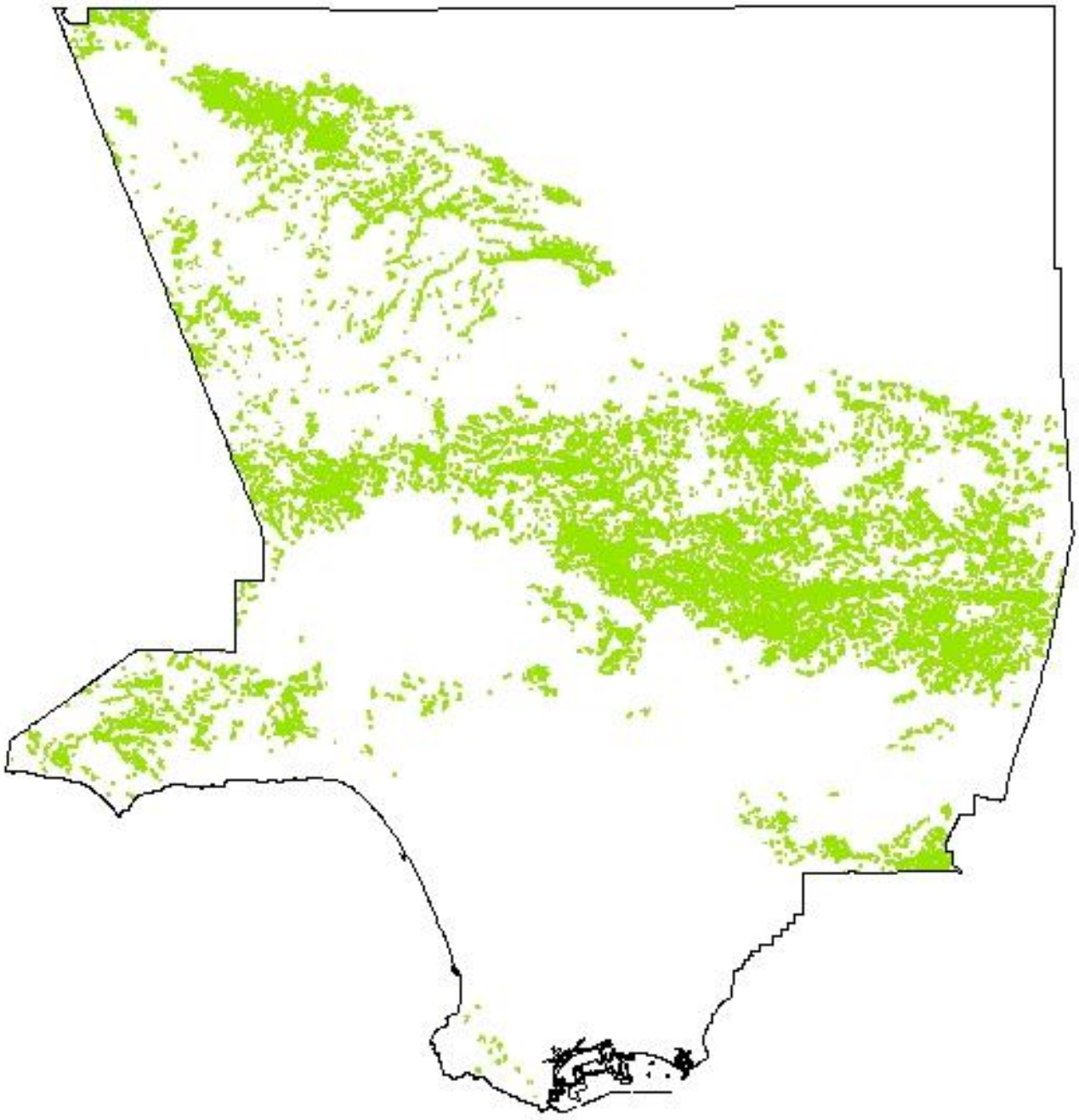
LOS ANGELES COUNTY

OAK WOODLANDS CONSERVATION MANAGEMENT PLAN GUIDE



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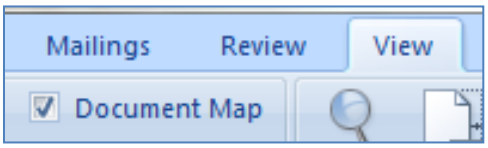


BACKGROUND

On October 7, 2001, the Governor approved the California Oak Woodlands Conservation Act (AB 242) which requires that Los Angeles County (County) develop an Oak Woodlands Conservation Management Plan (Plan) to qualify for funding to preserve oak woodlands through the State of California's Oak Woodlands Conservation Fund (Fund). Accordingly, the County Board of Supervisors adopted Motion 95-C on October 7, 2008, which directed the Resource Conservation District of the Santa Monica Mountains (RCD) to develop such a plan. The RCD assembled a group known as the Oak Woodlands Habitat Conservation Strategic Alliance (Alliance), consisting of biologists, arborists, environmentalists, foresters, planners, Building Industry Association representatives and academics. The Alliance completed the Plan in May 2011 and the Board of Supervisors adopted Part 1 of the Plan on August 23, 2011.

