

## CHAPTER 3. SEA PROTECTED TREES

Native trees are those that evolved and occur naturally in a given location. Maintaining and protecting native trees in SEAs is important not only for the health and perpetuation of the SEAs, but also for the welfare of the County as a whole. The intent of the tree protection regulations in the SEA Ordinance is to encourage responsible management of trees within SEAs.

Healthy trees provide benefits for public health (e.g. producing oxygen, reducing smog, and intercepting airborne particulates), social welfare (e.g. reducing stress and promoting physical activity), the environment (e.g. filtering, slowing and retaining rainwater, and cooling air temperatures), and the economy (e.g. improving property values). And native trees are especially important because they coevolved with the flora and fauna of the region, are adapted to local climates and soils, and are intricately tied to the function of ecosystems and the maintenance of biodiversity.



Figure 8. Native trees are especially important because they coevolved with the flora and fauna of the region, are adapted to local climates and soils, and are intricately tied to the function of ecosystems and the maintenance of biodiversity.

### SEA PROTECTED TREES

A list of trees that are native to each SEA is included in Appendix A. SEA native trees become protected once their trunk diameter reaches the size indicated in the list. Trunk diameter is measured at 54 inches above natural grade (also referred to as “diameter at breast height” or “DBH”).

The size at which native tree species become protected was determined as follows:

- ✓ All Joshua trees (*Yucca brevifolia*) and California juniper (*Juniperus californica*) are protected, regardless of size<sup>7</sup>,
- ✓ Riparian species and trees listed as rare by California Native Plant Society (“CNPS”) are protected at 3-inch DBH,
- ✓ Coniferous species are protected at 5-inch DBH, and
- ✓ Upland hardwood species are protected at 6-inch DBH.

Additionally, for all listed native trees with multiple trunks, the tree is protected if the combined diameter of the two largest trunks equals eight inches or more.

### HERITAGE TREES

A SEA CUP is required to remove any Heritage Tree, which are considered irreplaceable because of their rarity, distinctive features, and prominence within the landscape. To be designated as a Heritage Tree, a SEA Protected Tree must have a single trunk that measures 36 inches or more in diameter, or two trunks that collectively measure 54 inches or more in diameter. For tree species with unnaturally enlarged trunks due to injury or disease (e.g., burls and galls), the tree must be at least 60 feet tall or 50 years old. Joshua

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<sup>7</sup> These are very slow growing trees that are particularly vulnerable to impacts of development and important to the maintenance of biodiversity of the SEAs in which they occur.

and juniper trees, which have naturally thin trunks, must have a height of 20 feet or a canopy spread of 35 feet, respectively, to be designated as a Heritage Tree. Age should be determined from historical accounts, photographs, or associations with historic structures; age may not be determined by growth ring counts in cores taken from the edge to the center of the tree.

### TREE PROTECTED ZONE

Tree roots extend well beyond the visible canopy of the tree and can be greatly impacted by disturbances to the ground around them (e.g., from compaction, grading, paving, etc.). Healthy roots that have access to nutrients, air, and water are vital to maintaining the health of the tree. Subsection 22.102.090(B) establishes minimum setbacks for SEA Protected Trees, known as the Tree Protected Zone, or “TPZ”. The TPZ extends a minimum of five feet out from the dripline of a protected tree or 15 feet from the trunk, whichever distance is greater.

