

2023

OAK WOODLANDS ORDINANCE



Photo: Gordon Long

COUNTY OF
CALAVERAS

WOODLAND MITIGATION ORDINANCE

Purpose

The purposes of the Oak Woodlands Mitigation Ordinance are as follows:

- (1) Mitigate any **significant** direct and cumulative impacts to oak woodlands in conjunction with discretionary project development.
- (2) Address pre-development removal of oaks in conjunction with discretionary projects.
- (3) Retain Heritage Trees **to the greatest extent feasible** because of their scenic, historic, cultural, ecological, and habitat values.
- (4) Leave oak woodlands connected, **when possible**, to retain wildlife corridors and avoid habitat fragmentation.
- (5) Protect oak woodland working landscapes that provide a variety of ecosystem goods and services.

Introduction

Calaveras County contains four of the state's five identified hardwood rangeland habitat types including: (a) Valley Oak Woodlands, (b) Blue Oak/Foothill Pine Woodlands, (c) Blue Oak Woodlands, and (d) Montane Hardwood Forests. California's oak woodlands perform numerous important ecosystem services including scenic beauty, erosion prevention, improving water quality and infiltration, regulating water flow in watersheds, providing habitat for bird and animal species, increasing biodiversity, carbon sequestration, as well as improving soil health. Oaks are healthy for rangelands for many of these same reasons, plus they provide shade for grazing animals and increase soil water storage for a longer "green" period. The decrease in oaks has been attributed to many factors including overgrazing, fire suppression, excessive ground squirrel and gopher activity, invasive species, poor management practices and human development. The California Oak Foundation projects that over 1 million acres of woodland will be lost to development in the upcoming 30 years.

For these reasons, the County of Calaveras must do its part to protect the species by passing an Oak Woodlands Mitigation Ordinance.

In 1996 Calaveras County adopted a resolution (96-284) for the creation of an Oak Woodland Voluntary Management Guidelines. This document remains relevant, and its use is still encouraged.

17.101.010 General Plan Policies Regarding Oak Woodlands Mitigation

- A. Calaveras County General Plan Policy COS 3.5 encourages "preservation of oak woodlands in accordance with state law."
- B. Calaveras County General Plan Policy COS 3.6 provides that conservation easements may be an acceptable means to protect oak woodlands from new development.

- C. Calaveras County General Plan Policy COS 3.9 seeks to preserve and enhance healthy woodlands consistent with state law, reasonable development, and fire safety considerations.
- D. Calaveras County General Plan Implementation Measure COS-4D directs the Planning Department to implement Policies COS 3.5, 3.6, and 3.9 by adopting the statutory oak woodland mitigation measures described in Public Resources Code §21083.4(b)(1)-(3) as well as local mitigation measures pursuant to Public Resources Code §21083.4(b)(4).
- E. The purpose of Implementation measure COS-4D is to facilitate the environmental review process relative to mitigating significant direct and cumulative impacts to oak woodlands in conjunction with discretionary project approval and to address pre-development removal of oaks.
- F. The purpose of this Chapter is to implement General Plan Implementation Measure COS-4D by adopting herein the statutory and local oak mitigation measures that comply with Public Resources Code §21083.4(b)(1)-(4).

17.101.020 Applicability

The provisions of this ordinance shall apply to discretionary projects that result in the removal of oak trees or oak woodlands including disturbance to the Tree Protection Zone (TPZ). The provisions of this ordinance shall not apply to ministerial actions including but not limited to the following:

- A. Hazardous Tree Removal – The removal of trees with structural defects that indicate pending failure as determined by a qualified professional.
- B. Operations subject to the State Forest Practice Act or State Forest Practice Rules including tree removal resulting from a Timber Harvest Plan or Timber Harvest Plan Exemption approved by CAL FIRE.
- C. Vegetation removal required to comply with defensible space requirements set forth in Public Resources Code Section 4290 (Fire Safety Regulations).
- D. Removal of oak canopy through the utilization of State and local fuel reduction programs such as those managed by local Fire Safe Councils and similar organizations.
- E. Requirements under Calaveras County Code Chapter 15.10 (Defensible Space Requirements)

17.101.030 Exemptions

The following are exempt from the requirements of this Chapter:

- A. Projects undertaken pursuant to an approved Natural Community Conservation Plan or approved subarea plan within an approved Natural Community Conservation Plan that includes oaks as a covered species or that conserves oak habitat through natural community conservation preserve designation and implementation and mitigation measures that are consistent with Public Resources Code § 21083.4.