As of January 2005, California Public Resources Code Section 21083.4 (2004 Senate Bill 1334) requires that when a county is determining the applicability of the California Environmental Quality Act to a project, it must determine whether that project "may result in a conversion of oak woodlands that will have a significant effect on the environment." If such effects (either individual impacts or cumulative) are identified, the law requires that they be mitigated. Acceptable mitigation measures include, but are not limited to, conservation of other oak woodlands through the use of conservation easements and planting replacement trees, which must be maintained for seven years. One notable exemption to this law is for the "conversion of oak woodlands on agricultural land that includes land that is used to produce or process plant and animal products for commercial purposes."

INTRODUCTION

The main goal of the Plan is to preserve and restore oak woodlands so they are conserved in perpetuity with no net loss of existing woodlands. There are three important objectives of the Plan: prioritize the preservation of oak woodlands, promote conservation by integrating oak woodlands into the development process in a sustainable manner and effectively mitigate the loss of oak woodlands. The Plan implements these objectives through a series of recommendations that are grouped in the following categories:

Alterations to the County's development and environmental review process;
Revisions to the process by which County agencies address impacts to oak woodlands;
Expansion of goals and policies contained in the County's General Plan;
Changes to the County Zoning Code; and

Long range implementation and monitoring efforts.

This guide focuses on the first two categories of recommendations and does not include revisions to Title 22 or a new permit type. The main changes to the existing permit and environmental assessment processes are in the form of a revised Environmental Assessment Questionnaire, additional site plan requirements, a required oak woodland report, prioritized mitigation measures and improved mitigation monitoring. This document is intended to implement portions of the Plan and to be a resource to assist County staff when processing development applications for discretionary projects that are not exempt from CEQA and that may impact oak woodlands. The guide is organized into the following four sections: definitions, application procedures, case processing, project mitigation and mitigation monitoring.

DEFINITIONS

Oak tree is defined by the plan as "*all native trees of the genus Quercus. This includes small shrubby oaks typically clustered on slopes, as well as individual large oaks that are naturally widely distributed across the landscape. Under California state law, oaks [that are part of a woodland] greater than 5 inch diameters at breast height (DBH) are also protected* (California Public Resources Code 21083.4a)." (Plan page 28)

Oak stand is defined by the plan as "*a group of similar [oak] trees growing in a contiguous pattern, having sufficiently diverse age-class distribution, composition and structure, and growing on a site of sufficiently uniform quality that it is distinguishable as a unit. Stands are a basic physical unit of vegetation in the landscape and do not have a set size*." (Plan page 29)

Oak woodlands are defined by California Department of Fish and Wildlife Code Section 1361.h and by the Plan (page 28) as "*an oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover."* This document interprets the Plan's definition of an oak woodland (pages 28-29) as an oak stand, including its understory, which consists of two or more oak trees of at least five inches in diameter measured at 4.5 feet above mean natural grade, with greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover as early as January 1, 2005 (effective date of California Public Resources Code Section 21083.4). The following figures depict how the Plan (pages 49-50) identifies oak woodlands and calculates relative canopy cover.

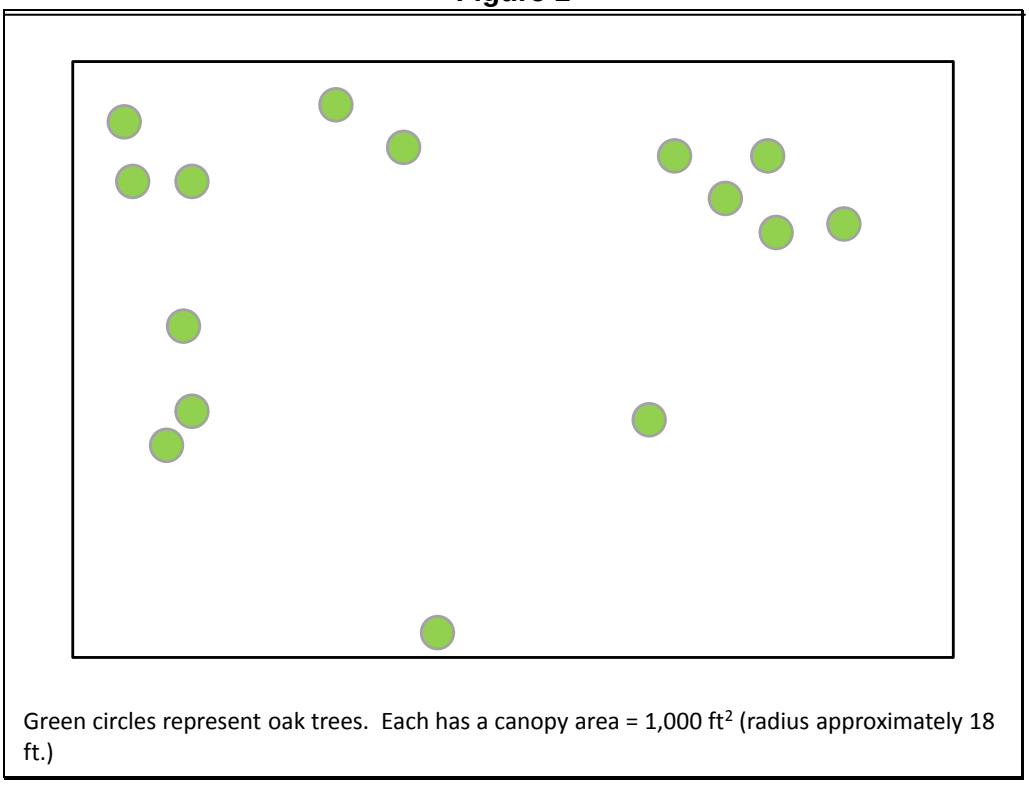
Oak Savanna is lightly wooded grassland, with oaks as the dominant tree species. The canopy cover of an oak savanna may often be less than 10 percent and therefore oak savannas are not necessarily subject to California Public Resources Code Section 21083.4. Nevertheless, some types of oak savanna are considered sensitive by the California Department of Fish and Wildlife (CDFW), and these are given consideration as sensitive natural communities under CEQA (see the CDFW Natural Communities List and CEQA Guidelines Appendix G).