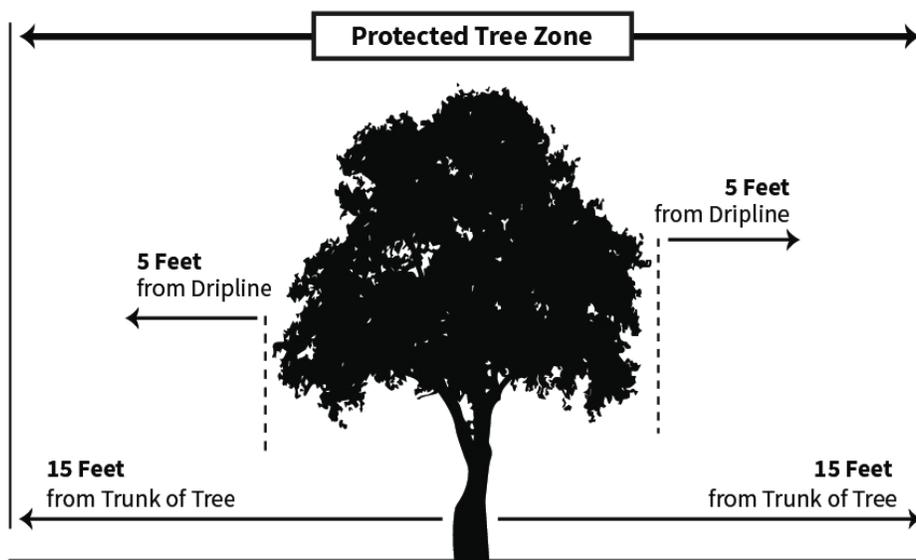


Figure 9. Development must be set back a minimum of 5-feet from the dripline or 15-feet from the trunk of a SEA Protected Tree, whichever distance is greater.

### SEA PROTECTED TREE EXEMPTIONS

The following exemptions (B, M, N, and P) listed in 22.102.040 (Exemptions) pertain to SEA Protected Trees. See Chapter 5 of this Guide for a full explanation of SEA Ordinance exemptions.

#### Exemption B.

*All areas outside the boundaries of the Antelope Valley Area Plan:*

1. *Additions or modifications to existing single-family residences, associated accessory structures, or animal keeping areas/structures, as long as such addition or modification does not increase the total building site area to more than 20,000 square feet or **encroach into more than 10 percent of the dripline for up to four SEA Protected Trees.***

This exemption allows for expansions or modifications to single-family residences, or their accessory structures or animal keeping facilities, to have minimal encroachments on a limited number of trees. Note that it specifically refers to encroachments into the driplines of the protected trees, rather than the protected zone.

Key elements of this exemption related to SEA Protected Trees include:

- ✓ the addition or modification may not encroach within more than 10 percent of the dripline of any protected tree, and
- ✓ the addition or modification may not encroach within the driplines of more than 4 protected trees.

#### Exemption M.

*Emergency removal of any tree listed on the SEA Protected Tree List maintained by the Department, due to a hazardous or dangerous condition, or being irretrievably damaged or destroyed through flood, fire, wind, lightning, drought, pests, or disease, as determined after visual inspection by a forester with the Fire Department in consultation with a County Biologist.*

The County Forester can issue an emergency tree removal permit for trees that are determined to be in a hazardous or dangerous condition. This generally means that the tree is in a condition and location that directly endangers the safety of people or property. An emergency removal may also be allowed when the tree is determined to be diseased or infested by non-native pests and removal of the tree is determined to be necessary to prevent a more widespread infestation.

#### Exemption N.

*Tree maintenance, limited to removal of dead wood and pruning of branches not to exceed two inches in diameter and 25 percent of live foliage within a two year period, intended to ensure the continued health of a SEA Protected Tree, in accordance with guidelines published by the National Arborists Association. Should excessive maintenance, trimming, or pruning adversely affect the health of the tree, as determined by the County Biologist or Forester with the Fire Department, a Protected Tree Permit per Section 22.102.070 (Protected Tree Permit) or SEA Conditional Use Permit (SEA CUP) per Section 22.102.080 (SEA Conditional Use Permit) may be required.*

This exemption allows for pruning of protected trees that is necessary to maintain the health of the tree, remove fuel ladders for fire protection, or protect persons or property from the risk of falling limbs. Tree maintenance is exempt from the Ordinance as long as the maintenance is performed in accordance with guidelines published by the National Arborist Association, and as long as the pruning:

1. does not remove branches in excess of two-inch diameter, and
2. does not remove more than 25% of the tree's overall canopy within a two year period.

