# **Hayward Tree Preservation Ordinance Appendix**

### **Table of Contents**

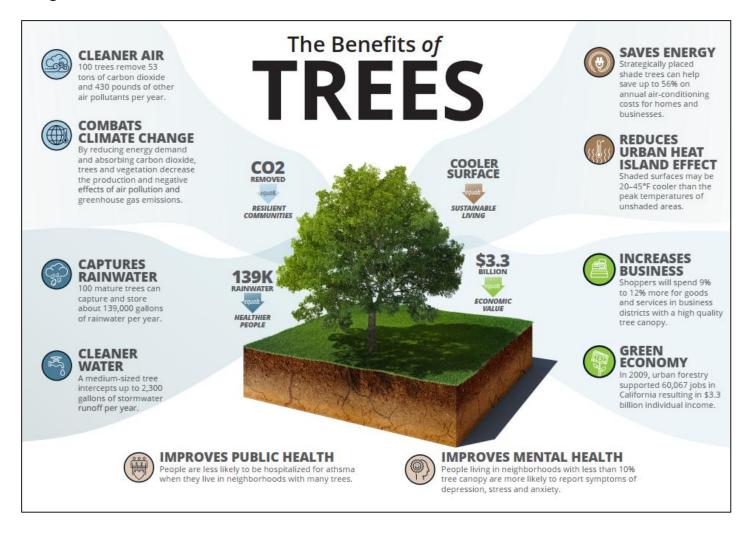
- 1. Purpose. Benefits of Trees
- 2. Tree Removal Permit Process Summary
- 3. Heritage Tree Checklist
- 4. Protected Native Tree Species in Hayward with Photos
- 5. City of Hayward Recommended Tree List with Photos
  - Small Planting Area Trees
  - Large Planting Area Trees
- 6. Do NOT Plant Tree List with Photos
- 7. Hayward Airport Landscape Plan and Plant List
- 8. Cal Fire Fire Hazard Severity Map
- 9. San Francisco Bay Tidal Marsh Map
- 10. Arboriculture Best Management Practices for Tree Planting and Maintenance
- 11. Arborist Report Template
- 12. List of Local Arborists and Tree Pruning and Removal Companies

# 1 Purpose

The City of Hayward recognizes the role that trees have in providing wildlife habitat, reducing the urban heat island effect, and maintaining the community's health, well-being, and aesthetic value (**Figure 1**). Hayward's Tree Preservation Ordinance is intended to protect and preserve trees and control the pruning, removal or relocation of those trees that provide benefits for the neighborhood or the entire community, while balancing private property rights and development.

This Appendix has been developed alongside the City's 2025 Tree Preservation Ordinance update. This document provides references for interpreting the tree protections set forth in the tree ordinance as well as additional tree maintenance guidelines for private property owners. Together, this document and the updated ordinance are intended to enhance the management of trees on private property and maximize the benefits that Hayward's urban forest provides.

Figure 1. Benefits of Trees



## 2 Permit Process

The City of Hayward's tree ordinance has a list of actions that are restricted or require permits. The regulations in Hayward's Tree Preservation Ordinance only apply to Protected Trees.

#### Information Gathering and permit preparation

- What action are you intending to do?
- In what way will trees in question be affected? The City of Hayward's tree ordinance has a lists of actions that are restricted or require permits.
- What is the species of your tree?
- What is the diameter of your tree? See "How to measure tree trunks" in **Section 11** below.
- Do you own the property where the proposed action is to take place? If not, do you have the property owner's written consent?
- Wanting to do tree work between February and September: Is there evidence of nesting birds?

#### **Protected Trees**

- Protected trees include, **but are not limited to**, the protected native trees displayed in **Section 4** of this document. Other protected trees include street trees, memorial trees officially recognized by the City, heritage trees, replacement trees, trees designated for preservation in a plan, and trees that are a condition of approval for a previous permit or zoning requirement.
  - o For more information on if your tree is a protected tree, refer to the ordinance.
- Sec. 10-15.14 provides the information needed to determine whether your tree is protected.
- Refer to Sec. 10-15.26 to determine whether your scenario meets any of the City's defined exceptions.

#### For Development Projects

- The Tree Preservation Ordinance has specific planting requirements and tree protection measures that apply to development projects. Ensure that your project is aligned with these requirements during the planning phase before construction commences.

#### Permit Process

- 1. Determine whether a permit is necessary.
- 2. Apply for a permit before any construction or actions that will affect the tree take place.
- 3. Development services will evaluate your permit based on the criteria found in Sec. 10-15.22.
- 4. The City may apply conditions for approval, which often include tree replacement requirements. If tree replacement on-site is not feasible, a fee in-lieu of replacement may apply. Other conditions may apply.
- 5. Upon approval, a permit is valid for 3 months.

## Frequently Asked Questions:

#### Is there a permit fee?

Yes. This fee is determined by the City's Master Fee schedule. Additionally, for development projects, a bond is required equal to the appraised replacement value of the existing trees that are to remain on site.

#### Do I need an arborist report?

An arborist report is required for the specifically listed actions in SEC. 10-15.21. See **Section 12** of this document for a checklist of required information for arborist reports.

#### Are there penalties for skipping the permit process?

Yes, penalties may include fines and stop work orders, as described in SEC. 10-15.29 of the Tree Preservation Ordinance.

#### Can the City revoke a permit?

Yes, but only under the circumstances defined in SEC. 10-15.30 of the Tree Preservation Ordinance.

#### What if I believe my permit was wrongfully denied?

Permit applicants may appeal, according to the process set in place by SEC 10-15.28 of the Tree Preservation Ordinance.