OAK WOODLAND VS OAK TREE PROTECTION

The Oak Tree Ordinance (Section 22.56.2050 of the Los Angeles County Code) is intended to protect individual trees while the Plan and State law referenced in this document are intended to protect oak woodlands. A project may be subject to both the Ordinance and Plan requirements. See applicability matrix on the following page.

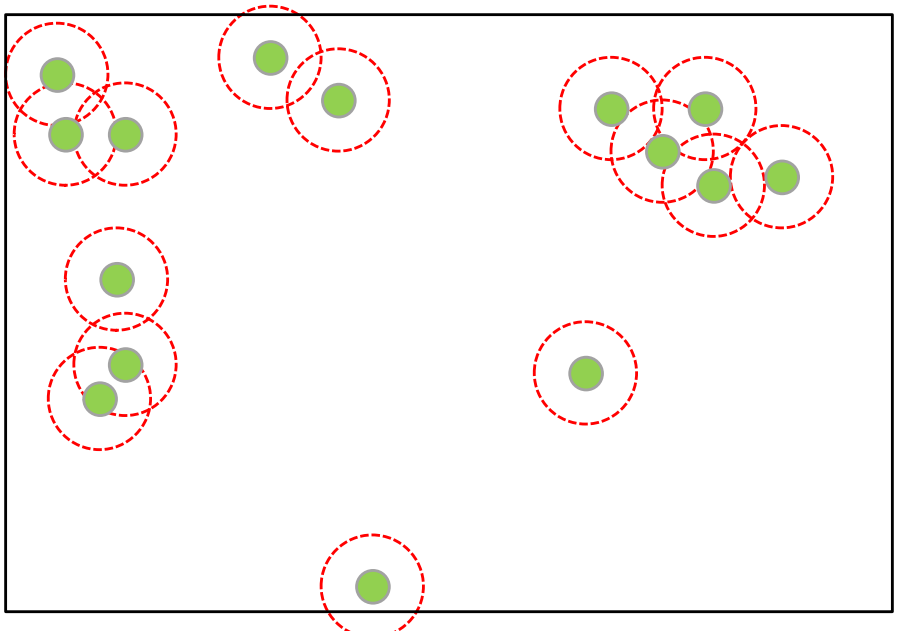
Criteria	Plan	Ordinance
Number of Removed or Encroached Trees:	Two or more.	At least one.
Tree Size:	At least five inches in diameter.	At least 8 inches in diameter.
Sphere of Influence /Encroachment Zone:	Ten times the canopy area.	Five feet from the drip-line or 15 feet from the trunk, whichever is greater.