There are no submittal requirements; however, pruning or trimming in excess of that allowed that leads to loss of the tree or a notable decline in tree health, as determined by a Forester with the Fire Department or the County Biologist, is a violation of the Ordinance and will require a Protected Tree Permit.

#### Exemption P.

*Introduction of trees which qualify for protection under the definition of SEA Protected Tree, but which can be demonstrated to have been planted by a person for the purposes of affecting the architecture, climate, or aesthetics of a given place and are, therefore, considered landscape features, or subsequent removal or other alteration of only those trees that qualify as introduced. Removal or other alteration of an introduced tree shall require documentation of the introduction. Trees planted as mitigation do not qualify as introduced.*

Trees that qualify as protected but which can be demonstrated to have been planted by a person for the purposes of affecting the architecture, climate, or aesthetics of a given place and that are, therefore,

considered landscape features, may be planted, or removed or altered without an SEA or Protected Tree permit. Documentation of the planting must be provided, and may be in the form of invoices, photographs, an approved landscaping plan that clearly indicates the location and species of the new tree to be planted, or other reasonable means. Trees planted as mitigation do not qualify as introduced.

## SEA PROTECTED TREES DEVELOPMENT STANDARD

The SEA Ordinance includes the following Development Standards for SEA Protected Trees:

1. Establishment of the tree protected zone (see above),
2. Limitation on number and extent of encroachments allowed:
  - ✓ no more than four encroachments into the TPZ of SEA Protected Trees; and
  - ✓ no more than 10 percent encroachment into the TPZ of each of those protected trees.
3. Limitation on number and size of removals allowed:
  - ✓ removal of one SEA Protected Tree<sup>8</sup> is allowed through Ministerial SEA Review; but
  - ✓ the tree to be removed cannot be a Heritage Tree.

A development that can comply with this requirement for protected trees and all other Development Standards requires only the Ministerial SEA Review. Any impacts to SEA Protected Trees beyond that allowed by the Development Standard require either a Protected Tree Permit or a SEA CUP (TABLE 1).