# 3 Heritage Tree Checklist

Heritage trees are those trees recognized by the City of Hayward to be an exceptional tree with a distinctly high level of value to the community as set forth in section 10.15-19: Memorial or Heritage Trees.

## **Heritage Tree Determination:**

		nsidered a Heritage Tree when the City Landscape Architect finds at least two of the following criteria ease mark which of the following criteria the tree meets and provide the reasoning below:
		Native Tree: The tree is a native species of Hayward, as listed in Section 10-15.14.
		<b>Provides Essential Habitat</b> : The tree currently or commonly provides habitat for any state or federally listed endangered or threatened species as identified by the projects Certified Arborist. Note that such trees may be protected through other local, state, or federal regulations.
		Horticulture Significance: The tree is rare or significant in the horticultural development of Hayward.
		<b>Historical or Cultural Significance</b> : The tree has a documented historical or cultural connection to the City of Hayward including original plantings or coincides with historical events in the City.
Reason	ing f	or why the tree should be nominated as a Heritage tree:
Herita	ige	Tree Removal:
to the a	pplic	ant desires to remove an existing Heritage tree, they must prove to the reviewing body that the burder cant in preserving the tree outweighs the benefit to the public, as stated in Sec. 10-15.23. Factors tha idered include:
(1)	All t	he benefits provided by the Heritage Tree.
(2)	The	contribution of the tree to the character of the site, local ecology, and the neighborhood.
(3)	Spe	cies, health condition and value of the tree.
(4)	Whe	ether the tree is part of an important grove of trees.
(5)	The	visibility of the tree to the neighborhood and the public.
(6)	Whe	ether the development provides a public benefit.
(7)	Whe	ether measures short of removing the tree can be employed consistent with the development.
Justifica	ation	for why the Heritage tree should be removed:

# 4 Protected Native Tree Species in the City of Hayward

All trees with a diameter of 8" or greater when measured 54" above ground level are protected, unless the tree is an invasive species recognized by the California Invasive Species Council. Native trees – trees belonging to species that have evolved with California's landscape for millennia and developed intertwined relationships with California's flora and fauna – have further protections. California natives are protected at diameter of 4" or greater when measured 54" above ground level. **Table X** displays the list of native trees protected in Hayward. Photos are courtesy of SelecTree (SelecTree. UFEI. 1995-2024. Cal Poly State University, San Luis Obispo).

Table 1: List of protected native trees in the city of Hayward and photos to aid in species identification.

Common Name	Scientific Name	Leaf	Tree	Selectree Link
Big leaf maple	Acer macrophyllum	5427467		SelecTree: Bigleaf Maple
California buckeye	Aesculus californica			SelecTree: California Buckeye

Pacific madrone	Arbutus menziesii		SelecTree: Pacific Madrone
California sycamore	Platanus racemosa	Constants.	SelecTree: California Sycamore

Coast live oak	Quercus agrifolia		SelecTree: Coast live oak
Canyon live oak	Quercus chrysolepis		SelecTree: Canyon live oak

Blue oak	Quercus douglassii		
Oregon white oak	Quercus garryana		SelecTree: Oregon white oak

California	Quercus		SelecTree:
black oak	Quercus kelloggii		SelecTree: California black oak
Valley oak	Quercus Iobata		SelecTree: Valley oak

Interior live oak	Quercus wislizenii		SelecTree: Interior live oak
California bay	Umbellularia californica		SelecTree: California Bay

# 5 City of Hayward Recommended Tree Species

## **Small Planting Area Trees**

Common Name:	Marina madrone / Strawberry tree
Scientific Name:	Arbutus 'Marina'
Mature Tree Size:	25' H x 20' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/174



Common Name:	Weeping bottlebrush
Scientific Name:	Callistemon viminalis
Mature Tree Size:	30' H x 20' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/241



Common Name	Blue palo verde	
Scientific Name	Cercidium floridum	
Mature Tree Size	20' H x 15' W	
California Native:	No	Carrier Commencer
Selectree Link:	https://selectree.calpoly.edu/tree-detail/309	
		Marine Co
		@ Rejeran



Common Name:	Oklahoma redbud
Scientific Name:	Cercis canadensis var. texensis 'Oklahoma'
Mature Tree Size:	20' H x 15' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/323



Western redbud
Cercis occidentalis
20' H x 15' W
Yes
https://selectree.calpoly.edu/tree-detail/321



Common Name	Burgandy Desert willow	
Scientific Name	Chilopsis linearis 'Burgundy'	
Mature Tree Size	20' H x 20' W	
California Native:	Yes	
Selectree Link:	https://selectree.calpoly.edu/tree-detail/345	





Common Name	Chitalpa
Scientific Name	Chitalpa tashkentensis
Mature Tree Size	25' H x 25' W
California Native:	Yes
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1488





Common Name	Sweet bay
Scientific Name	Lauris nobilis
Mature Tree Size	25' H x 20' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/804



Common Name	Santa Cruz ironwood
Scientific Name	Lyonothamnus floribundus,
Mature Tree Size	35' H x 20' W
California Native:	Yes
Selectree Link:	https://selectree.calpoly.edu/tree-detail/832





Common Name	Fruitless olive
Scientific Name	Olea europea 'Wilsonii'
Mature Tree Size	25' H x 20' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/970



Common Name	Bracelet Honey myrtle
Scientific Name	Melaleuca armillaris
Mature Tree Size	25' H x 20' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/927





Common Name	Iron wood
Scientific Name	Parrotia persica columnar variety
Mature Tree Size	25' H x 10' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/987





Common Name	Water gum	
Scientific Name	Tristania luarina	
Mature Tree Size	25' H x 20' W	
California Native:	No	
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1486	