Figure 1



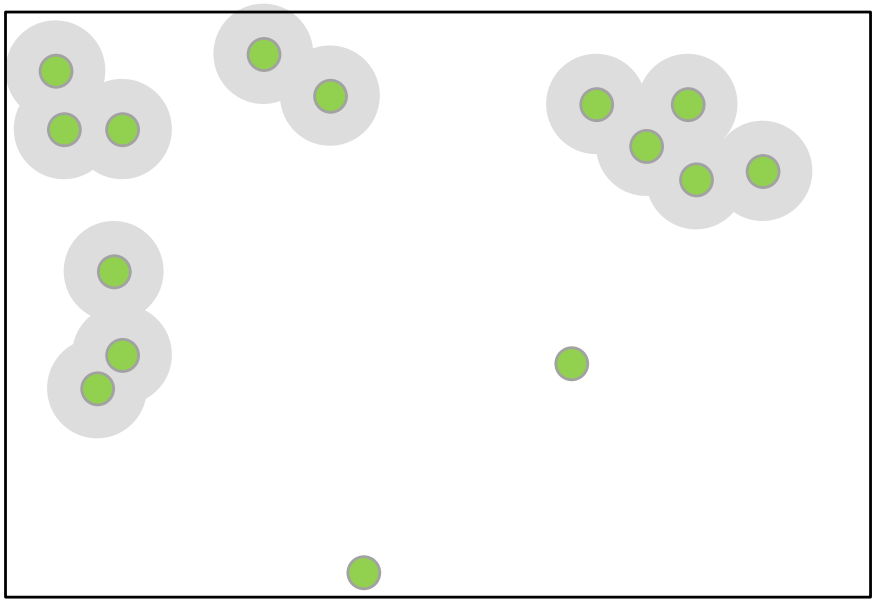
Green circles represent oak trees. Each has a canopy area = 1,000 ft^2 (radius approximately 18 ft.)

Figure 2



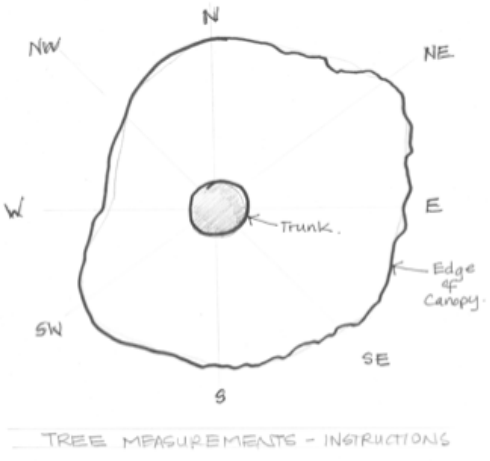
Red circles are 10 times larger (i.e. radius is ~3.2 times larger) than the canopy area (10,000 ft^2, radius approximately 56 ft.) and represent the area of which the oak tree occupies 10%.

Figure 3



Where 10X areas overlap, these are stands of oak trees, each having 10% or greater relative cover of oak tree canopy (**WOODLAND**). Where there is no overlap, these are isolated trees (**NOT WOODLAND**).

Figure 4



How to measure canopy:

1. Take 8 measurements from the center of the trunk one in each direction as shown on drawing. Trunks should be located accurately using GPS. Accuracy should be high. Reconcile trunk locations with aerial photographs.

2. Draw canopy as shown. Trunk should also be shown at actual size (to scale).

3. When canopies overlap, show the canopy underneath as a dashed or lighter line.

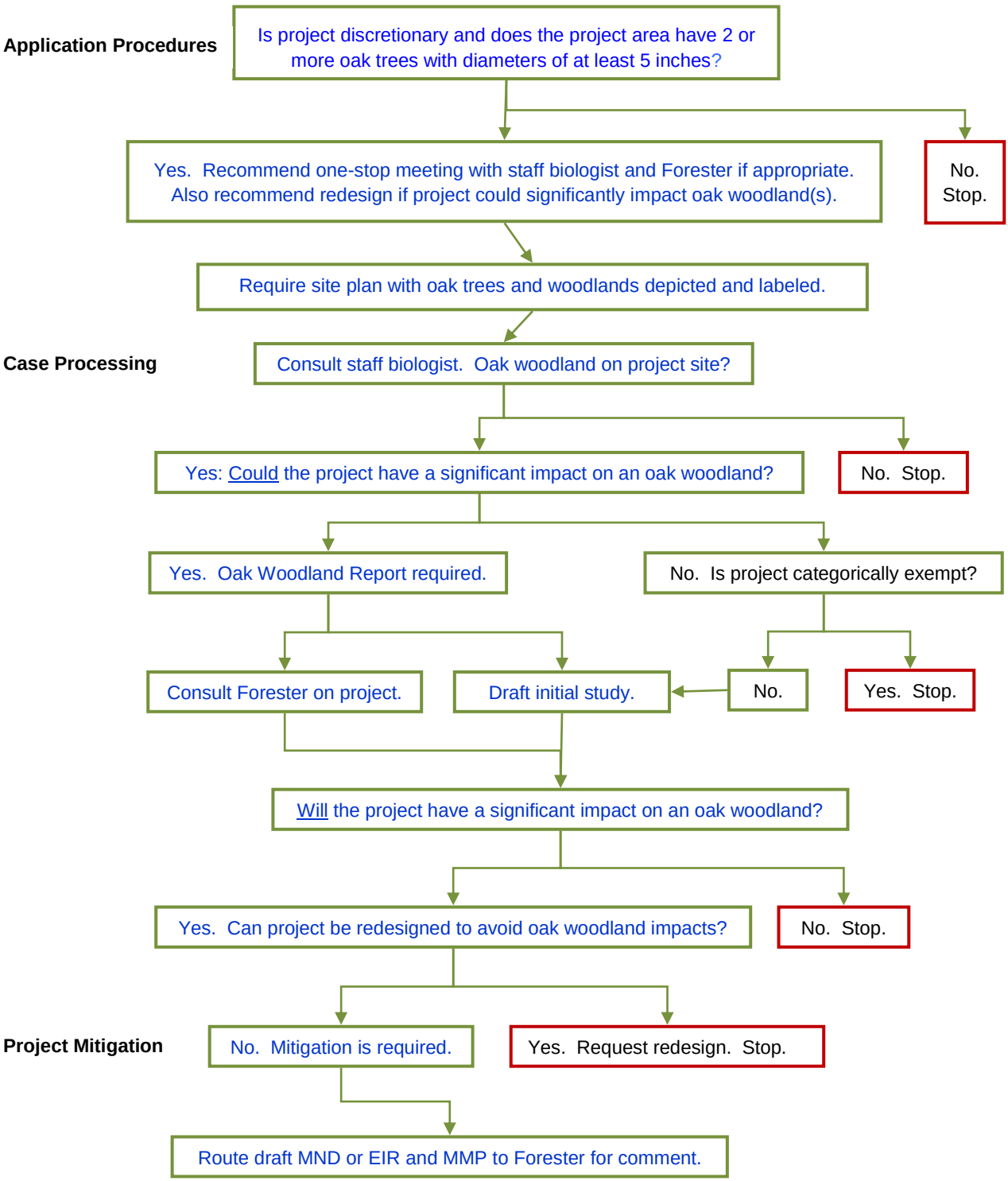
4. Draw canopies using a dark or thicker line so that they can be seen easily on the drawings.

