

## Tree Protection Ordinance (TPO) EXHIBIT A

### SECTION 26-04-020 (P) DEFINITIONS

12. Protected Perimeter. ~~The~~ A protected area surrounding a protected tree drip-line, the radius of which is at least 1.5 times the distance from trunk to outermost extent of canopy.

13. Protected Tree. ~~Any of the~~ The following tree species and any natural hybrids of these tree species are considered protected tree species:

- 1) Hardwoods: Big Leaf Maple (*Acer macrophyllum*), Black Oak (*Quercus kelloggii*), Blue Oak (*Quercus douglasii*), Boxelder (*Acer negundo*), California Black Walnut (*Juglans californica*), California Buckeye (*Aesculus californica*), Canyon Live Oak (*Quercus chrysolepis*), Coast Live Oak (*Quercus agrifolia*), Cottonwood species (*Populus fremontii*, *P. trichocarpa*), Interior Live Oak (*Quercus wislizenii*), Madrone (*Arbutus menziesii*, ~~Oracle Oak *Quercus morehus*~~), Oregon Ash (*Fraxinus latifolia*), Oregon Oak (*Quercus garryana*), Red or White Alder (*Alnus rubra*, *A. rhombifolia*), Valley Oak (*Quercus lobata*), Willow species (*Salix laevigata*, *S. lucida*)
- 1)2) Softwoods: Cypress species (*Hesperocyparis macrocarpa*, *H. macnabiana*), Grand Fir (*Abies grandis*), Pine species (*Pinus attenuata*, *P. contorta*, *P. lambertiana*, *P. muricata*, *P. ponderosa*, *P. sabiniana*), Redwood (*Sequoia sempervirens*, ~~Valley Oak *Quercus lobata*~~, California Bay Umbellularia-california and their hybrids.), Western Hemlock (*Tsuqa heterophylla*)

Sec.

## SECTION 26-88-010(M) TREE PROTECTION PROTECTION ORDINANCE

~~(m) Tree Protection Ordinance.~~

### A. General Provisions. Projects

1. Defined terms. As used in this Sec. 26-88-010.M:
  - a. A reference to “this ordinance” is to Sec. 26-88-010.M.
  - b. A reference to a “subsection” is to a subsection (A-E) of this ordinance, unless otherwise specified.
  - c. “Housing development project” shall be defined as provided in Government Code, Sec. 65589.5(h).
  
2. The intent of this ordinance is to:
  - a. Support essential community and ecosystem functions of trees by requiring their protection and requiring mitigations for their removal; and
  - b. Facilitate hazard reduction, forest health, and property maintenance by exempting qualifying activities from permits or mitigations.
3. Except as otherwise provided in this ordinance, land uses shall be designed to minimize/avoid the destruction of protected trees. With development permits,
4. Permit requirement.
  - a. Unless a use permit is required per subsection A.4.b. or an exemption applies under subsection B, a ministerial zoning permit is required for removal of protected trees.
  - b. Unless an exemption applies under subsection B, a use permit is required for the following:
    1. removal of redwoods with single stem d.b.h. exceeding 48”
    2. removal of oaks and other hardwoods with single stem d.b.h. exceeding 36”.

Use permits for large tree removal shall not be approved unless the decision maker makes the findings required by Section 26-92-080, mitigation is provided for as described in subsection E of this ordinance, and the tree removal is done in a manner that is in support of the intent of this ordinance.
5. A permit application for removal of protected trees shall:
  - a. Include a site plan shall for that parcel that (1) identifies the area of the parcel that encompasses the protected perimeter of protected trees proposed for removal, and (2) within that area additionally identifies the following:
    1. Protected trees greater than six inches (6”) diameter at breast height (d.b.h.) proposed for removal or retention; and
    2. Existing and proposed structures, including agricultural and residential accessory structures; and



with the requirements and restrictions of state law, including Public Resources Code section 4291.