## Large Planting Area Trees (4-ft and greater planter width):

Common Name	Incense cedar
Scientific Name	Calocedrus decurrens
Mature Tree Size	50' H x 20' W
California Native:	Yes
Selectree Link:	https://selectree.calpoly.edu/tree-detail/243



Common Name	Desert willow
Scientific Name	Chilopsis linearis
Mature Tree Size	35' H x 30' W
California Native:	Yes
Selectree Link:	https://selectree.calpoly.edu/tree-detail/345





Common Name	Australian willow
Scientific Name	Giejera parviflora
Mature Tree Size	35' H x 25' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/654



Common Name	Brisbane box
Scientific Name	Lophostemon conferta
Mature Tree Size	35' H x 20' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1425



Common Name	Chinese pistache	206-24-1
Scientific Name	Pistache chinensis	
Mature Tree Size	35' H x 25' W	
California Native:	No	
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1086	



Common Name	Bloodgood London plane tree
Scientific Name	Platanus x hispanica/acerfolia 'Bloodgood'
Mature Tree Size	60' H x 40' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1100



Common Name	Columbia London plane tree
Scientific Name	Platanus x hispanica/acerfolia 'Columbia'
Mature Tree Size	60' H x 40' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1826



Common Name	Mexican sycamore
Scientific Name	Platanus mexicana
Mature Tree Size	50' H x 35' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1589



Common Name	Chilean mesquite tree
Scientific Name	Prosopis chilensis
Mature Tree Size	35' H x 35'
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1141



Common Name	Coast live oak
Scientific Name	Quercus agrifolia
Mature Tree Size	60' H x 50' W
California Native:	Yes
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1227



Common Name	Blue oak
Scientific Name	Quercus douglasii
Mature Tree Size	60' H x 40' W
California Native:	Yes
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1234



Common Name	Valley ank
	Valley oak
Scientific Name	Quercus lobata
Mature Tree Size	80' H x 50' W
California Native:	Yes
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1246



Common Name	Cork oak
Scientific Name	Quercus suber
Mature Tree Size	60' H x 40' W
California Native:	No
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1263



# 6 Do NOT Plant Tree List

## **Invasive and Pest Tree Species That Should Not Be Planted in Hayward.**

See this California Invasive Plant Council guide for more information:

https://www.cal-ipc.org/wp-content/uploads/2017/11/Dont-Plant-a-Pest-Trees-of-CA.pdf

Common Name	Acacia/wattle
Scientific Name	Acacia dealbata, A. decurrens, A. melanoxylon
Cal-IPC Rating	Limited to Moderate
Mature Tree Size	50' H x 50' W
Selectree Link:	https://selectree.calpoly.edu/tree-detail/23
	https://selectree.calpoly.edu/tree-detail/24
	https://selectree.calpoly.edu/tree-detail/28



Common Name	Tree of heaven
Scientific Name	Ailanthus altissima
Cal-IPC Rating	Moderate
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/145
Links:	https://www.cal-
	ipc.org/plants/profile/ailanthus-altissima-
	profile/



Common Name	Silk tree
Scientific Name	Albizia julibrissin
Cal-IPC Rating	Not on Cal-IPC list
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/147
Links:	



Common Name	Paper mulberry
Scientific Name	Broussonetia papyrifera
Cal-IPC Rating	Not on Cal-IPC list
Selectree Link:	https://selectree.calpoly.edu/tree-detail/218



Common Name	Single-seed hawthorn
Scientific Name	Crataegus monogyna
Cal-IPC Rating	Limited
Selectree Link:	https://selectree.calpoly.edu/tree-detail/281
	https://www.cal-ipc.org/plants/profile/crataegus-
	monogyna-profile/



Common Name	Russian olive
Scientific Name	Elaeagnus angustifolia
Cal-IPC Rating	Moderate
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/500
Links:	https://www.cal-
	ipc.org/plants/profile/elaeagnus-angustifolia-
	profile/



Common Name	Blue gum eucalyptus
Scientific Name	Eucalyptus globulus
Cal-IPC Rating	Limited
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/543
Links:	https://www.cal-
	ipc.org/plants/profile/eucalyptus-globulus-
	profile/



Common Name	Golden Rain Tree
Scientific Name	Koelreuteria paniculata
Cal-IPC Rating	Not on Cal-IPC List
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/777
Links:	



Common Name	Chinaberry
Scientific Name	Melia azedarach
Cal-IPC Rating	Watch
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/935
Links:	https://www.cal-ipc.org/plants/profile/melia-
	azedarach-profile/



Common Name	Myoporum / Ngaio tree;
Scientific Name	Myoporum laetum
Cal-IPC Rating	Moderate
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/1485
Links:	https://www.cal-
	ipc.org/plants/profile/myoporum-laetum-
	profile/



Common Name	Callery Pear
Scientific Name	Pyrus calleryana
Cal-IPC Rating	Not on Cal-IPC list
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/779
Links:	



Common Name	Black locust
Scientific Name	Robinia pseudoacacia
Cal-IPC Rating	Limited
Selectree Link:	https://selectree.calpoly.edu/tree-detail/1290 https://www.cal-ipc.org/plants/profile/robinia- pseudoacacia-profile/



Common Name	Chinese tallow tree
Scientific Name	Sapium sebiferum
Cal-IPC Rating	Moderate
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/1317
Links:	https://www.cal-ipc.org/plants/profile/triadica-
	sebifera-plant-profile/



Common Name	Brazilian peppertree
Scientific Name	Schinus terebinthifolius
Cal-IPC Rating	Moderate
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/1323
Links:	https://www.cal-ipc.org/plants/profile/schinus-
	terebinthifolius-profile/



