

A guide to planting, watering & maintaining healthy trees

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#### **ACKNOWLEDGMENT & CONTRIBUTIONS:**





Published March 2024



# Coast Live Oak

CONTRACTOR OF STREET

## 1/Prep

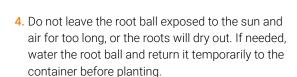
- 1. Remove grass and plants in a 4-foot-wide area of your landscape.
- 2. Dig a hole that is as deep as the tree's **root ball** and 2 to 3 times as wide, about 4 feet wide by 8 inches deep.
- 3. Remove the container from the tree by laying the tree down on its side and putting pressure on the sides of the container to loosen the root ball.

Remove the container from the tree, not the tree from the container.

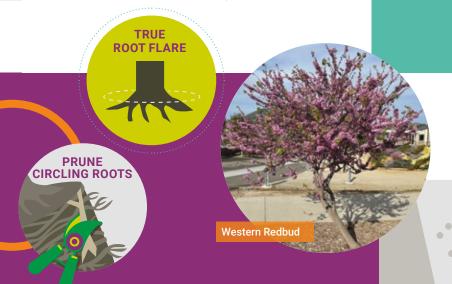
2 1

- True root flare
- 2 Root ball
- 3 Circling roots

Prep continued on next page ...



- Massage the root ball to remove extra soil and loosen the roots for planting. You want the roots to stretch out radially like bicycle spokes coming out of the root ball.
- Remove extra soil to expose the area where the first main roots attach to the trunk. This area is known as the true root flare.
- Prune off and straighten any large, circling roots and add soil around them if they are flexible.





## 2/Plant

- Place the tree in the hole, paying attention to the direction the branches will grow. You don't want branches to interfere with buildings or street traffic.
- 2. If the tree is slanted, add soil underneath the root ball to straighten.
- **3.** Fill the hole with the same soil that you removed from the area.
- 4. As you fill the hole, tamp down the soil to remove any air pockets. Do not stomp the soil in place. Instead, you can use the back of a shovel to tamp down, but make sure to leave space for water to percolate into the soil.
- 5. The root flare should be the same level as the soil.









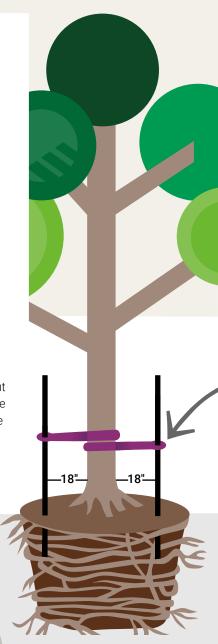
JUST RIGHT

TOO HIGH TOO LOW

## 3/Stake

- Remove the nursery stake and fill the hole with soil.
- 2. Place stakes on either side of the tree, about 18 inches from the trunk. Then, position them to hold the tree straight when tied to the stakes
- 3. Loosely loop the rubber ties around the tree in a figure X. The tree should be able to move 3 inches in the wind with the ties on. The ties should be placed about 2/3 of the way up the tree trunk.
- **4.** Nail both ends of the ties to the stakes to secure.
- 5. Stakes and ties should remain until the roots are established. This may take about six months to two years. You will know the roots are established when you can shake the trunk and the ground does not move.

NOTE: Installing stakes can be an arduous process that involves climbing a ladder and hammering. You may want an extra set of hands for this step.



# 4/Water & Mulch

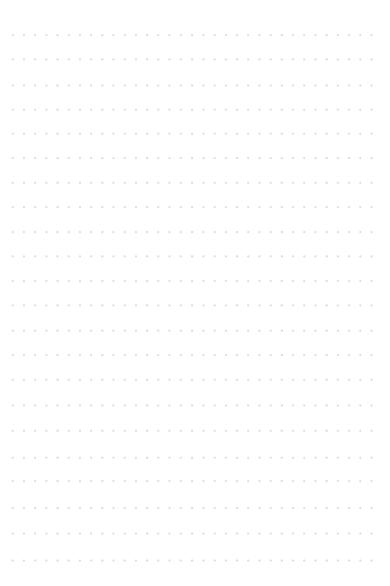
- Slowly water the tree with a bucket or hose by pouring it onto the back of a shovel directed at the tree roots.
- 2. After planting, give the tree about 15 to 20 gallons of water.
- Add soil to any area where water is escaping.
- **4.** Spread no more than 6 inches of mulch 4 inches from the trunk.