5. The scale of drawing should be 1":20' or 1":30' to give enough detail.

6. Accurate tree canopy and trunk locations should be overlaid on site and construction drawings.

PROCESS OVERVIEW

Note: This chart is a summary. For details, see relevant sections of the guide, to which this page is hyperlinked. Use the Document Map to return.



APPLICATION PROCEDURES

In order to expedite the review process and avoid mitigation, staff should communicate to the applicant as early as possible that avoidance of impacts to oak woodlands is the preferred alternative project option. If determined appropriate, Staff should recommend a pre-application counseling meeting (One-stop) that includes the staff biologist and County Forester.

In addition to other required application materials, the applicant shall submit the following items:

A completed Environmental Assessment Information Form which will require the following information: disturbance history of the project site (such as fires or grazing), number of trees and their location on the site, whether any trees have been removed or pruned since January 1, 2005, and whether the area within the 10 percent sphere of influence of the canopy is developed.

A site plan that includes:

- Oak trees with a diameter of five or more inches (measured four and one half feet above mean natural grade) depicted, trunk diameters labeled, and ten times the canopy area of each oak tree depicted and labeled and;
- Oak trees with a trunk diameter of eight inches or greater shall have the 5-foot radius outside of all tree drip lines depicted and labeled.

Include off-site oak trees located within 200 feet of the property boundary. If a tree has multiple trunks, label the diameter of the largest trunk.

CASE PROCESSING

Determination

1. For any discretionary project with two or more oak trees on site, the case planner should consult with the staff biologist to determine if the project is located in an oak woodland and may impact the woodland. Consultation would typically occur after the case has been assigned to a planner but it could also take place earlier in the process. The staff biologist should be consulted even on projects that may initially be considered categorically exempt from CEQA because if there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances, a categorical exemption may not be used according to State of California Public Resources Code Section 15300.2.c. If the staff biologist determines that an oak woodland is located on the project site, the staff biologist will likely recommend that the case planner request a oak woodland report (OWR) from the applicant. The OWR must be completed by an "individual with expertise acceptable to the director and the County Forester," be certified to be true and correct and include:

   A description of the baseline condition of the oak woodland, including the species of oak trees present, the density of trees (number/acre), a demographic assessment of the trees (e.g. size or age range and the proportion of trees in young, mature, and declining classes), the vegetation type of the understory (e.g. scrub, grass/herb, barren, ornamental, etc.), the presence or potential use of the site by special-status species, and the spatial relationship to other woodland stands in the vicinity (e.g., immediately adjacent and fully integrated, isolated by urban development, etc.);

   A determination of the habitat value/integrity of the woodland (See Table 1);

   An analysis of impacts to the oak woodland and their severity (See Tables 2 and 3);

An analysis of recreational or aesthetic value of the woodland based on the presence of trails, location within a viewshed visible from parks or scenic highways, etc; and

An analysis of alternative project options that includes an explanation of why avoidance of the oak woodland was not feasible.

Impact of introduced pests and disease on the oak woodland.

A summary of ecosystem services provided by oak woodlands as described by the Plan and how those services may change with development of the proposed project.

It is recommended that consultants writing an OWR report use the Plan as a resource. It has a wealth of information that is useful in the preparation of an OWR.