Common Name	Scarlet wisteria				
Scientific Name	Sesbania punicea				
Cal-IPC Rating	High				
Selectree and Cal-IPC	Not available on Selectree				
Links:	https://www.cal-				
	ipc.org/plants/profile/sesbania-punicea-profile/				



Common Name	Saltcedar
Scientific Name	Tamarix species
Cal-IPC Rating	High
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/1382
Links:	https://www.cal-ipc.org/plants/profile/tamarix-
	parviflora-plant-profile/



Common Name	Mexican fan palm
Scientific Name	Washingtonia robusta
Cal-IPC Rating	Moderate
Selectree and Cal-IPC	https://selectree.calpoly.edu/tree-detail/1471
Links:	https://www.cal-
	ipc.org/plants/profile/washingtonia-robusta-
	profile/



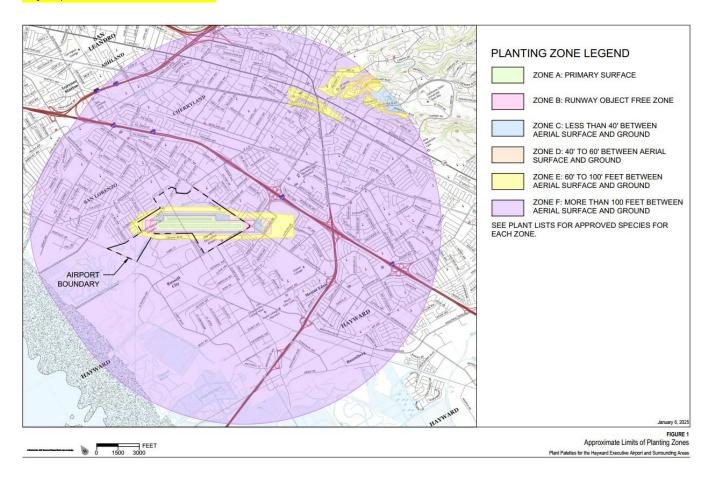
# 7 Hayward Airport Landscape Plan and Plant List

The following plants and trees list applies to properties that are adjacent to the Hayward Executive Airport which have specific height and species restrictions required by the Federal Aviation Administration.

The full Hayward Executive Airport Landscape Plan can be viewed and downloaded here: City to provide link when available.

The Hayward Airport Planting list by zone can be found on the next page.

An interactive map of the different airport planting zones with height restrictions can be accessed here: City to provide link when available.



.

Airport Plant List							
Botanical Name	Common Name	С	D	E	F	Mature Height (feet)	Attracts Wildlife
TREES							
Acer saccharum subsp. Floridanum	Southern Sugar Maple			Х	Х	50	Yes
Aesculus californica	California Buckeye			X	X	15 to 40	Yes
Afrocarpus falcatus	African Fern Pine			X	X	60	Yes
Arbutus marina	Marina Madrone			X	X	40 to 50	Yes
Arbutus menziesii	Pacific Madrone				X	15 to 70	Yes
Arbutus unedo	Strawberry Madrone			Х	X	20 to 35	Yes
Agonis flexuosa	Peppermint Tree		Х	X	X	20 to 35	No
Brachychiton populneus	Kurrajong			X	X	30 to 50	Yes
Callistemon varieties	Bottlebrush		Χ	X	X	20 to 35	Yes
Cercidium floridum	Blue Palo Verde		X	Х	Х	15 to 20	Yes
Cercis occidentalis	Western Redbud		,,	X	Х	25	Yes
Chilopsis linearis 'Burgundy'	Burgandy Deseert Willow	Х	Х	Х	Х	20	No
Chitalpa tashkentensis	Chitalpa			Х	Х	35	Yes
Cordyline (tree varieties)	Cordyline	Х	Х	Х	Х	15-Oct	No
Cotinus coggygria	Common Smoketree		Х	Х	Х	10 to 15	Yes
Eriobotrya japonicum	Japanese Loquat			Х	Х	30	Yes
Geijera parviflora	Australian Willow			Х	Х	35	Yes
Gingko biloba	Maidenhair Tree			Х	Х	30 to 50	No
Juglans hindsii	California Black Walnut				Х	30-60	Yes
Lagerstroemia indica	Crape Myrtle	Χ	Х	Х	Х	6 to 30	No
Laurus nobilis	Sweet Bay			Х	Х	15 to 40	Yes
Leptospermum varieties	Tea Tree	Χ	Х	Х	Х	10 to 15	No
Lophostemon conferta	Brisbane Box			Χ	Х	20 to 40	Yes
Lyonothamnus floribundus	Santa Cruz Ironwood		Х	Х	Χ	30 to 40	Yes
Melaleuca varieties	Paperbark		Х	Х	Х	20 to 40	Yes
Olea europaea 'Swan Hill' (fruitless)	Swan Hill Olive		Х	Х	Х	20 to 40	Yes
Olea europaea 'Wilsonii' (fruitless)	Wilson Olive	Х	Х	Х	Х	15 to 25	No
Platanus racemosa	California Sycamore				Х	20-80	Yes
Palm varieties (short palms)	Palm	Χ	Χ	Χ	Χ	20-May	No
Quercus agrifolia	Coast Live Oak			Х	Х	40	Yes
Quercus chrysolepis	Canyon Live Oak				Х	70	Yes
Quercus douglasii	Blue Oak				Х	30-70	Yes
Quercus garryana	Oregon White Oak				Х	40-90	Yes
Quercus kelloggii	California Black Oak				Χ	30-70	Yes
Quercus lobata	Valley Oak				Χ	50-70	Yes
Quercus morehus	Oracle Oak			Χ	Χ	50	Yes