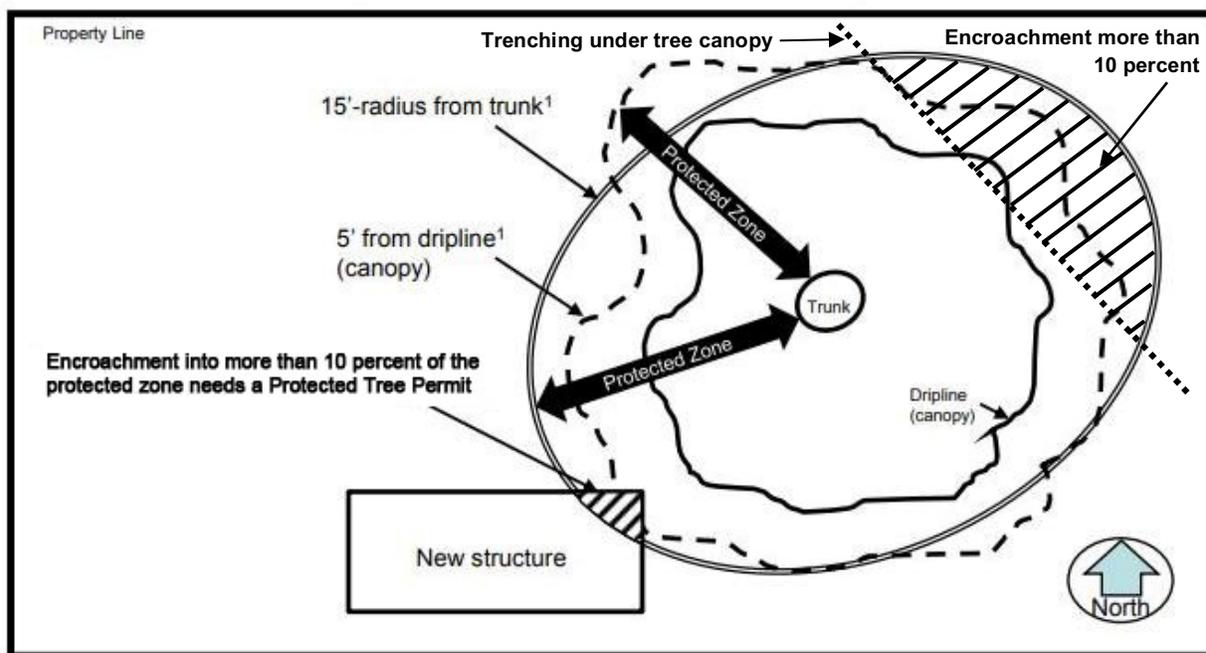


Figure 10. Any development (including but not limited to structures, walls, fences, grading, paving, irrigation, landscaping, decks, storage, and parking) must be located outside the tree protected zones of all SEA Protected Trees. When determining whether there is an encroachment, consider the protected zones of both protected trees on the subject property and those outside the property, including within the public right of way.

<sup>8</sup> Oak trees may require additional application materials for an Oak Tree Permit.

## PROTECTED TREE PERMIT

If a development is able to meet all Development Standards except for impacts to SEA Protected Trees, it may be able to obtain a Protected Tree Permit (“PTP”) and proceed with the Ministerial SEA Review. All PTPs will have a corresponding Ministerial SEA Review, since the Ministerial SEA Review process will determine that all other Development Standards are met and identify the need for a PTP. A PTP may be obtained for pruning of protected trees in excess of that allowed by Exemption N, encroachments of up to 30% of the TPZ for any number of protected trees, and/or removal of two (non-heritage size) protected trees, provided that such activity can meet the findings and burden of proof. Removal of more than two SEA Protected Trees or removal of any Heritage Tree requires an SEA CUP.

### A PROTECTED TREE PERMIT (PTP) IS REQUIRED WHEN...

the development is able to meet all development standards, except for the SEA Protected Trees development standard, and the impacts to SEA Protected Trees include one or more of the following:

- ✓ Pruning of branches greater than two-inches diameter;
- ✓ Pruning in excess of 25% of live foliage;
- ✓ Encroachments up to 30% of the protected zone; or
- ✓ Removal of up to two trees that are not designated as Heritage Trees.

### APPLICATION MATERIALS

The PTP will follow the Type II Review process. The application materials for PTPs include:

1. Standard application materials for Type II Review
2. Protected Tree Report prepared by a qualified arborist or resource specialist, which includes:
  - ✓ a tree survey map;
  - ✓ descriptions of all existing SEA Protected Trees on the subject property and any potentially impacted SEA Protected Trees adjacent to the subject property;
  - ✓ evaluation of existing health and potential impacts of development for each SEA Protected Tree;
  - ✓ identification of all SEA Protected Tree removals and encroachments; and
  - ✓ recommendations for avoiding, minimizing, and/or mitigating SEA Protected Tree impacts<sup>9</sup>.

*Oak tree species may require additional application materials for an Oak Tree Permit.*

### MITIGATION & MONITORING

Removal of any SEA Protected Tree will require mitigation in the form of two replacement plantings. Replacement trees should be seedlings of the same species being removed, and should be planted in an area of the project site where there is suitable habitat and where the trees will be able to remain in perpetuity. Undersized, naturally sprouted trees of the same species growing on-site may be protected as

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<sup>9</sup> If replacement plantings are required for mitigation of tree removals, recommendations for planting and maintaining these plantings should be included in the report as well. Proposed locations for the replacement plantings should be shown on the tree survey map or site plan.

mitigation trees. The replacement trees will need to be nurtured and maintained in a healthy condition, and will be monitored. If any of the replacement plantings fail during the monitoring period of seven years, the applicant will be responsible for replanting and nurturing those new trees.

