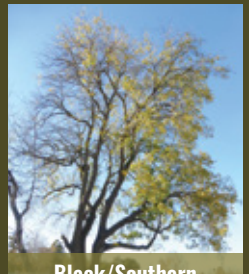
Coast Live Oak



Valley Oak



California Bay/Laurel



**Black/Southern
California Walnut**



Toyon



Alder

Photos courtesy of:

California Native Plant Society,
calscape.org.

Urban Forest Ecosystems
Institute at Cal Poly



Photo courtesy of the Theodore Payne Foundation
for Wild Flowers and Native Plants

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Resources



Los Angeles County Fire Department

The department's **Plant Selection Guidelines by Zone** focuses on drought tolerant species that retain moisture and resist ignition.



Sustainable Defensible Space

A multi-agency effort led by Resource Conservation District of the Santa Monica Mountains to help Southern California create **fire-wise landscapes**.



California Department of Forestry and Fire Protection

CAL FIRE's **Fire-Smart Landscaping for Enhanced Wildfire Safety** helps residents choose plants that thrive in California's dry climate.



US Green Building Council California

The USGBC CA **California Wildfire Rebuilding Guide** helps homeowners, designers and contractors reduce future risk as they rebuild single-family homes.

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