3. Fire risk reduction activities that results in protected tree removal when the activity or tree removal is documented to be directed, ordered, overseen, recommended, or approved by the public agency having fire protection responsibility for the area. This includes prescribed or cultural burning projects. Nothing in this section is intended to modify the applicability of Section 26-02-070 of Chapter 26, related to applicability of Chapter 26 to governmental units.
  4. Fire risk reduction activities that results in protected tree removal when the activity or tree removal is undertaken by the County, CAL FIRE, or other public agencies. This includes prescribed or cultural burning projects. Nothing in this section is intended to modify the applicability of Section 26-02-070 of Chapter 26, related to applicability of Chapter 26 to governmental units.
  5. Protected tree removal authorized by a plan, program, project, or entitlement subject to direct oversight of the tree removal work by a governmental agency.
- ii. Emergency Operations. Protected tree removal or activities that may result in protected tree removal undertaken by public agencies during emergency operations or in post-disaster remediation. Nothing in this section is intended to modify the applicability of Section 26-02-070 of Chapter 26, related to applicability of Chapter 26 to governmental units.
- iii. Hazardous, Dead, Dying, or Diseased Trees.
1. Removal of a hazardous, dead, dying, or diseased protected tree is exempt from this ordinance if either of the following criteria are met:
    - a. The removal of the hazardous, dead, dying, or diseased protected tree occurs inside the defensible space zone of a structure, as defined by County Code Chapter 13A and state law applicable to defensible space; or
    - b. The removal of the hazardous, dead, dying, or diseased protected tree occurs outside of the defensible space zone of a structure, and (1) the tree is within striking distance of a structure, (2) the tree creates a potential health and safety hazard due to the risk of the tree falling, and (3) the tree is

structurally unstable, and the structural instability cannot be remedied.

2. Removal of a hazardous, dead, dying, or diseased protected tree that would otherwise require a use permit for tree removal, requires a ministerial zoning permit, and is otherwise exempt from subsection E, "Required mitigations for removal of protected trees," of section 26-88-080(M), if the following criteria are met:

a. The hazardous, dead, dying, or diseased tree is over 36" dbh;

b. Tree removal will occur outside of the defensible space zone of a structure as defined by County Code Chapter 13A and state law applicable to defensible space;

c. The permit application demonstrates that a certified arborist or Registered Professional Forester has determined that the tree removal is necessary to protect life or property from the threat of harm caused by the tree.

3. The removal of a hazardous, dead, dying, or diseased protected tree subject to a ministerial zoning permit is exempt from subsection E, "Required mitigations for removal of protected trees," of this ordinance, if the following criteria are met:

a. The permit application includes a written determination by a certified arborist or Registered Professional Forester that concludes that the tree removal is necessary to protect life or property from the threat of harm caused by the tree.

4. An application for a permit for removal of the hazardous, dead, dying or diseased trees required by this ordinance may be submitted that depicts the location of all protected trees greater than nine inches (9") and their protected perimeters in areas that will be impacted by the proposed development, within 30 days after hazardous tree removal, where immediate removal was necessary for public health or safety reasons.

5. The Director may waive standards that are otherwise applicable to a permit application for removal of a hazardous, dead, dying, or diseased protected tree, upon findings that such as the building envelopes, access roads,

~~leachfields, etc. Lot line adjustments, zoning permits and agricultural uses are exempt from this requirement. The provisions of this section shall not apply to trees which waiver is necessary to comply with subsection A. subdivision 6 of Section 26-88-080(M).~~

**2. Stewardship and Resource Management Exemption.**

1. Resource conservation, restoration, or enhancement projects. Protected tree removal for soil, water, wildlife, or other resource conservation, restoration, or enhancement projects where a public agency takes full responsibility for the work or has approved or funded the work. Nothing in this section is intended to modify the applicability of Section 26-02-070 of Chapter 26, related to applicability of Chapter 26 to governmental units.
2. Removal of protected trees provided for in a County approved Oak Woodland Management Plan, or Forest Management Plan, Natural Communities Conservation Plan, Habitat Conservation Plan, Streamside Conservation Plan or similar conservation management plan as determined by the Director.