Project Consultation

2. The case planner will consult with the County Forester on the project by routing relevant application materials that include the OWR, site plan, and environmental questionnaire to the County Forester for review.
3. The County Forester, upon receiving the consultation request, will inspect the project site and oak trees, review the report and site plan for adequacy and recommend project conditions.

Environmental Assessment

4. The case planner in conjunction with the staff biologist will answer the following initial study (IS) questions in the Biological Resources and Mandatory Findings of Significance sections that pertain to project and cumulative impacts to oak woodlands**:**

IS Question 4.b: Does the proposed project have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?

This question relates to natural communities listed as sensitive by the CDFW, and does not necessarily extend to all oak woodland types as identified by Section 21083. To answer this question, consult the staff biologist and the 2010 CDFW Natural Communities List, available at http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp. The list provides sensitivity rankings for all named community types; other types may also be considered sensitive (as indicated by an asterisk) or may not yet be inventoried.

IS Question 4.e: Will the project convert oak woodlands…or otherwise contain oak or other unique native trees?

To answer this question, provide a baseline description of oak woodlands that fits this definition found on the site, including the following information: the species and density (number/acre) of oak trees present; demographic assessment of the trees (e.g. size or age range and the proportion of trees in young, mature, and declining classes); vegetation type of the understory (e.g. scrub, grass/herb, barren, ornamental, etc.); presence or potential use of the site by special-status species; and the spatial relationship to other woodland stands in the vicinity (e.g., immediately adjacent and fully integrated, isolated by urban development, etc.). Additionally, assess whether the project will exceed the threshold for significance for impacts to oak woodlands. Use Table 1 to establish the baseline, then

Tables 2 to determine impact severity and finally Table 3 to determine level of significance.

Table I – Existing Conditions

Woodland Integrity:	Intact	Moderately Degraded	Severely Degraded
Existing Conditions:	Site is currently in a "wild" state where all ecological functions such as groundwater infiltration, shade, habitat, nutrient cycling, carbon sequestration, wind/noise/dust abatement, and the stand is self-sustaining and regenerating. Understory of grasslands may be dominated by invasive exotic grasses and forbs. Fire exclusion or frequency may have altered native woodland. Woodland supports associated flora and fauna and are free from destructive land practices that limit long-term persistence.	Even though the site has been altered, oak woodlands persist and retain some of their functions. Natural regeneration is possible, wildlife use still occurs, and some level of ecosystem services is still present. The majority of oak woodlands in the County fall within this category.	Site has been drastically altered from the natural condition to accommodate residential, commercial or industrial uses, and oak woodlands remain in scattered locations. Natural regeneration is not possible. Soil is compacted, contaminated or paved. Wildlife habitat is limited and associated understory vegetation has been replaced by managed non- native landscaping.
Examples:		Golf courses intermixed with fragmented oak woodlands, many of the subdivisions and urban wild land interface areas found in the Santa Monica Mountains, Santa Clarita Valley, along the foothills of the San Gabriel Mountains and throughout the Puente Hills.	Small clusters of oaks within or surrounding parking lots, isolated small stands in parks or open spaces surrounded by urban development, or woodlands remaining along freeway corridors.
Recommendation:	Projects that would alter the oak woodland should receive the highest level of scrutiny. Project alternatives that would avoid this alteration should be fully explored and given first consideration.	Project needs to be reviewed within the context of preventing further ecosystem function losses. This could include reduction of project scale, adjusting project footprint to reduce impacts, identifying opportunities to preserve connectivity, increase groundwater retention, and restore habitat.	Site should be reviewed within the context of adjacency to other oak woodland stands, potential for restoration and the potential to restore connectivity and ecosystem functions. A Severely Degraded site may be a good choice for a mitigation area that could be restored.

Table 2 – Impact Severity

Impact Severity	Intact Woodland	Moderately Degraded Woodland	Severely Degraded Woodland
Low:	Minimal disturbance to stand structure and composition and habitat features resulting in no increased edge habitat or fragmentation; road and stream crossings are not being considered; activities will not result in the introduction of exotic or invasive species. Minimal site or spatial disturbance may still result in significant impacts to an intact or core woodland.	Regeneration potential is being maintained across the site; understory oak associates present or can be restored; expansion of developed areas are centralized; new road and stream crossings not being considered. In the absence of special circumstances, statutes or ordinances, this may represent a non-significant impact.	Majority of remnant trees are retained; understory removal or road widening does not compromise existing tree health; no further loss of ecosystem services considered. In the absence of special circumstances, statutes or ordinances, this may represent a non-significant impact.
Moderate:	Detectible change or reduction in canopy, structure or composition; loss of some habitat features, subtle impacts increasing fragmentation, edge creation or loss of connectivity (fences, roads, other artificial barriers or buffers).	Regeneration potential is being marginalized; developed areas expand into previously undeveloped areas; new roads or stream crossings proposed; habitat features are being lost; activities will add exotic an invasive species.	Loss of a majority of existing trees; activities will inhibit or harm residual tree health and vigor; barriers constructed will increase fragmentation; ecosystem services will be lost or degraded.
	These impacts are considered significant.		
High:	Obvious change or reduction or loss of canopy, structure or composition; loss of existing habitat features; fragmentation and parcelization of contiguous ownerships; introduced roads, stream crossings and/or exotic invasive species; creation of edge effects; construction of barriers (fences, roads, etc.).	Large scale impacts including loss of habitat, understory, resulting in fragmentation and increased edge effects; Loss of woodland structure and changes in composition in large continuous woodland patch.	Loss of remnant trees or stand increases fragmentation across the landscape through loss of connectivity.
	These impacts are considered significant.		