Protected Tree Permits for encroachments or excessive pruning will require monitoring of those impacted trees for a period of seven years. The County Biologist or a Forester with the Fire Department will conduct a minimum of three monitoring visits during that seven year period, with visits occurring in years two, four, and seven. If, at any time during the monitoring period, the County Biologist or Forester detects a noticeable decline in the tree's health, they will make recommendations regarding actions that should be taken to improve the tree's condition. If the tree continues to suffer unacceptable decline of health and vigor or is found to be dead at the end of the monitoring period, the applicant will be required to mitigate that loss by planting two replacement trees (for each tree lost). The decline of health and vigor determination will be based on the County Biologist or Forester's field knowledge, International Society of Arboriculture references, and seasonal anomalies.

**TABLE 1. SEA PROTECTED TREES PERMIT REQUIREMENTS**

	<b>IMPACT</b>	<b>PERMIT</b>	<b>MITIGATION</b>
<b>Pruning</b>	Up to 25%; ≤ 2-inch branch diameter	Exempt	None
	More than 25%; > 2-inch branch diameter	Protected Tree Permit	Monitoring – 7 years
<b>Encroachment</b>	Up to 10%; maximum 4 trees	Ministerial SEA Review	None
	Up to 30%; any number of trees	Protected Tree Permit	Monitoring – 7 years
	More than 30%	Processed as Removal (see below)	
<b>Removal</b>	1 tree (under heritage size)	Ministerial SEA Review	None
	2 trees (under heritage size)	Protected Tree Permit	2:1
	More than 2 trees	SEA CUP	Determined through discretionary review
	Heritage Trees	SEA CUP	

### PROTECTED TREE FUND

If the County Biologist or Forester determines that replacement plantings on the project site is inappropriate (e.g. no adequate locations for plantings exist), they may recommend that the applicant pay into the Protected Tree Fund instead. The amount to be paid into the fund would be an amount equivalent to the resource value of the trees described in the Protected Tree Report. The resource value of the trees will be calculated according to the most current edition of the International Society of Arboriculture's "Guide for Plant Appraisal", and approved by the County Biologist or Forester. The applicant should consult with a qualified arborist or resource professional in calculating the value of SEA Protected Trees.

The Protected Tree Fund will be used for projects related to native tree and woodland establishment and protection, including planting, establishing, and maintaining native trees on public lands, purchasing native tree woodlands, and/or purchasing sensitive native trees of ecological, cultural, or historic significance. Up to twenty percent of the funds collected may be used to study and identify appropriate programs for use of the fund. Programs can include for outreach and educational purposes.

## SEA CUP FOR IMPACTS TO SEA PROTECTED TREES

Any development that will remove a Heritage Tree or will remove more than two non-heritage size SEA Protected Trees will require an SEA CUP. Mitigation and monitoring for such removals will be determined as part of the discretionary SEA CUP review and included as conditions of approval in the permit. Mitigation and monitoring requirements for SEA CUPs should meet or exceed the mitigation and monitoring requirements of the PTP.

## BEST MANAGEMENT PRACTICES

The following are recommended best practices for properly caring for trees in SEAs.

### DEAD AND FALLEN TREES

Dead and/or fallen trees provide habitat for a host of flora and fauna, and contribute to the nutrient cycling of an ecosystem. Therefore, when occurring outside of the development footprint (which includes fuel modification areas), dead and/or fallen trees should be left in place to serve their purpose as a natural part of the habitat. Removal of a tree which has fallen naturally and/or the felling and subsequent removal of standing, certifiably dead trees is considered development and may require a SEA permit or Protected Tree Permit. An exemption for emergency removal may be obtained if a visual inspection by a Forester with the Fire Department determines removal is necessary due to a hazardous or dangerous condition (e.g. disease, potential for spreading infestation to other trees, blocking public roadways, etc.). Any emergency removal of infested, dead, or fallen trees which have been shown to have a disease or infestation should follow proper Best Management Practices for tree removal and disposal.

### IRRIGATION

Spray-type irrigation systems should not be used within a tree's protected zone and water should never be sprayed against the trunk of a native tree. Continuously wet soil near the root crown (the area where the tree trunk meets the soil surface) favors the growth of tree pests that lead to rot and disease.