**3. Forest Management Activities Exemption.** Removal of protected trees is exempt from this ordinance if it meets any of the following criteria:

- i. Timber Harvest. The tree removal occurs as part of activities that are the subject of a valid timber harvesting permit approved by the state of California. This section shall not be applied in a manner that would reduce allowable density lower than that permitted as a result of C.E.Q.A. or by other county ordinances or render a property undevelopable. To achieve this end, adjustments may be made.State of California;
- ii. Timber Management. The tree removal occurs as part of activities that meet the definition of Timber Management on RRD or TP zoned parcels; or
- iii. Forestry Activities.
- iv. The tree removal occurs as part of activities defined in California Public Resources Code Sections 750 through 781 as forestry conducted on forested landscapes overseen by a Registered Professional Forester.

**4. Pest Control Exemption.** The protected tree removal occurs as part of selective vegetation removal that is part of an integrated pest management program administered by a state licensed Pest Control Advisor.

**5. Maintenance of Existing Agricultural uses-Activities Exemption.** Unless otherwise specified, the following are exempt from the tree protectionthis ordinance-are-:

- i. Removal of protected trees no more than necessary to maintain existing grazing, livestock management, or similar agricultural production, not involving cultivation or structures, means: (1) maintenance of existing access roads; (2) maintenance of associated infrastructure; (3) activities necessary to maintain agricultural use of the existing agricultural operation. The intentional clearing of protected trees for the purposes of establishing new grazing or livestock areas is not exempt.
- ii. Removal of protected trees no more than necessary to maintain an existing cultivated agricultural crop area, as follows: ~~the raising, feeding, maintaining and breeding of confined and unconfined farm animals, commercial aquaculture,~~(1) maintenance of existing access roads; (2) maintenance of drainage or drainage infrastructure; (3) maintenance of irrigation or irrigation infrastructure; (4) activities necessary to maintain ~~commercial mushroom farming, wholesale nurseries, greenhouses, wineries and agricultural use of the existing agricultural crop cultivation-~~ area, including planting, seeding, fertilizing, weeding, tree trimming, and harvesting.
- iii. Protected tree removal is not exempt from this ordinance if it is for the expansion of existing cultivation areas or the establishment of new cultivation areas into land not used for agricultural crop cultivation at the time this provision became effective, and no other exemption applies.

**6. Property Maintenance Exemption.** Unless otherwise specified, the following are exempt from this ordinance:

- i. Residential maintenance activities. Protected tree removal no more than necessary for residential maintenance activities associated with a legally established residential structure or residential use, including maintenance of residential structures, fences, residential well and septic systems, and outdoor spaces used in conjunction with a residence, such as paths, yards, gardens, and landscaping.
- ii. Nuisance trees. Removal of a protected tree if it is or creates a nuisance. For the purpose of this exemption, nuisance means causing damage to improvements, such as but not limited to building foundations, retaining walls, roadways/driveways, patios, paths, sidewalks and decks, pipes, utility conduits, or otherwise interfering with the operation, repair, replacement or maintenance of public or private utilities.
- iii. Septic. Protected tree removal to allow an existing on-site sewage disposal system that poses a threat to human health or safety to be repaired or replaced, so long as no alternative option exists

that would both cure the threat to human health and safety and avoid the protected tree removal.

~~A.C. Construction Standards. Applicants are encouraged to use a qualified specialist to establish tree protection methods.~~ Development permit applications proposing a project or activity involving disturbance on or within the protected perimeter of retained protected trees shall be subject to the following construction standards, unless the Director waives one or more standards and makes findings consistent with section 26-88-010(M), subsection A, subdivision 6:

~~(1)~~ —

1. Protected trees, their protected ~~perimeters~~perimeter and whether they are to be retained or removed are to be clearly shown on all improvement plans. A note shall be placed on the improvement plans that "Construction is subject to requirements established by Sonoma County to protect certain trees."
2. ~~(2)~~ Before the start of any clearing, excavation, construction or other work on the site, every tree designated for protection on the approved site plan shall be clearly delineated with a substantial barrier (steel posts and barbed wire ~~or~~, chain link fencing, orange construction fencing, or other exclusionary barrier) at the protected perimeter, or limits established during the permit process. The delineation markers shall remain in place for the duration of all work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of brush, earth and other debris as to avoid injury to any protected tree.
3. ~~(3)~~ Where proposed development or other site work must encroach upon the protected perimeter of a protected tree, special measures shall be incorporated to allow the roots to obtain oxygen, water and nutrients. Tree wells or other techniques may be used where advisable. No changes in existing ground level shall occur within the protected perimeter unless a drainage and aeration scheme approved by a certified arborist is utilized. No burning or use of equipment with an open flame shall occur near or within the protected perimeter (except for authorized controlled burns).
4. ~~(4)~~ No storage or dumping of oil, gasoline, chemicals or other substances that may be harmful to trees shall occur within the ~~drip line~~protected perimeter of any tree, or any other location on the site from which such substances might enter the ~~drip line~~protected perimeter.
5. ~~(5)~~ If any damage to a protected tree should occur during or as a result of work on the site, the county shall be promptly notified of such damage. If a protected tree is damaged so that it cannot be preserved in a healthy state, the planning director shall require replacement in accordance with the arboreal value chart. If on-site replacement is not feasible, the applicant shall pay the in-lieu fee to the tree replacement fund.

~~(6) The following design standards for~~ **D. General Development Provisions.** Development removing protected trees shall be adhered~~adhere~~ to: the following.

1. ~~(i)~~—Underground trenching for utilities ~~should~~shall avoid tree roots within the protected perimeter. If avoidance is impractical, tunnels should be made below major roots. If tunnels are impractical and cutting roots is required, it shall be done by hand-sawn cuts after hand digging trenches. Trenches ~~should~~shall be consolidated to serve as many units as possible.
  2. ~~(ii)~~—Compaction within the ~~drip line~~ or protected perimeter shall be avoided.
  3. ~~(iii)~~—Paving with either concrete or asphalt over the protected perimeter should be avoided. If paving over the protected perimeter cannot be avoided, affected trees shall be treated as removed for purposes of calculating arboreal values.
  4. ~~(iv)~~—Wherever possible, septic systems and/or leachlines shall not be located on the uphill side of a protected tree.
  5. ~~(7)~~—An application for a development permit that proposes removal of one or more protected trees, or that would impact a protected tree, shall demonstrate that no feasible options are available to avoid removal or impacts to protected trees.
- 5.6. Security posted for the purpose of insuring the proper construction of public or private improvements shall also include an amount sufficient to secure any requirements imposed pursuant to this section. In addition, security for potential tree damage shall be twenty-five percent (25%) of the amount posted for planned tree replacement. In lieu fees shall be paid prior to recording any maps. Such security shall not be released until protection requirements, including planting replacement trees, and any long term maintenance requirements have been satisfactorily discharged. The initial bond amount may be reduced to cover only the maintenance and replacement of trees after construction is completed.
- 6.7. ~~(8)~~—The Valley Oak-*Quercus lobata* shall receive special consideration in the design review ~~process~~and other discretionary permit processes to the extent that mature specimens shall be retained to the fullest extent feasible. Valley Oaks contribute greatly to Sonoma County's visual character, landscape, habitat, carbon sequestration and they provide important visual relief in urban settings. On existing parcels created without the benefit of an accompanying EIR, ~~design~~-review shall focus on the preservation of Valley Oaks to the fullest extent feasible. Where such preservation would render a lot unbuildable, partial protection with accompanying appropriate mitigations developed by a certified arborist shall be incorporated into the project design. In such cases where only partial protection can be achieved, full replacement in accordance with the arboreal value chart shall be required.

Arboreal Value Charts. ~~One of the following charts is to be used for determining arboreal values. The applicant shall indicate at time of application which chart is to be used. Chart No. 1 requires analysis to be done only in the development areas (building envelopes, access roads, etc.) and requires one hundred percent (100%) replacement or in-lieu fees. Chart No. 2 requires analysis of the entire site but allows for removal of up to fifty percent (50%) of the arboreal value. Compensation for the loss of greater than fifty percent (50%) arboreal value will require replacement by using the chart.~~

**E. Required mitigations for removal of protected trees.**

Unless otherwise exempt, the removal of protected trees is subject to required mitigation, which shall be provided through tree replacements or in-lieu payment, consistent with the options provided in this subsection E.