Table 3 – Estimated Level of Significance

Woodland Integrity:	Intact			Moderately Degraded			Severely Degraded		
Impact Severity:	**Low**	**Mod**	**High**	**Low**	**Mod**	**High**	**Low**	**Mod**	**High**
Impact	**Level of Significance** "LTS"= Less Than Significant; "PS" =Potentially Significant; "S" = Significant								
Net loss of oak woodland acreage.	PS	S	S	LTS	S	S	LTS	LTS	LTS
Increased habitat fragmentation.	PS	S	S	LTS	S	S	LTS	LTS	LTS
Loss of vertical and horizontal structural complexity.	PS	S	S	LTS	S	S	LTS	LTS	LTS
Loss of understory species diversity, locally uncommon or rare species or associations.	PS	S	S	LTS	S	S	LTS	LTS	LTS
Loss of food sources for wildlife	PS	S	S	LTS	S	S	LTS	LTS	LTS
Loss of nesting, denning, burrowing, hibernating and roosting structures.	PS	S	S	LTS	S	S	LTS	LTS	LTS
Loss of habitats and refugia for sedentary species and those with special habitat requirements, *i.e.* mosses, lichens, rocks, native grasses and fungi.	PS	S	S	LTS	S	S	LTS	LTS	LTS
Road construction, grading, trenching, activities affecting changes in grade, other road-related impacts.	PS	S	S	LTS	S	S	LTS	LTS	LTS
Stream crossings, culverts, and road associated erosion and sediment inputs.	PS	S	S	LTS	S	S	LTS	LTS	LTS
Loss of riparian function, reduced bank stability and increasing sedimentation or water temperature that impacts native fishes and other aquatic species.	PS	S	S	LTS	S	S	LTS	LTS	LTS
Road building activities that aggravate existing conditions	PS	S	S	LTS	LTS	S	LTS	LTS	LTS
Changes in environmental conditions that prevent existing residual trees from natural regeneration.	PS	S	S	LTS	LTS	S	LTS	LTS	LTS
Proposed project designs that result in construction that poses barriers to wildlife or fish passage.	PS	S	S	LTS	S	S	LTS	LTS	LTS
Proposed project designs that result in the probable introduction or expansion of invasive plants and animals	PS	S	S	LTS	S	S	LTS	LTS	LTS
Loss of individual heritage trees that are recognized and/or protected by ordinance or statutes.	PS	S	S	LTS	S	S	LTS	S	S
Loss of appropriate recruitment sites for recognized and/or protected heritage tree species.	PS	S	S	LTS	S	S	LTS	S	S

Woodland Integrity:	Intact			Moderately Degraded			Severely Degraded		
Impact Severity:	**Low**	**Mod**	**High**	**Low**	**Mod**	**High**	**Low**	**Mod**	**High**
Impact	**Level of Significance** "LTS"= Less Than Significant; "PS" =Potentially Significant; "S" = Significant								
Loss of individual trees where the natural occurrence and range of the species has been dramatically reduced and altered resulting in decreased recruitment/restoration potential for the species.	PS	S	S	LTS	S	S	LTS	S	S
The removal of even a few individual trees that represents a significant portion of the existing population of that species.	PS	S	S	LTS	S	S	LTS	S	S
Loss of ecosystem services such as groundwater recharge, erosion protection, water quality protection, temperature moderation.	PS	S	S	LTS	S	S	LTS	S	S
Changes to carbon sequestration potential.	PS	S	S	LTS	S	S	LTS	S	S
Loss of view-shed, aesthetics, amenity value, public recreation opportunities, historic or cultural resources.	PS	S	S	LTS	S	S	LTS	S	S

Note: The High Impact Severity column is based on Table 6 of the OWCMP on page 72. The Low and Moderate Impact Severity columns are estimates.

Environmental Assessment (continued)

When answering the aforementioned initial study questions for Advance Planning (AP) or Ordinance Studies (OS) projects, special consideration needs to be given to those projects that create or change existing permitted uses that may impact oak woodlands because permitted uses would not receive project specific environmental assessment. Therefore, any impacts to woodlands and related mitigation would need to be addressed through the AP/OS project environmental assessment.