Quercus suber	Cork oak			Х	Х	20 to 40	Yes
Quercus tomentella	Island Oak			Х	Х	50	Yes
Quercus wislizeni	Interior Live Oak				Х	30-70	Yes
Tilia cordata	Littleleaf Linden			Х	Х	50	Yes
Tristania luarina	Water Gum	Х	Х	Х	Х	15 to 25	No
Ulmus parvifolia	Chinese Elm			Х	Х	40 to 50	Yes
Umbellularia californica	California Laurel				Х	30 to 80	No
Vitex agnus-castus	Chaste Tree			Х	Х	8 to 20	Yes
3							
SHRUBS							
Agave varieties	American century plant	Х	Х	Х	Х	6 to 10	No
Agapanthus varieties	Lily of the Nile			Х	Х	2 to 3	Yes
Aloe varieties	Aloe	Х	Х	Х	Х	0.5 to 1	No
Arctostaphylos varieties	Manzanita			Х	Х	6 to 10	Yes
Atriplex lentiformis	Quail Bush		Х	Х	Х	3 to 10	Yes
Baccharis varieties	Coyote Bush			Х	Х	2 to 10	Yes
Callistemon 'Little John'	Dwarf Callistemon		Х	Х	Х	4 to 6	Yes
Carpenteria californica	Bush Anemone			Х	Х	6 to 10	Yes
Ceanothus varieties	Ceanothus			Х	Х	2 to 15	Yes
Cistus varieties	Rock Rose		Х	Х	Х	4 to 6	Yes
Cordyline varieites	Cordyline	Х	Х	Х	Х	4 to 8	No
Dasylirion varieities	Grass Tree	Х	Х	Х	Х	2 to 5	No
Eriogonum varieties	Buckwheat			Х	Х	2 to 5	No
Euonymus varieties	Euonymus	Х	Х	Х	Х	10 to 15	No
Euphorbia varieties	Euphorbia	Х	Х	Х	Х	1 to 3	No
Hemerocallis varieties	Day Lily			Х	Х	2 to 3	Yes
Heteromeles arbutifolia	Toyon			Х	Х	6 to 30	Yes
Hesperaloe parviflora	Red Yucca		Х	Х	Х	3 to 4	Yes
Lavandula varieties	English Lavender		Х	Х	Х	1 to 2	Yes
Mahonia varieties	Oregon Grape		Х	Х	Х	3 to 7	Yes
Nandina varieties	False Bamboo		Х	Х	Х	3 to 8	Yes
Olea 'Little Ollie'	Dwarf Fruitless Olive	Х	Х	Х	Х	4 to 6	No
Phormium varieties	New Zealand Flax	Х	Х	Х	Х	1 to 6	No
Photinia X fraseri	Fraser's Photinia			Х	Х	10 to 20	No
Rhamnus californica varieties	Coffeeberry			Х	Х	6 to 15	Yes
Rosa californica	California Wildrose			Х	Х	8 to 10	Yes
Salvia varieties	Autumn Sage			Х	Х	2 to 3	Yes
Westringia varieties	Sea Coast Rosemary	Х	Х	Х	Х	3 to 6	No
_							
GRASSES							
Calamagrostis varieties	Feather Reed Grass			Х	Х	3 to 5	Yes
Carex varieties	Sedge	Х		Х	Х	1 to 2	Yes
Chondropetalum varieties	Cape Rush	Х	Χ	Х	Х	3 to 5	No
Dianella varieities	Dianella	Х	Х	Х	Х	1 to 4	No
Dietes varieties	Fortnight Lily	Х	Х	Х	Х	3 to 5	No

Festuca varieties	Blue Fescue	Х	Х	Х	Х	1	Yes
Helichtotrichon sempervirens	Blue Oat Grass	Х	Х	Χ	Х	2 to 3	No
Lomandra varieites	Lomandra	Х	Х	Χ	Х	3 to 4	No
Leymus 'Canyon Prince'	Canyon Prince Wild Rye		Х	Х	Х	3 to 4	Yes
Melica californica	California Melicgrass			Х	Х	1 to 4	Yes
Muhlenbergia varieties	Deergrass			Х	Х	4 to 5	Yes
Pennisetum (non-seeding varieties)	Fountain Grass		Х	Х	Х	1 to 2	Yes
Stipa gigantea	Giant Feather Grass				Х	5 to 6	No
GROUNDCOVERS							
	Yarrow (CA native						
Achillea varieties	cultivars)			Χ	Χ	1 to 3	Yes
Aeonuium	Aeonuium	Х	Х	Χ	Χ	1 to 2	No
Artemisia varieties	California Mugwort			Χ	Χ	8	Yes
Carissa (groundcover varieites)	Natal Plum		X	Χ	Χ	3 to 5	Yes
Grevillea (groundcover varieites)	Grevillea	Х	Х	Χ	Χ	3 to 5	No
Iris douglasiana	Douglas Iris			Χ	Χ	1 to 2	Yes
Lantana (groundcover varieties)	Lantana			Χ	Х	1 to 2	Yes
Limonium perezii	Sea Lavender			Χ	Х	2 to 3	Yes
Myoporum parvifolium	Myoporum	Х	Х	Χ	Х	1 to 3	No
Rosea (groundcover varieites)	Groundcover Rose	Х	Х	Х	Χ	3 to 4	No
Rosmarinus (prostrate varieites)	Rosemary	Х	Х	Х	Х	1 to 3	No
Westringia (groundcover varieites)	Sea Coast Rosemary	Х	Х	Х	Х	1 to 3	No
Succulent varieties	Succulents	Х	Х	Х	Х	1 to 2	No