1. Option 1. Tree Replacement Using Arboreal Value Chart No. 1
2. Option 2. In-lieu Payment. The following in-lieu payments apply:
  - a. For tree removal requiring a Use Permit for the removal of redwoods with a single stem 48" DBH or larger or the removal of protected hardwoods with a single stem 36" DBH or larger, payment amount shall be determined using a methodology for tree replacement cost contained in the most recent version of "Guide for Plant Appraisal" published by the Council of Tree and Landscape Appraisers or an alternative methodology of common practice acceptable to the applicable decision maker issuing the permit. Appraisal of cost shall be conducted by a qualified professional certified or licensed to make such determinations.
  - b. For protected tree removal not subject to the Use Permit requirements for the removal of redwoods with a single stem 48" DBH or larger or the removal of protected hardwoods with a single stem 36" DBH or larger, the in-lieu payment shall be \$510 per arboreal value point as determined by Arboreal Value Chart No. 1.

**Arboreal Value Chart No. 1: To Be Used For Measuring Protected Trees Removed Only in The Development Areas Proposed for Removal**

EXPAND

<u>d.b.h.<sup>4</sup> (inches)</u>	<u>Removed Trees</u>	<u>Weighted Value</u>	<u>Arboreal Value</u>
<u>9-15-6-12</u>		1	
<u>over 15-21-12-18</u>		2	
<u>over 21-27-18-24</u>		3	

<sup>4</sup> d.b.h. (diameter at breast height, four and one-half (4 ½) feet above ground) can be calculated by measuring the circumference of the tree and dividing by 3.14 or pi.

d.b.h. <sup>4</sup> _(inches)	Removed Trees	Weighted Value	Arboreal Value
over <del>27-33</del> <u>24-30</u>		4	
<u>Over 30-36</u>		<u>5</u>	
over <del>33-36</del> <u>42</u>		<u>5-6</u>	
<p><u>Weighted values for trees that exceed the preceding size classes shall be based on the same increment established in this table (i.e. one additional weighted value point per 6" step in dbh.) For example, a tree with d.b.h. of over 48" to 54" shall have a weighted value of 8</u></p>			

Total        Arboreal Value       

~~This~~The arboreal value (the A.V.) is used to calculate the replacement number ~~-~~ or in-lieu fee payment.

**Chart No. 2 Complete Site Analysis.**

a.  To Be Used For Measuring Existing Trees On The Entire Site.

d.b.h.* (inches)	Existing Trees	Weighted Value	Existing Arboreal Value
9-15		1	
over 15-21		2	
over 21-27		3	
over 27-33		4	
over 33		5	

Total       

b.  To Be Used For Measuring Trees To Be Removed.

d.b.h.* (inches)	Removed Trees	Weighted Value	Removed Arboreal Value
9-15		1	
over 15-21		2	
over 21-27		3	
over 27-33		4	

over 33		5	
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\* d.b.h. (diameter at breast height, four and one half (4 ½) feet above ground) can be calculated by measuring the circumference of the tree and dividing by 3.14 or pi.

Total \_\_\_

Subtract the removed arboreal value from the existing arboreal value. If the removed arboreal value is more than fifty percent (50%) of the existing arboreal value, the developer must replace the difference between removed arboreal value and fifty percent (50%) of existing arboreal value using the arboreal valuations.

An applicant utilizing mitigation plantings shall (1) submit a plan that identifies the location of mitigation plantings on-site, off-site, or on a combination of on- and off-site locations; (2) submit a plan for monitoring of replacement plantings for survival; and (3) where off-site mitigation plantings are planned, in whole or part, submit evidence acceptable to the Director that suitable on-site locations are not available. Where mitigation plantings are utilized, and off-site planting is permitted, off-site locations that are geographically close to the on-site location of tree removal are encouraged.

Arboreal Valuations. All trees to be replaced shall be the same native species as that removed unless specific approval has been granted by the ~~planning director~~ Director or the Agricultural Commissioner.

-1 point A.V.                    = ~~\_\_\_~~ six 5-gallon trees (can be existing trees on site that are below 96" d.b.h. if preservation methods are part of ~~the~~ a development permit)

~~\_\_\_~~ two 15-gallon trees\*\*  
= \$510 in-lieu fee

2 points A.V.                    = ~~\_\_\_~~ \$200 in lieu fee\*\*\*  
= 24" Box Tree\*\*  
= ~~\$400~~ 1,020 in-lieu fee\*\*\*

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\*\* The large trees must come from nurseries where they have been irrigated. They must have on-site irrigation to insure their survival.