Use rubber ties or horticulture tape. They are flexible and will give the tree some wiggle room.

15 to 20 gallons of water after planting.



## **Notes**

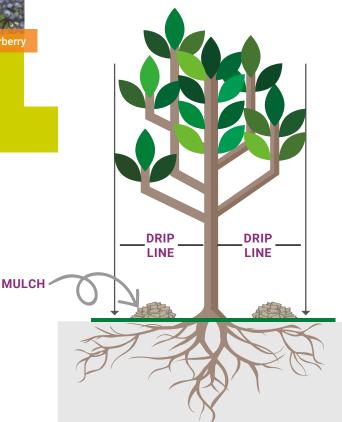




Blue Elderberry

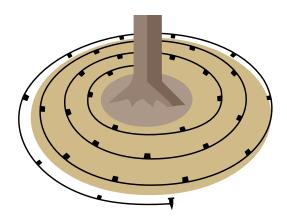
## Watering

Do not rely on lawn sprinklers to water your trees—they do not soak soil deep enough to reach the tree roots. Trees absorb water at least 18 inches below the soil and out to the drip line. The **drip line** is an imaginary line around the tree that marks the edge of the tree canopy.



## Watering

The best way to irrigate your trees is with a tree ring, or **in-line emitter hose** spiraled outward from the tree in concentric circles beyond the drip line. If possible, put the tree on its own irrigation valve. Trees need deeper but less frequent watering than other plants. A separate irrigation valve may water the tree more effectively.



### **Watering Young Trees**

#### One to three years after planting

- The area around young trees must always be kept moist to help the trees establish.
- 2. While the tree is young, pack soil around the tree to create a circular mound. This creates a basin that directs water to the roots. Extend this mound to the drip line once a year as the tree grows.



- Place your finger or a screwdriver 4 inches into the soil to check for moisture. If the soil is still wet, don't water.
- **4.** Water young trees about once a week using a 5-gallon bucket. Slowly pour about three to four buckets of water into the tree basin.

### Watering Established Trees

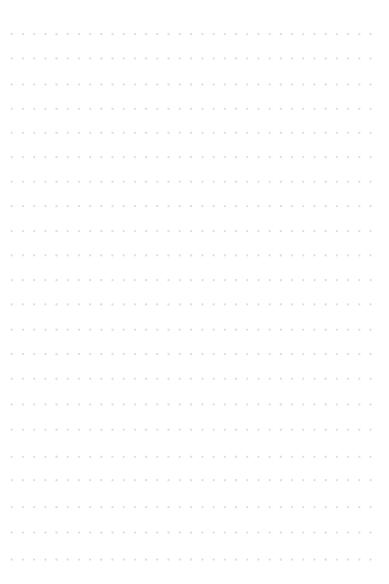
#### Three+ years after planting

- After establishment, trees no longer need to be kept moist. Allow the soil to dry out between watering.
- Water the tree once or twice monthly using an in-line emitter hose. Due to the slow water rate of this type of irrigation, this could take one to two hours.
- 3. Water needs to soak into the soil until it reaches about 12 to 18 inches deep. Continue to soak until the water depth reaches that point. You can use a soil probe or screwdriver to push into the soil and check how far the water has reached. When it doesn't go down any further, you have hit the dry layer.
- **4.** Don't water close to the trunk. Water should be directed closer to the drip line of the tree.





## **Notes**







## Mulch

HAIR MULCH

(highly flammable)

Mulch acts as a protective barrier for tree roots. It shields the roots from extreme temperatures and discourages competition from grasses or weeds. Add only natural and organic mulch around your tree to help it grow and keep moisture and nutrients in the soil.

Avoid using synthetic mulch material. Apart from being highly flammable, it does not provide the beneficial nutrients your trees need. Some organic mulch can also be highly flammable.