### NESTING BIRDS

Proposed project activities (including, but not limited to, tree removal, maintenance, and/or construction activities) should occur outside of the avian breeding season ("nesting bird season") to avoid take of birds or their eggs. Nesting bird season generally runs from February 1 to August 31, but may start as early as January 1 for some raptors. Take means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill (Fish and Game Code Section 86), and includes take of eggs or young resulting from disturbances which cause abandonment of active nests. Depending on the avian species present, a qualified biologist may determine that a change in the breeding season dates is warranted.

If avoidance of the avian breeding season is not feasible, a qualified biologist with experience in conducting breeding bird surveys should conduct nesting bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 500 feet of the disturbance area. Depending on the habitat present and the magnitude of disturbance to take place, the biologist may recommend weekly surveys to be conducted over a 30-day period, two surveys to be conducted within one or two weeks prior to disturbance, or a single survey to be

conduct within three days of disturbance. Regardless of the number of surveys conducted, the last survey should always be conducted no more than three days prior to the initiation of project activities.

If a protected native bird is found, the project proponent may delay all project activities within 300 feet of on- and off-site suitable nesting habitat (or within 500 feet for suitable raptor nesting habitat) until August 31. Alternatively, the qualified biologist may continue the surveys in order to locate any nests. If an active nest is located, project activities within 300 feet of the nest (within 500 feet for raptor nests) or as determined by a qualified biological monitor, should be postponed until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting.

For more information on bird-friendly tree maintenance, refer to Los Angeles Audubon's "Guide to Bird-Friendly Tree and Shrub Trimming and Removal", available online at: [planning.lacounty.gov/site/sea/resources](http://planning.lacounty.gov/site/sea/resources).

### TREE TRIMMING OR PRUNING

Be careful not to excessively and inappropriately trim native trees. Removal of live tissue for ornamental or aesthetic purposes alone is not appropriate for SEA Protected Trees. Over trimming results in trees that are less healthy and more vulnerable to pests and disease, and reduces the amount of habitat available for birds and other wildlife. The amount of live foliage that can be removed while maintaining a healthy tree depends on a variety of factors, such as the tree's size, species, and age. Younger trees tolerate more pruning than mature trees. Generally, no more than 25% of a tree's live foliage should be removed at once – less for mature trees. Removing even a single, large limb can result in significant canopy loss and can create a wound that the tree may not be able to close, leaving it vulnerable to pests and disease. This is especially true for mature trees that are already impacted by drought, development, or other stressors, or if the pruning is done improperly or at the wrong time of year. For this reason, pruning of branches two-inches or more in diameter is prohibited without a Protected Tree Permit.

With the exception of periodic removal of dead wood, most native trees require very little pruning. Dead wooding, which refers to the removal of dead tissue in the tree canopy, may be performed without a permit. Pruning of branches with major defects, such as decay, cavities, cracks, physical imbalance, fire damage, disease, or insects, that pose a threat to the safety of persons or property, or to the continued well-being of the tree, should follow standards endorsed by the International Society of Arboriculture.

It is always recommended to consult with a certified arborist, licensed landscaper, or qualified tree trimmer who knows and cares about tree health before pruning or trimming native trees. For more information on proper tree pruning and maintenance, visit the International Society of Arboriculture website at: [www.treesaregood.org/treeowner/pruningyourtrees](http://www.treesaregood.org/treeowner/pruningyourtrees).

### PROTECTED TREE PERMIT AND OAK TREE PERMIT

When oak trees of regulation size (8-inch DBH or more) per the Oak Tree Permit are impacted along with other SEA Protected Trees, the oak trees shall be counted as SEA Protected Trees. The Oak Tree Permit required for the regulation size oak trees shall be folded into and processed through either a Ministerial SEA Review, Protected Tree Permit, or SEA CUP, depending on the impacts. No accompanying Oak Tree Permit will be required in these instances.