- B. Affordable housing projects for lower income households, as defined pursuant to California Health and Safety Code §50079.5, that are located within an urbanized area, or within a sphere of influence as defined pursuant to Government Code § 56076.
- C. Conversion of oak woodlands on agricultural land that includes land that is used to produce or process plant or animal products for commercial purposes (excluding commercial firewood operations).
- D. The regulatory program of the Fish and Game Commission pursuant to the Fish & Wildlife and Game Code.

17.101.040 Approval Required Prior to Removal

On applicable discretionary projects, unless exempted or not applicable under this ordinance, no oak tree, oak woodland, or portion thereof shall be removed until all the following has occurred:

- A. The project is approved by the decision-making authority.
- B. Compliance with the applicable requirements of this chapter is established and as otherwise required in the conditions of approval.
- C. The Planning Department has issued a letter to proceed.

Violation of this clause will result in assessment of fines to the developer through the project's conditions of approval and mitigation measures, subject to the appropriate sections of this ordinance.

17.101.050 Oak Woodland Evaluation Plan

- A. An Oak Woodlands Evaluation Plan shall be required in conjunction with an application for the required discretionary entitlements for a development project to document the proposed extent of impact. The Oak Woodlands Evaluation Plan shall include but not be limited to the following:
 - 1. Site location and site plan
 - 2. Description of oak woodland including an evaluation of its overall condition including intact, moderately degraded, and severely degraded, as well as any areas of unique environmental or ecological features
 - 3. Inventory of heritage trees within project area
 - 4. Map of oak woodland including oaks subject for removal and retention. Measurement of total oak area; location and area of proposed oak woodland conversion
 - 5. The project shall be designed to avoid Heritage trees and oak woodlands that occur along waterways and/or wildlife corridors including deer migration corridors; are connected with oak woodlands on adjacent lands including public lands; and other factors determined by the Planning Department.
 - 6. The location of required tree protection fencing and signage
 - 7. Proposed mitigation consistent with the requirements of this ordinance.

- B. The Oak Woodlands Evaluation Plan shall be prepared by a qualified professional. Exceptions to this may be considered by the Planning Director based on limited scale of the project or other factors.
- C. The Planning Department shall review the Oak Woodland Evaluation Plan to determine its completeness and distribute it together with the project environmental document.
- D. The decision-making authority shall include the Oak Woodland Evaluation Plan in its action on the project.

17.101.060 Oak Woodland Mitigation

Based on the Oak Woodland Evaluation Plan, if oak woodlands will be impacted as part of the permit, the applicant shall mitigate for loss of oak woodlands as follows:

- 1. The land area requiring mitigation shall be the cumulative land area within the development footprint.
- 2. The mitigation of oak woodlands shall take place within Calaveras County.
- 3. Mitigation shall be of a similar species mix, density, and viability as would be found in a naturally occurring and healthy oak woodland.

The project shall include one or a combination of the following measures for the equivalent area converted at the replacement ratio specified in **17.101.070** to the satisfaction of the Planning Director:

- A. Proof of executing a conservation easement on-site or off-site as described in the Oak Woodlands Conservation Act.
- B. In-lieu fee payment made to an accredited land trust or qualified land conservation organization.
- C. Contribute funds to the Oak Woodlands Conservation Fund, as established under Fish and Game Code §1363 for the purpose of purchasing oak woodlands conservation easements as described in by Public Resources Code § 21083.4. (An applicant that chooses this option may not receive a grant from the Oak Woodlands Conservation Fund as part of project mitigation.)
- D. A combination of options A, B, and C, above.

17.101.070 Mitigation Ratio

Oak mitigation will be determined based on the size of the total development footprint and the overall health of the impacted oak woodland. Heritage oaks are assessed separately.

- A. Intact oak woodlands will be mitigated at a 2:1 ratio.
- B. Moderate oak woodlands will be mitigated at a 1.5:1 ratio.
- C. Degraded oak woodlands will be mitigated at a 1:1 ratio.
- D. Heritage oaks will be assessed individually. For every inch of diameter at breast height (DBH), an Area (in acres) shall be calculated. This area shall be mitigated at a 3:1 ratio.