#### **TYPES OF MULCH TO AVOID**

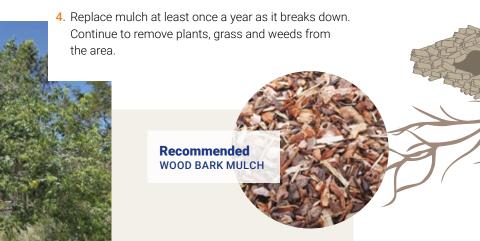


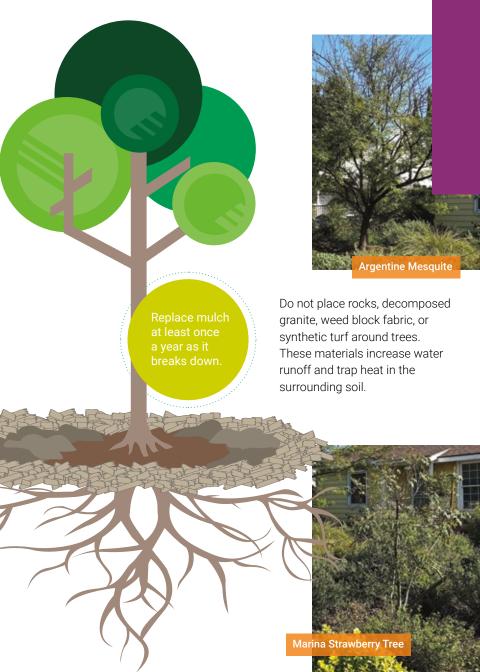


## Mulch

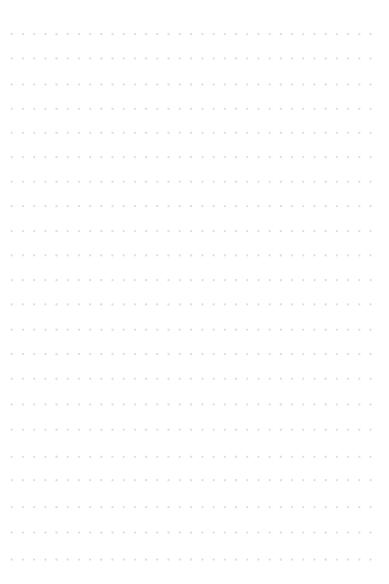
#### How to introduce mulch to your landscape:

- 1. Remove grass and weeds around the tree, especially in the mulch area.
- 2. As an option, spread compost in the mulch area to promote healthy soil.
- 3. Spread and layer mulch in the shape of a 4-foot diameter doughnut around the tree. Lay mulch at least 4 inches from the trunk and avoid placing it directly against the base of the tree. The mulch layer should be about 6 inches thick. Spread mulch outward from your young tree as it grows. For mature trees, spread mulch further away from the base, at least 6 inches.





## **Notes**







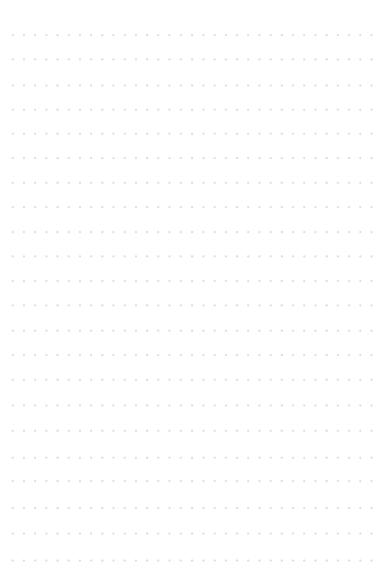
# Pruning & Weeding

- 1. You do not need to prune for the first three years.

  After three years, prune every winter as needed.
- 2. Remove any competing branches that are the same height as the main trunk.
- 3. Remove dead, diseased, and crossing branches.
- 4. Remove suckers, which are branches growing from the ground or root flare. If the suckers are growing directly off the roots, remove the soil first and then remove the growth.
- 5. Remove all grass and weeds growing in a 3-to 4-foot-wide circle around the tree. Be sure to use a small hand tool so only weeds are removed without damaging the roots.



## **Notes**



## 05/ GLOSSARY & DEFINITIONS



#### Tree canopy

The layer of branches and leaves that cover the ground when viewed from above.

#### **Drip line**

An imaginary line around the tree that marks the edge of the tree canopy.

#### True root flare

Where the first main roots attach to the trunk.

#### Suckers

Small branches growing from the ground or root flare.



# Hollyleaf Cherry

#### **Root ball**

The main mass of roots located directly beneath the plant's stem.

#### In-line emitter hose

Irrigation drip line that has built-in emitters that spread water evenly every set number of inches.