\*\*\* Annual average retail cost can be changed to reflect cost increases.

Replacement trees may be located on residentially zoned parcels of at least one and one-half acres and on any commercial or industrial zoned parcel, regardless of size, where feasible. Where infeasible, they may be located on public lands or maintained private open space. Monitoring shall be required for a period of seven years to ensure that trees have survived. An annual report shall be prepared and

submitted by the applicant to the Department identifying the status of mitigation plantings' survival.  
Any mortality that occurs during the reporting period shall be replaced.

In-lieu fees ~~may~~will be used to acquire and protect stands of native trees in preserves or place trees on public lands.

## SECTION 26-65 RC RIPARIAN CORRIDOR COMBINING ZONE

### Sec. 26-65-040. ~~Allowed land uses, activities and permit requirements.~~

The following activities and uses may be allowed within a streamside conservation area, if allowed by the base zone and any combining zones, subject to any required permits and the standards specified in this section. These activities and uses shall also be conducted and maintained in compliance with any prohibitions, permits, approvals, or authorizations required by applicable resource agencies.

...

C. ~~\_\_\_\_\_~~ Invasive plant removal, such as, but not limited to, Himalayan blackberry (*Rubus armeniacus*), giant reed (*Arundo donax*), salt cedar (*Tamrix sp.*), and star thistle (*Centaurea solstitialis*), not exceeding five (5) acres in disturbed area, principally involving hand labor and not using mechanized equipment.

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O. ~~\_\_\_\_\_~~ Tree removal, subject to a zoning permit, to protect life or property from the threat of harm posed by a dead, dying, diseased, or damaged tree likely to die within one (1) year of the date proposed for removal, or a tree at risk of falling when the structural instability cannot be remedied. A report by a certified arborist or registered professional forester documenting the hazardous condition and a tree replacement plan is required. Tree removal shall be conducted in such a manner as to protect the functions and values of the riparian corridor. No stumps shall be removed, unless the report concludes that retaining the stump poses a hazard, and that it can be removed without resulting in erosion or sedimentation in the riparian corridor.

### Sec. ~~SECTION 26-88-140. Minor timberland conversions.~~ **MINOR TIMBERLAND CONVERSIONS**

- a. All minor timberland conversions shall require a ~~zoning~~ use permit. Notice of the permit shall be mailed to all owners of real property as shown on the latest equalized assessment roll within three hundred feet (300') of the subject property and posted in at least three (3) public places on or near the subject property at least ten (10) days prior to issuance of the permit. The notice shall include an explanation of the procedure to appeal issuance of the permit. In addition to such other plans and data as are necessary to determine compliance with this chapter, the application for the permit shall be accompanied by all of the following...

...

- ~~(e).~~ All minor timberland conversions shall ~~minimize~~ avoid damage to soils, residual trees, young growth, and other vegetation, and prevent erosion and damage to neighboring properties.

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~~Sec.~~ **SECTION 26-88-160** Major timberland conversions. **MAJOR TIMBERLAND CONVERSIONS**

~~This section establishes standards for major timberland conversions.~~

- b. Permitted Use, Zoning Districts. Except as otherwise provided in subsection (b) of this section, major timberland conversions shall be a use permitted with a use permit in the RRD, ~~RRDWA~~, and TP zoning districts, and a permitted use in all other zoning districts. Major timberland conversions may convert timberland to any permitted use or use permitted with a use permit in all zoning districts, except for the TP zoning district. In the TP zoning district, major timberland conversions may be undertaken only to convert timberland to a permitted use or use permitted with a use permit that does not significantly detract from the use of the property for, or inhibit, timber production.

...

- c. ~~(e)~~ —Application Requirements. The use permit application for a major timberland conversion shall include all of the information and materials required by Section 26-92-170, and, ~~where the California Department of Forestry and Fire Protection is the lead agency,~~ the timberland conversion permit, and timber harvesting plan, ~~and environmental documents approved by that agency~~ the California Department of Forestry and Fire Protection for the proposed major timberland conversion—...