

The following Oak Woodland Mitigation Program is based on Tuolumne County draft language that has been modified by California Oak Foundation to coincide with current oak woodland conditions. This program represents a template to formulate oak woodland mitigation measures for all California counties containing blue oak woodland or valley oak trees. Counties where coast live oak is a dominant oak woodland species may require additional measures.

OAK WOODLAND MITIGATION PROGRAM

Purpose

State law directs the County to determine the significance of impacts to native oak woodlands and when appropriate, to mitigate those impacts. Public Resources Code (PRC) Section 21083.4 requires the County to determine whether projects “may result in a conversion of oak woodlands that will have a significant effect on the environment.” When it is determined that such a project may have a significant effect, specific California Environmental Quality Act (CEQA) mitigation is required. PRC Section 21083.4 mitigation standards apply to all native oak species in the County, except those oaks determined by the California Department of Forestry and Fire Protection to be growing on timberland. The Oak Woodland Mitigation Program has been established to identify and mitigate significant impacts to oak woodlands.

Program Alternative

The program established herein is to be used by land development project applicants to mitigate impacts to oak woodland; project applicants also have the option of contracting with qualified resource professionals to develop alternative mitigation proposals for review and approval by the County and Department of Fish and Game. The alternative mitigation measures must be equivalent or more effective in mitigating potentially significant effects on oak woodland.

Applicability

This program applies to any land development project requiring a discretionary entitlement from the County that is subject to review under CEQA and which will have a potentially significant impact on oak woodland. Oak woodland is defined as project site land where a majority of living trees are native oaks and with 10 percent or greater oak canopy cover.

The 10 percent canopy cover standard applies to the individual stand of oaks and not to the entire project site; consequently, a project site may contain one or more oak woodland. For example, the project site is 1,000 acres but only contains two 50-acre oak stands, one averaging 25 percent canopy cover, the other 35 percent. The project site does not average 10 percent canopy cover per acre but both stands are subject to program mitigation requirements because each 50-acre woodland averages 10 percent oak cover per acre.

Identification of Impacts

Impacts to oak trees and woodlands in the County fall into two general categories, indirect impacts and direct impacts:

Indirect Impacts

Indirect impacts are those impacts to native oaks and associated resources through the on-going disturbance that results from human occupancy and use of oak woodlands. Examples include landscaping, fire clearing around structures, hiking trails, bike paths and disturbance to wildlife from people, pets and automobiles.

Direct Impacts

Direct impacts are those impacts to oak trees and woodland resulting from tree and land clearing associated with land development projects. Examples include grading, clearing, or otherwise modifying land for roads, driveways, building pads, landscaping, utility easements, fire-safe clearance and other development activities. Any project that creates a significant direct impact is deemed to also create a significant indirect impact.

Determination of Impact Significance

Indirect Impacts

A land development project is considered to have a significant indirect impact on oak woodland if it will result in human occupancy and use of oak woodland.

Direct Impacts

1. A land development project is considered to have a significant direct impact on oak woodland if the project will result in more than a 10 percent decrease in native oak canopy within oak woodland on the project site. For example, if an oak woodland contained 50 percent oak canopy cover, removal of more than five percent canopy cover would be considered significant.
2. Impacts to any valley oak. Valley oaks should be retained on the project site and avoided during the development process. Where avoidance is impossible, impacts to such trees is subject to mitigation measures in addition to those for other oaks as provided herein due to the rarity of these trees and woodlands.
3. Impacts to any old growth oak. Old growth oaks should be retained on the project site and avoided during the development process. Where avoidance is impossible, impacts to such trees is subject to mitigation measures in addition to those for other oaks as provided herein due to the high-biological value of these trees and woodlands.

Tree Evaluation Plan

In order to determine the extent of the impact on oak woodland, a tree evaluation plan shall be required by the Planning Department in conjunction with an application for the required discretionary entitlements for a development project. The tree evaluation plan shall identify the location and total acreage of oak woodland on the project site, along with representative samples of the species and sizes of all native oaks five inches or more in diameter at breast height (dbh), except for diameter of blue oak which shall be measured at two-feet (2') above grade (D2').

Mitigation Measures

Indirect Impact Mitigation

Indirect impacts to native oak woodland are considered to be adequately mitigated through the implementation of a seven-year educational program directed at project residents regarding oak tree health and maintenance in an urban environment.

Direct Impact Mitigation

Any one or a combination of the following mitigation measures may be used on the project site or off-site to mitigate the direct impacts on oak resources, except valley oaks and old growth oaks:

1. Conservation Easement and Land Dedication

Protect existing native oak trees on or off the project site from future development through a conservation easement or fee title dedication to a land conservation group approved by the County and the Department of Fish and Game. If the conservation easement or land dedication do not reduce the oak woodland impact to less than significant, additional mitigation measures are required.