## 8 Cal Fire - Fire Hazard Severity Map

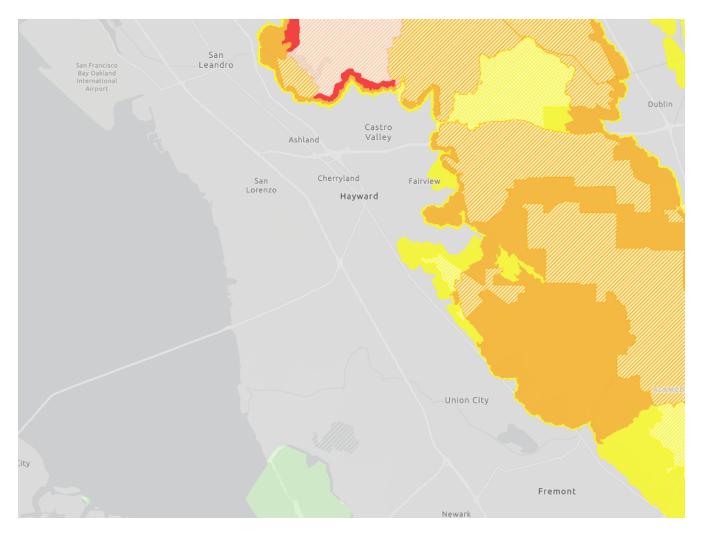
Sec. 10-15.26 of the Hayward Tree Preservation Ordinance provides permit exceptions for tree removals that are on properties within high or very high fire severity zone as identified by CalFire's current Fire Hazard Severity Zone Map.

The interactive version of the current Cal Fire - Fire Hazard Severity Zone Map can be accessed here to check if a property is within a high or very high fire severity zone:

https://experience.arcgis.com/experience/6a9cb66bb1824cd98756812af41292a0

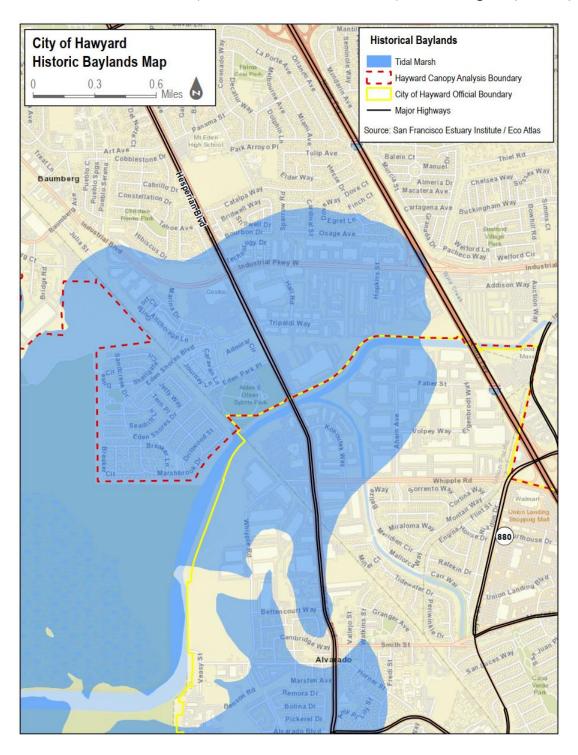
More information about the Fire Hazard Severity Zone Map can be found here:

https://www.hayward-ca.gov/fire-department/office-fire-marshal/local-responsibility-areas-lras-and-fire-hazard-severity-maps



## 9 San Francisco Bay Tidal Marsh Map

The map below is provided as a reference for those wishing to remove trees within 1,320 feet of the San Francisco Bay tidal marsh (See Sec. 10-15.16). Tree removal work will only be permitted outside of the nesting bird season. Generally, the months when tree removal work will be permitted in these areas is from September through early February.



## 10 Arboriculture Best Management Practices for Tree Planting, Watering and Maintenance

- How to Measure Tree Trunks
- Tree Planting and Mulching
- Tree Staking Guidelines
- Establishment Care Guidelines
- Watering Guidelines
- Tree Maintenance Guidelines
- Pruning to Improve Young Tree Structure
- Tree Protection Guidelines for Construction

## How to Measure Tree Trunks

Tree trunks are often used as a metric to determine the size of the tree. In arboriculture, the standardized method for measuring trunk size is to determine a tree's Diameter at Standard Height, or DSH which is 4.5 feet or 54 inches above the ground surface.

Arborists use a specialized measuring tape that is wrapped around the tree and reads the diameter.

For those who don't have "diameter tape," there is a simple way to measure tree diameter by using a length of string.

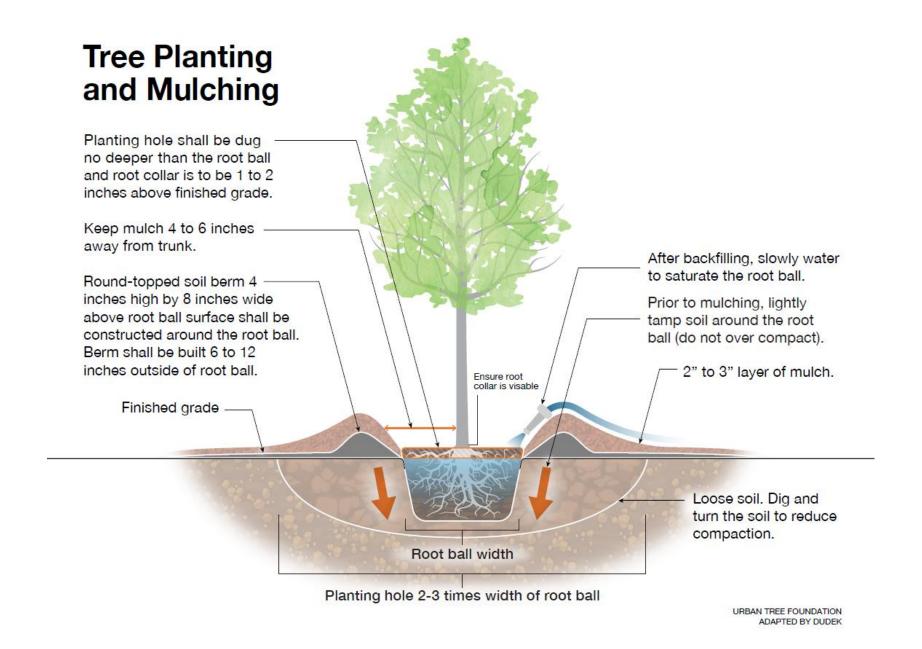
### **Measuring Tree Trunk with String**