## For Your Waterwise Garden

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Trees are natural helpers of the environment—they improve air quality, capture carbon and reduce surrounding temperatures. That's why Metropolitan offers an extra incentive to include trees in your turf replacement project.

You can now receive a \$100 rebate per tree for up to five trees planted while you replace your grass with a beautiful California Friendly® landscape. Before you go to your local nursery or garden center, use this recommended list to help identify trees that are a good fit for your space and will thrive in Southern California's climate.

#### **Rebate Requirements**

A tree is defined as a woody perennial plant with many secondary branches supported above the ground by one main stem or trunk.

- Trees must be planted within the turf replacement project area.
- Trees must be a minimum size of 15 gallons when purchased and planted.
- Trees are expected to grow to at least 15 feet tall and 10 feet wide at maturity (this does not apply to edible fruit trees).
- Fruit trees are only rebateeligible for residential properties, not commercial.



Crown/Root Spread





Maximum Height

Root Damage Potential



Evergreen 💸



are in feet.

#### **Small California Native Trees**

Common Tree Name Species	Ī		4	A B		***	$\Diamond$
Western Redbud Cercis occidentalis	3'	25'	10-20'	Low	Yes	No	Moderate
Bubba Desert Willow Chilopsis linearis 'Bubba'	3'	20'	10-15'	Low	Yes	No	Very Low
Chitalpa Chitalpa tashkentensis	3'	35'	20-30'	Low	Yes	No	Low - Moderate
Desert Museum Palo Verde Parkinsonia x 'Desert Museum'	3'	20'	20-25'	Low	Yes	No	Very Low
Blue Elderberry Sambucus mexicana	3'	20'	10-20'	Medium	Yes	No	Low
<b>Toyon</b> Heteromeles arbutifolia	4'	25'	10-15'	Low	Yes	Yes	Low











#### **Medium California Native Trees**

Common Tree Name Species			4	A B		**	٥
Hollyleaf Cherry Prunus ilicifolia	6'	30'	10-25'	Low	No	Yes	Low
Tecate Cypress Hesperocyparis forbesii	7'	25'	15-20'	Medium	Yes	Yes	Low
Southern California Black Walnut Juglans californica	7'	30'	15-30'	Medium	No	No	Moderate
California Bay Laurel Umbellularia californica	8'	80'	60-75'	Medium	No	Yes	High

#### What Not to Plant

Certain trees are not eligible for the rebate. Here's a list of what **not** to plant.

- Woody plants like tree-looking shrubs used to create hedges around a property.
- Plants bred or pruned to maintain a reduced canopy. These plants are commonly called topiary, espaliered, or pollarded trees or shrubs.

- Small weeping varieties with soft branches hanging downward and touching the ground.
- Trees without spreading canopies that do not provide substantial shade or shelter when fully grown.
- All invasive tree species listed by the California Invasive Plant Council at cal-ipc.org.
- All palm varieties.

#### **Large California Native Trees**

Common Tree Name Species	J		4	AB.		***	0
Incense Cedar Calocedrus decurrens	10'	90'	10-15'	Medium	No	Yes	Moderate
Coast Live Oak Quercus agrifolia	10'	70'	20-70'	Medium	No	Yes	Low
Engelmann Oak Quercus engelmannii	10'	70'	80-120'	Medium	No	No	Low once established
California Sycamore	10'	80'	20-50'	Medium	No	No	Moderate -



#### Other Trees to Consider

Torrey Pine | Pinus torreyana California Ash | Fraxinus dipetala Island Ceanothus | Ceanothus arboreus

#### The Best Fruit Trees for your Home

Catalina Cherry | Prunus ilicifolia ssp. lyonii Pineapple Guava | Acca sellowiana

#### **Types of Trees to Avoid**

Certain trees need a lot of water. Others are vulnerable to disease or pests, and some are not ideal for fire hazard severity zones.

#### **DISEASE & PEST PRONE**

American Sweetgum Box Elder

#### **HIGH WATER USE**

Mulberry

Fremont Cottonwood

Coast Redwood

European
 White Birch

#### **HIGH FIRE RISK**

Avoid if you are in a fire hazard severity zone

Pine

Cypress

Eucalyptus

Palms

Juniper





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For additional information on tree care and maintenance, visit bewaterwise.com/trees.

To apply for the turf replacement rebate, visit **bewaterwise.com/turf.** 

Operators are available to answer questions in severa languages at (888) 376-3314.