Oak woodland offered as mitigation must be configured in such a manner as to best preserve the integrity of the oak ecosystem and minimize the ratio of edge to area. Priority should be given to conserving oak habitat adjacent to existing woodlands under conservation easements, public lands or open space lands. Land proposed as mitigation, when viewed with adjacent existing conservation land, should not result in conserved parcels of less than one acre.

2. In-Lieu Fee

Contribute a fee to the California Wildlife Conservation Board's Oak Woodlands Conservation Fund or other mitigation fund established by the County using the following formula:

Fee = 1.0 x acres of impacted oak woodland x current land value.

All contributions to the state Oak Woodlands Conservation Fund or other mitigation fund shall specify that these moneys will be used to purchase mitigation oak woodlands in the County. An administration fee equal to five percent of the mitigation fee shall also be required to cover the County's costs associated with this option. For land division projects, the in-lieu fee may be prorated among the parcels created and collected at the time of issuance of the first building permit on each parcel. This alternative is subject to approval by the County and Department of Fish and Game.

3. Planting Replacement Trees

Pursuant to PRC Section 21083.4 the planting of oaks shall not fulfill more than 50 percent of the mitigation requirement for the project. Plant and maintain on or off the project site replacement trees on land conserved through a conservation easement or fee title dedication to a land conservation group approved by the County and Department of Fish and Game.

All planted replacement trees must be grown in deep five-gallon containers and the trees shall not have been in the containers for more than two years. Planted trees must be spaced such that they do not compete with one another and they do not compete with established vegetation. This option will require a Tree Planting and Maintenance Plan showing species, size, spacing and location of plantings and the location and species of established vegetation. The plan will be subject to approval by the County and Department of Fish and Game.

Tree planting may be used to restore former oak woodland at a ratio of one acre of oak woodland for every one acre of impacted woodland on the project site. Restoration only applies to lands that should naturally support oak habitat but due to human intervention currently do not support oak woodlands. Restoration should result in species composition and density similar to the project site and appropriate to the restoration site.

Oak trees five-15 inches in diameter, except valley oak, that are impacted by the project shall be replaced with the same species at the following ratios:

4:1 replacement for impacted trees five-10 inches diameter.

5:1 replacement for impacted trees >10-15 inches diameter.

Valley Oak Mitigation

Projects that impact valley oak trees five-15 inches diameter shall comply with all of the following mitigation measures:

1. Avoid valley oak trees to the maximum extent feasible. No more than 25 percent of valley oak trees may be impacted on project sites larger than two acres.
2. For each impacted valley oak that is larger than a seedling (one foot or more in height), five valley oak replacement trees shall be planted on land conserved through a conservation easement or fee title dedication to a land conservation group approved by the County and the Department of Fish and Game. Replacement trees shall be planted on land capable of supporting mature valley oak trees without irrigation.
3. Payment of a fee to the California Wildlife Conservation Board's Oak Woodlands Conservation Fund or other mitigation fund established by the County:

Fee = number of valley oak trees impacted x 0.25 x current land value. An administration fee equal to five percent of the mitigation fee shall also be required to reimburse the County for its expenses associated with this mitigation measure.

Old Growth Oak Mitigation (>15 inches diameter)

Projects that impact old growth oak (OGO) trees shall comply with all of the following mitigation measures:

1. Avoid OGO trees to the maximum extent feasible. No more than 25 percent of the OGO trees on a project site may be impacted.
2. For each impacted OGO tree, except valley oak, ten replacement trees of the same species shall be planted on land conserved through a conservation easement or fee title dedication to a land conservation group approved by the County and Department of Fish and Game.

For each impacted OGO valley oak tree, 15 replacement trees shall be planted on land conserved through a conservation easement or fee title dedication to a land conservation group approved by the County and the Department of Fish and Game.

3. Payment of a fee to the California Wildlife Conservation Board's Oak Woodlands Conservation Fund or other mitigation fund established by the County using the following formulas:

Fee = number of OGO trees impacted x 0.5 x current land value; for OGO valley oak trees:

Fee = number of OGO valley oak trees impacted x 0.75 x current land value. An administration fee equal to five percent of the mitigation fee shall also be required to reimburse the County for its expenses associated with this mitigation measure.