- Wrap a piece of string around the tree, 4.5 feet above the ground.
- Mark the string at the location where it has wrapped 360° around the tree.
- Unwrap the string and measure it. This will give you the tree's circumference.

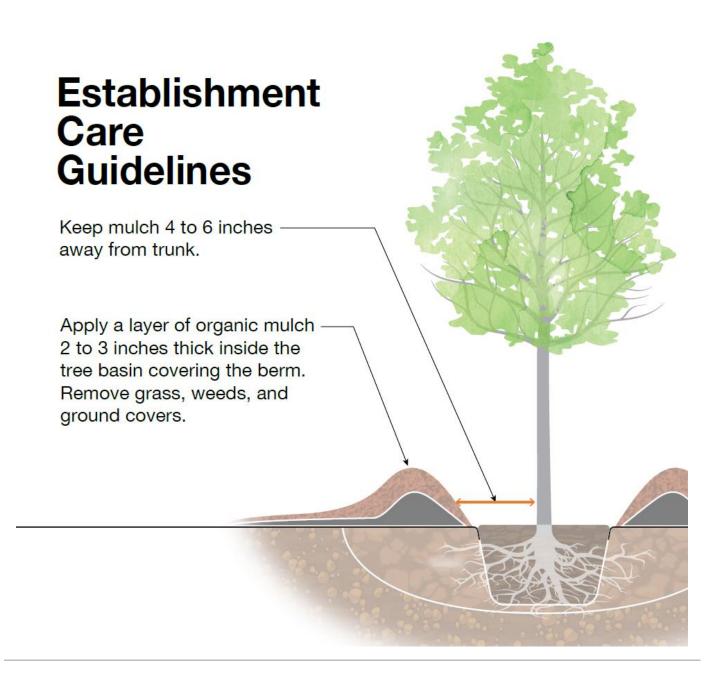
Divide the circumference by 3.14 to find the diameter.

4.5 FT 24 ÷ 3.14 = 7.6

MC M+ ÷ X



# **Tree Staking Guidelines** Remove nursery stake Ensure proper tree support Two stakes. Install outside of the root ball. ■ Tree ties should be placed in the middle to upper ■ Stake location shall not interfere portion of the tree and with permanent branches. allow tree movement in each direction. ■ Non-abrasive tree ties. ■ Tree stakes should be firmly secured vertically in the URBAN TREE FOUNDATION © 2014 OPEN SOURCE FREE TO USE



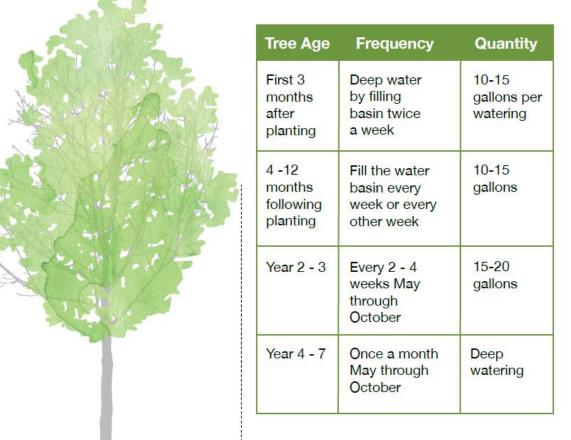
**Watering Guidelines** 

## **Watering for Wet Seasons**

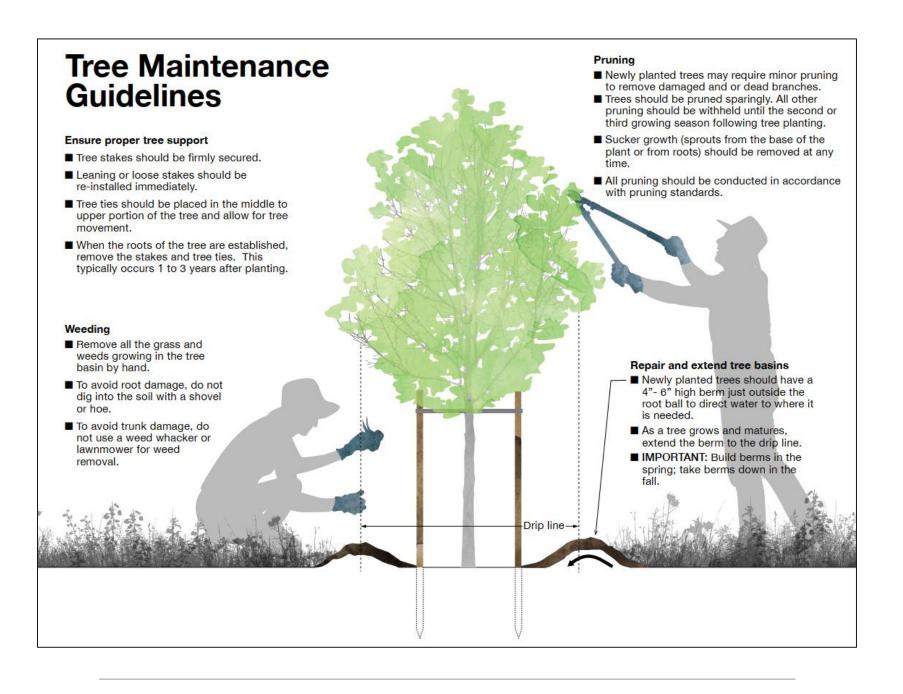
- Prolonged saturated soil can lead to tree mortality.
- Turn off irrigation during rain events.
- To avoid over watering a newly planted tree, monitor soil moisture after rain events.
- If soil is saturated, stop watering. Resume watering when soil is dry.