5. The case planner will route the draft initial study to the County Forester for review and comment.

PROJECT MITIGATION

If a project cannot be redesigned to avoid impacts to oak woodlands, the case planner should work with the staff biologist and the County Forester to determine an appropriate mitigation strategy. Recommended mitigation measures for projects resulting in a significant impact to oak woodlands are identified below and are based on the Plan's recommendations on pages 92-96. The mitigation measures are prioritized by preference for intact woodlands. Per the Staff biologist, prioritization of mitigation measures may not be appropriate for degraded oak woodlands. If avoidance is not possible, then one of the following shall be implemented:

1. Acquire oak woodland habitat that is comparable to the habitat that was impacted.

2. Restore degraded oak woodlands: Off-site restoration should be prioritized over on-site restoration and where feasible, should be located nearby the impacted property, preferably within the same watershed or sub-drainage as deemed appropriate by the County Forester and the staff biologist, or within the same planning area as the impacted property.

   Off-site restoration may include any of the following:

   Acquiring off-site fee title for oak woodland habitat;

   Replacement planting.

   Restoring moderately or severely degraded oak woodlands. More specifically, removing exotics and restoring appropriate native plant diversity

   On-site restoration should be utilized when circumstances at the site allow for long-term sustainability of the replacement plantings, the potential to expand/connect to adjacent oak woodlands, and/or the improvement of degraded oak woodlands. The permittee shall replace/restore lost canopy area. More specifically, the permittee shall provide mitigation trees of the same Oak species. All replacement trees should be planted on native undisturbed soil and should be the same species of oak (*Quercus sp.*) as the removed tree with appropriate associated native vegetation in the understory. The location of the replacement tree should be in the vicinity of other oak trees of the same species. If replacement trees cannot be planted on native undisturbed soil or are not in the vicinity of the same species of oak (*Quercus sp.*) as the removed tree, the County Forester may require additional conditions to ensure that trees thrive.

3. Contributing to LA County's Oak Forests Special Fund at a minimum two to one canopy cover area for the amount removed.

4. Other mitigation measures developed by the County.

The following provisions apply to the aforementioned mitigation options:

To ensure that mitigation measures are implemented, the County Forester may require the project applicant post a bond in the amount determined by the County Forester.

If possible, on site mitigation areas or off site mitigation land should be located adjacent to preserved natural open space unless there are reasons that outweigh this priority (like contributing to a linkage or preserving a specific location with special status species on the mitigation site). The location on site mitigation areas or off site mitigation land requires County Forester and staff biologist approval.

Mitigation areas or land should be at a minimum of two to one canopy cover area for the amount removed. This is the expected canopy extent of mature trees. A more convenient way to think of it might be to base it on stem density, then apply that density over twice the acreage of the impacted area.

All mitigation areas or land should be placed in a conservation easement. If a conservation easement is not possible, the land shall be protected in perpetuity by other means deemed acceptable by the County. Mitigation land may be designated public open space if appropriate.

In addition to mitigation for tree removal, the permittee shall prepare a plan to the satisfaction of the County Forester, for protecting remaining oak trees during and after development.

As part of Mitigation Monitoring Plan (MMP), the staff biologist may require a Habitat Mitigation Monitoring Plan (HMMP) that details the long term maintenance and monitoring plans for the mitigation site. The HMMP should be approved prior to issuance of a grading permit and include the following minimum requirements: description of the project/impact and mitigation sites, specific objectives, success criteria, plant palette, implementation plan, maintenance activities, monitoring plan and contingency measures. Finally, the case planner should route the MMP to the staff biologist and the County Forester for review.

MITIGATION MONITORING

Mitigation monitoring methods are based on the successful monitoring strategies recommended in the Plan on pages 96-98.

Project mitigation shall be monitored and reported on over a seven-year period and shall incorporate an iterative process of annual monitoring and evaluation of progress and allow for adjustments to the program, as necessary, to achieve desired outcomes and meet success criteria. Annual reports discussing the implementation, monitoring, and management of the mitigation project shall be submitted to the County Forester and the Department of Regional Planning and should contain the following components:

Description of the project impact and mitigation site.

Specific objectives/success criteria, evaluated based on approved MMP survival rates and percent cover of planted native species, and control of invasive plant and animal species within the mitigation site. Success criteria should be based on a reference site supporting the desired oak species and understory that the mitigation site is designed to achieve.

Monitoring and maintenance activities conducted since the previous report.

Any contingency measures implemented since the previous report.

The County Forester will actively monitor the mitigation site for at least seven years following the implementation of the mitigation strategy.

Once the mitigation project has been completed, the applicant shall submit a final report to the County Forester and Department of Regional Planning. The report shall discuss the implementation, monitoring and management of the mitigation project over the seven-year period, and indicates whether the mitigation project has, in part, or in whole, been successful based on established success criteria. The project shall be extended if success criteria have not been met at the end of the seven-year period to the satisfaction of the County Forester.

The Department of Regional Planning will submit a bi-annual (every other year) report summarizing the status of oak woodland mitigation projects to the Board of Supervisors.