Area = $\pi(\text{DBH})^2 \times \text{HTC}$ HTC (Heritage Tree Constant) = 0.0000575

Example: A 36-inch DBH heritage tree would result in an area of 0.234 acres

Area = $3.14(36)^2 \times 0.0000575$

Area = $3.14(1296) \times 0.0000575$

Area = 0.234 acre

Total Mitigation requirement = 0.234 acre x 3 = 0.702 acre

17.101.080 Protection of Oak Trees Before and During Construction Activity

For all oak trees that will be retained within a project area, the following protective measures shall be implemented prior to and during construction activities:

1. Establish a Tree Protection Zone (TPZ). The Tree Protection Zone is defined as the surface area surrounding a tree, extending outward from the trunk 12 inches in radius per inch of DBH (trunk diameter at breast height). This can be applied to individual trees or connected oak woodlands. Heritage trees and blue oaks of any size shall be protected at 1.5 feet in radius per inch of DBH.
2. Fence off the Tree Protection Zone. A 42-inch (or taller) fence, anchored securely to the ground, shall be placed around the outermost edge of the TPZ on all sides that may be subject to construction activity. Fencing construction that'll allow for wildlife movement, shall be installed prior to start of any construction activity and remain in place until all construction activities are completed. Each TPZ shall have a sign that reads, "Do Not Enter – Tree Protection Zone".
3. No construction activities shall be conducted in the TPZ, including but not limited to trenching, paving, driving, storage or parking of any equipment or vehicles, storage of construction materials, or dumping of any trash, soils, fuels, or liquids. The TPZ may be encroached into up to 20% of the total TPZ area, if an additional equal percentage (%) of un-disturbed contiguous space can be added to the TPZ, and it is approved by the Qualified Professional. All construction activity within the TPZ shall be supervised by the Qualified Professional, and all directions provided by the Qualified Professional shall be implemented.
4. The existing grade shall be maintained around protected trees to the maximum extent possible. Retaining walls shall be utilized when necessary and no fill shall be allowed within the TPZ.
5. No lawns or frequent irrigation shall occur within the drip line of any retained oak tree. Infrequent, deep watering is permissible beyond ten feet (10') from the trunk when needed to alleviate drought stress. If plantings are to be incorporated within the drip line of retained oak trees, drought tolerant plants that are compatible with native oaks and do not require summer irrigation may be used.
6. Pruning work within the TPZ, if required, shall be done in accordance with current ISA (International Society of Arboriculture) Best Management Practices by a professional with expertise in oak trees and be supervised by the Qualified Professional.

7. Monitoring. The qualified professional shall perform periodic assessments of the retained trees throughout the construction process. The frequency and duration of the monitoring shall be left to the discretion of the qualified professional, with a minimum interval of once a week. The developer is responsible for associated monitoring expenses.
8. A copy of "Living Among the Oaks: A Management Guide For Woodland Owners and Managers", UCANR Publication #21538, or comparable educational brochure, shall be disbursed by the County Planning Department with all appropriate project permits. <https://anrcatalog.ucanr.edu/pdf/21538.pdf>.
9. As an incentive, oaks and/or oak woodlands that are retained in a project and are adequately protected according to the above TPZ guidelines shall not require mitigation.

17.101.090 Definitions

For the purposes of this Chapter, the following terms are defined as follows:

- A. **Applicant/Developer:** A person or group of persons, including a Limited Liability Company (LLC), a corporation, or other similar entities, seeking land use approval through a discretionary process from the county.
- B. **Conservation Easement:** An easement granting a right or interest in real property that is appropriate to retaining land or water areas predominantly in their natural condition; retaining such areas as suitable habitat for fish, plants, or wildlife; or maintaining existing land uses. For Conservation Easement dedication (on-site) or acquisition (off-site) as mitigation for Oak Woodlands impacts, a Conservation Easement to the satisfaction of the County Planning Commission shall be required to ensure the long-term maintenance and preservation of Oak Woodlands. The Conservation Easement shall provide for the preservation of the designated area in perpetuity and shall include such terms, conditions, and financial endowments for monitoring and management deemed necessary by the County to ensure the long-term preservation of the Oak Woodlands within the easement area.
- C. **Development Footprint:** The area proposed for development which consists of roadways, grading, disturbed soil, utilities, building pads, etc.
- D. **Diameter at Breast Height (dbh):** The measurement of the diameter of a tree in inches, specifically four (4) feet six (6) inches above natural grade on the uphill side of the tree.
- E. **Discretionary Project:** Projects subject to approval by the County Planning Director, County Planning Commission, and the County Board of Supervisors and are subject to the California Environmental Quality Act (CEQA).
- F. **Drip Line:** Imaginary line defined by the branch spread of a single tree or group of trees, projected vertically onto the ground.
- G. **Heritage Oak Tree:** Any live native oak tree of the genus *Quercus* [including blue oak (*Quercus douglasii*), valley oak (*Quercus lobata*), California black oak (*Quercus kelloggii*), interior live oak (*Quercus wislizeni*), canyon live oak (*Quercus chrysolepis*), Oregon oak

(*Quercus garryana*), [or hybrids thereof] with a single main trunk measuring 24 inches dbh or greater, or with a multiple trunk with an aggregate trunk diameter measuring 36 inches or greater. Blue oak is an exception at 18" dbh single with aggregate of 24".