Mitigation Monitoring

In conjunction with the approval of a discretionary entitlement for a land development project that is subject to this Oak Woodland Mitigation Program, a monitoring program shall be established to ensure compliance with the mitigation measures established herein. Oaks planted to replace the impacted trees shall be maintained for seven years from the date of planting in accordance with PRC Section 21083.4. An irrigation system shall be established to regularly

water the trees. Irrigation shall be required for the first five years following planting. The trees should be able to survive without irrigation for the last two years of the seven-year maintenance period.

During the seven-year maintenance period, dead or dying trees shall be replaced with trees of the same species and size in order to achieve an 80% survival rate at the end of the seven-year period. If an 80% survival rate is not achieved at the end of the seven-year period, all dead or dying trees at that time shall be replaced. The mitigation monitoring program shall identify who is responsible for maintaining and replacing trees during the seven-year maintenance period. During the seven-year maintenance period, the condition of the trees shall be monitored by the Planning Department. The property owner or other party responsible for maintaining the replacement trees shall submit an annual report to the Planning Department on or before July 1st of each year documenting the condition of the trees and identifying which trees have been replaced or will need to be replaced. The report shall include photographs of each of the replacement trees to illustrate their condition. A site inspection may be made by the Planning Department to verify the information contained in the report.

An agreement to maintain the replacement trees in accordance with this mitigation monitoring program shall be signed by the owner of the property on which the trees are located and by any other party who has been designated as responsible for maintaining the replacement trees and by the developer if the trees are planted off the project site, and a security shall be provided to the Planning Department in an amount sufficient for the County to maintain and potentially replace the trees for a seven-year period if the responsible party fails to do so. The security may be in the form of a letter of credit, certificate of deposit or other security as approved by the Planning Director. The amount of the security shall be determined by an estimate from a professional landscaper submitted by the property owner or the developer for the cost of maintaining the trees and potentially replacing them over the seven-year maintenance period or in an amount established by the Planning Director after professional consultation.

During the seven-year maintenance period, if the responsible party fails to maintain the replacement trees as required herein, the Planning Department shall be authorized to use the security to fund replacing dead or dying trees or maintenance of the trees. At the end of the seven-year maintenance program, the Planning Department shall conduct an inspection of the replacement trees. If the required 80% survival rate has not been achieved, all dead or dying trees shall be replaced and any funds remaining in the security shall be forfeited. If the required 80% survival rate has been achieved, any funds remaining in the security shall be released.

Program Review

This program should be reviewed periodically by an oversight committee established by the County to ensure that the intent of PRC Section 21083.4 is being met. Review should include an accounting of oak woodlands that have been impacted by development in relation to the oak woodlands that have been conserved, assessment of the effectiveness of the in-lieu mitigation measure, and assessment of the mitigation ratios. Recommendations for changes or revisions to the program should be forwarded to the Planning Department and Department of Fish and Game.

Definitions

The following definitions apply to this program:

Canopy Cover. The area directly under the live branches of the oak trees, defined as a percent of a given unit of land. Pursuant to PRC Section 4793(e), oak trees of any size are counted in calculating oak canopy cover.

Current Land Value. For the purposes of the in-lieu fee, the land value of one acre of agricultural land is established herein as \$_____. On July 1 of each year, this in-lieu fee shall be modified to correspond to the land value of one acre of agricultural land as determined by the County Assessor based upon the sales of parcels no larger than forty (40) acres in size during the previous twelve-month period. As an alternative to paying the fee as established herein, the property owner may submit an appraisal prepared by a qualified professional appraiser approved by the Planning Department providing the current value of one acre of agricultural land based upon the sales of parcels no larger than forty acres in size during the previous twelve-month period.

Diameter. Tree diameter for oaks is measured at 4.5-feet above grade (diameter at breast height/dbh), except the diameter of blue oak which shall be measured at two-feet above grade (D2').

Impacted Tree. An impacted tree is any oak which is removed, pruned, has more than 25% of the tree protection zone impacted or has more than 10% of the area under the drip line impacted by grading, compaction or construction.

Maintenance Period. The maintenance period for all tree planting in this program is seven years and dead and dying mitigation trees must be replaced during this period.

Oak Woodland. Oak woodland is defined as project site land where a majority of living trees are native oaks and with 10 percent or greater oak canopy cover. The 10 percent canopy cover standard applies to the individual stand of oaks and not to the entire project site; consequently, a project site may contain one or more oak woodland.

Old Growth Oak. An old growth oak is any native oak tree that is greater than 15 inches in diameter.

Project Site. Project site is a parcel or parcels of land on which a land development project is proposed.

Tree Protection Zone. The tree protection zone is the area encompassed by one and one-half times the distance from the bole to the outer edge of the tree canopy (drip line).