## Watering Guidelines for Hot and Dry Seasons

- Prolonged and unexpected extreme heat waves can threaten a newly planted trees survivability by depleting the available water inside the tree and in the soil.
- During these periods trees may need additional watering once or twice a week to be sustained.
- It is critical to provide additional water as soon as possible during extreme heat events to maintain tree health and vigor.

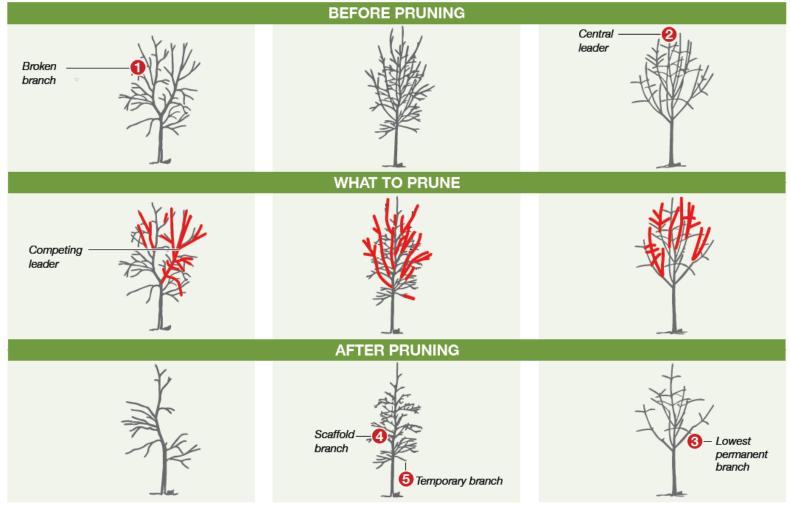


Drip line



## **Pruning to Improve Young Tree Structure**

- Remove broken branches.
- Select central leader and remove competing leaders.
- Select lowest permanent branch.
- Select scaffold branches.
- Select low temporary branches. Cut back and leave as temporary.

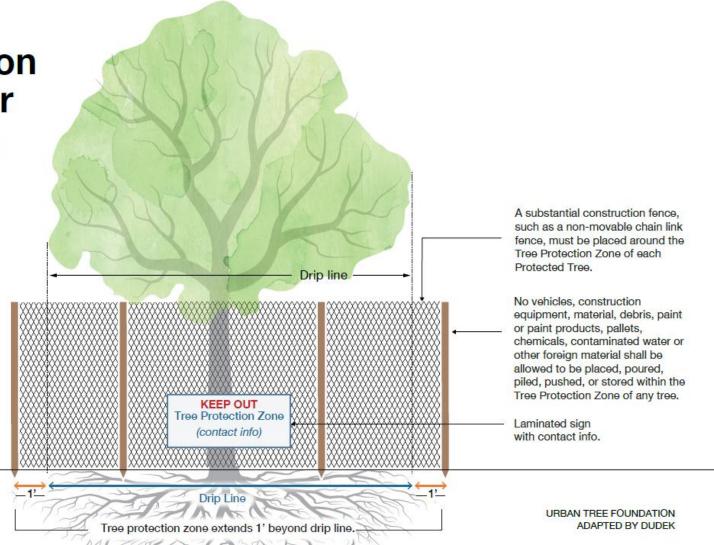


Structural Pruning: A Guide for the Green Industry | URBAN TREE FOUNDATION

# Tree Protection Guidelines for Construction

6 ft

Tree protections shall be in place prior to any construction equipment or materials being on site. Fencing shall remain in place until construction equipment, materials, and debris have been removed from the site and approval from the City Landscape Architect has been given for removal.



## 11 Arborist Report Checklist

The following information shall be included in any arborist report submitted to the City of Hayward.

### **Basic Information**

- Arborist's name, phone number, email
- Arborist designation (ISA, TRAQ, RCA#)
- Client name, address

### Site information

- Site plan that includes the following:
  - Any tree, on-site or off-site, that may be impacted by the proposed action
  - Buildings, driveways, nearby roads, and any other key factors that may assist the reviewer in locating the tree
- Clear indication of tree impacts (removal, encroachment, etc.)

#### Tree information

- Species of trees affected (common and botanical names)
  - Is the tree a protected native?
- Clear pictures of the tree indicating location, details, tree health
- Discussion of general health of the tree
- Tree measurements: Height, DSH

### **Proposed Work**

- Description of work to be done on tree(s) and methods to be used
- Discussion of reason for encroachment or removal and reasonable alternatives
- Discussion of tree protection measures

### Tree risk considerations

- If tree risk is a reason for removal, include ISA tree risk assessment form
- How will proposed activities affect tree risk?
- Discussion of target management

### Mitigation options

- Discussion of risk mitigation options: (pruning, structural support systems, site or cultural improvements, integrated pest management
- Proposed replacement tree(s) (species, size, location)

12	List of Local Arborists and Tree Pruning
	and Removal Companies

City to provide list