- H. **In-lieu Fee:** Cash payments made as a result of a land appraisal to an accredited land trust or other qualified land conservation organization for mitigation for oak woodland loss.
- I. **Oak:** Shall have the same meaning as it does in Public Resource Code §21083.4(a), which, as this statute is currently drafted, means "a native tree species in the genus *Quercus*, not designated as Group A or Group B commercial species pursuant to regulations adopted by the State Board of Forestry and Fire Protection pursuant to Public Resource Code § 4526, and that is five (5) inches or more in diameter at breast height.
- J. **Oak Resources:** Collectively, Oak Woodlands, Individual Native Oak Trees, and Heritage Trees.
- K. **Oak Resources Technical Report:** A stand-alone report prepared by a Qualified Professional containing information, documents, and formatting.
- L. **Oak woodlands:** Shall have the same meaning as it does in California Fish and Wildlife Code §1361(h), which, as this statute is currently drafted, means "an oak stand with a greater than 10 percent canopy cover or that may have supported greater than 10 percent canopy cover."
- M. **Oak Woodland Condition.** A description of the condition of oak woodland prepared by a qualified professional based on a variety of factors. Methodology to determine this includes but is not limited to the University of California Oak Woodland Impact Decision Matrix. <https://ucanr.edu/sites/csnce/files/389023.pdf>
- **Oak Woodland Condition, Intact:** In this condition roads and buildings are rare across the site. Trees, both dead and alive, dominate the landscape and the site is capable of natural regeneration of oaks and other plant species. The site allows for movement of wildlife and the existing development is localized and limited to a small number of residences with service buildings or barns. The site is relatively undisturbed and is recognized as Intact. Examples of an Intact woodland may include large to moderately (even relatively small parcels may qualify) sized private ranches; expansive oak woodlands zoned for agriculture, open space, scenic corridors, etc.
 - **Oak Woodland Condition, Moderately Degraded:** The site has been changed in one or more ways that has reduced its potential for providing ecological and socially important services. For example, it may have been partially developed resulting in the net loss of trees; the canopy or understory may have been reduced or eliminated over all or part of the site; past grazing or soil disturbance may have impaired regeneration in some areas.
 - **Oak Woodland Condition, Severely Degraded:** Site has been dramatically altered and is currently in a condition that has no trees or very few remain; it is being managed in such a way that natural regeneration is not possible or practical; the soil is compacted or contaminated; and/or has been used for residential,

commercial, or industrial purposes. Roads and stream crossings are commonplace and fencing and other obstructions limit wildlife access and movement.

- N. **Qualified Arborist:** An arborist certified by the International Society of Arboriculture (ISA) or registered with the American Society of Consulting Arborists (ASCA).
- O. **Qualified Professional:** A qualified arborist, a qualified wildlife biologist, a Registered Professional Forester (RPF), certified rangeland manager (CRM) or other qualified professionals in the subject matter, as determined by the Director of Planning.
- P. **Qualified Wildlife Biologist:** A professional with a BA or BS or advanced degree in biological sciences or other degree specializing in the natural sciences; professional or academic experience as a biological field investigator, with a background in field sampling design and field methods; taxonomic experience and knowledge of plant and animal ecology; familiarity with plants and animals of the area, including the species of concern; and familiarity with the appropriate county, state, and federal policies and protocols related to special status species and biological surveys.
- Q. **Registered Professional Forester (RPF):** A Registered Professional Forester (RPF) is a person licensed by the State of California to perform professional services that require the application of forestry principles and techniques to the management of forested landscapes.
- R. **Tree Protection Zone (TPZ):** The Tree Protection Zone is defined as the surface area surrounding a tree, extending outward from the trunk 12 inches in radius per inch of DBH (trunk diameter at breast height). This can be applied to individual trees or connected oak woodlands. Heritage trees and blue oaks of any size shall be protected at 1.5 feet in radius per inch of DBH.