

1. Introduction

A. Purpose

The Purpose of this Oak Woodland Management Plan (OWMP) is to outline the County's strategy for conservation of its valuable oak woodland resources. Through the OWMP, the County identifies areas where conservation easements may be acquired from willing sellers as a means to offset and mitigate the loss or fragmentation of oak woodlands in other areas as a result of implementation of the 2004 El Dorado County General Plan (General Plan). Additionally, the OWMP provides guidance for voluntary conservation and management efforts by landowners and land managers. Lastly, the OWMP sets forth further guidance on General Plan Policy 7.4.4.4 Option A, which includes measures designed to encourage retention of existing oak canopy in areas planned for development.

Loss and fragmentation of wildlife habitat, including oaks and oak woodlands, was identified in the 2004 General Plan Environmental Impact Report (EIR) as a significant impact that would result from development under the General Plan. The County identified several mitigation measures which would reduce the severity of these impacts, although not to below a level of significance. These mitigation measures included Policies 7.4.4.4, 7.4.4.5 and 7.4.5.2, and the related implementation Measure CO-P.

Measure CO-P directs the County to develop and adopt an Oak Resources Management Plan that addresses the following:

- Mitigation standards outlined in Policy 7.4.4.4;
- Thresholds of significance for the loss of oak woodlands;
- Requirements for tree surveys and mitigation plans for discretionary projects;
- Replanting and replacement standards;
- Heritage/Landmark Tree protection standards; and
- An Oak Tree Preservation ordinance as outlined in Policy 7.4.5.2.

An Oak Tree Preservation ordinance that incorporates the standards outlined in Policy 7.4.5.2 and Heritage and Landmark Tree protection standards will be developed after the adoption of the OWMP.

At the state level, the Oak Woodlands Conservation Act of 2001 recognizes the importance of private land stewardship in conserving oak woodlands. The legislation established the California Oak Woodlands Conservation Program (COWCP), the mission of which is to "conserve the integrity and diversity of oak woodlands across California's working landscapes through incentives and education." The COWCP provides technical and financial incentives to private landowners to protect and promote biologically functional oak woodlands.

The OWMP serves multiple purposes. It defines the County's conservation strategy for oak woodland resources and implements Option B of Policy 7.4.4.4. It also partially complies with Measure CO-P, and constitutes the oak portion of the County's Integrated Natural Resources Management Plan (INRMP). Finally, it will establish a plan for voluntary conservation that landowners, the County, and others can use to seek grants and cost-sharing from State and Federal programs for oak woodland conservation in El Dorado County.

B. Goals and Objectives of Plan

The OWMP goals are guided by two General Plan Objectives: Objective 7.4.2 and Objective 7.4.4. General Plan Objective 7.4.2 states: *Identify and Protect Resources*: "Identification and protection, where feasible, of critical fish and wildlife habitat including deer winter, summer, and fawning ranges; deer migration routes; stream and river riparian habitat; lake shore habitat; fish spawning areas; wetlands; wildlife corridors; and diverse wildlife habitat."

General Plan Objective 7.4.4 states: *Forest and Oak Woodland Resources*: "Protect and conserve forest and woodland resources for their wildlife habitat, recreation, water production, domestic livestock grazing, production of a sustainable flow of wood products, and aesthetic values."

The following goals are set forth by the OWMP:

- Mitigate oak canopy removal by providing flexibility through a range of on-site and off-site mitigation alternatives;
- Establish a Conservation Fund In-Lieu Fee that is sufficient to fully fund the mitigation program;
- Identify Priority Conservation Areas (PCAs) within large expanses of contiguous oak woodland habitat where conservation easements may be acquired from willing sellers to offset the effects of increased habitat loss and fragmentation elsewhere;
- Focus conservation easement acquisition efforts within areas not currently fragmented and which are unlikely to become fragmented through implementation of the General Plan;
- When weighing acquisition opportunities for conservation easements, generally maintain the relative acreages of all five oak woodland California Wildlife Habitat Relationship (CWHR) types (Valley Oak Woodland, Blue Oak Woodland, Blue Oak-Foothill Pine, Montane Hardwood Woodland, and Montane Hardwood-Conifer Woodland), but emphasize conservation of Valley Oak Woodlands, considered a "sensitive habitat" due to its relative rarity in the county;
- Encourage voluntary conservation and management of oak woodlands, including sustainable ranching and farming operations within working landscapes;

- Provide incentives (e.g., grants or cost-sharing for fuels/fire risk management) for the voluntary protection of oak woodlands providing superior wildlife values on private land (COWCP legislative goal);
- Provide oak woodland conservation guidance to private landowners and County planners through education and outreach (COWCP goals);
- Enhance oak woodland conservation by connecting acquisitions from willing sellers with existing open space, including publicly-owned lands that are managed for oak woodland habitat values (e.g., ecological preserves, recreation lands, rangelands, or natural resource areas) consistent with the County’s open space conservation goals (Goal 7.6; Policy 7.6.1.1); and
- Establish a database inventory of interested buyers and willing landowners wishing to participate in oak woodland acquisition and management mitigation options (Policy 7.4.2.8).

C. Oak Woodland Habitat in El Dorado County

The term “oak woodland” is defined in the Oak Woodland Conservation Act (Fish and Game Code §1361) as an oak stand with greater than ten percent canopy cover or that may have historically supported greater than ten percent canopy cover. For purposes of this OWMP, the conservation focus is on existing oak woodlands. The General Plan uses the term “oak woodland” interchangeably and in the same context as “oak canopy.” For the purposes of mitigation, measurement of oak canopy shall apply.

The OWMP addresses the same study area (below 4,000 feet elevation) and same categories of oak woodlands (California Fire and Resource Assessment Program, or FRAP) as were addressed in the 2004 General Plan. The General Plan EIR identifies five oak woodland types, which are listed in Table 1 below, along with the acreage of each category found within the OWMP study area. A sixth woodland type is Valley-Foothill Riparian which may include Fremont cottonwood, willow and valley oak. Valley-Foothill Riparian habitats in which valley oaks are the dominant tree species are considered oak woodlands under the OWMP. Both Valley Oak Woodland and Valley-Foothill Riparian are designated as “sensitive habitats” in the General Plan EIR. Less than 3,500 acres of Valley Oak Woodland and none of the Valley Foothill Riparian appears on the FRAP mapping for El Dorado County.

Table 1: Oak Woodlands in OWMP Study Area

Oak Woodland Category	Abbreviation	Acreage	% of Total
Blue Oak Woodland	BOW	42,400	(17)
Blue Oak-Foothill Pine	BOP	12,900	(5)
Montane Hardwood Woodland	MHW	155,900	(63)
Montane Hardwood-Conifer Woodland	MHC	34,200	(14)
Valley Oak Woodland	VOW	3,400	(1)
Total Oak Woodland in Study Area		248,800	(100)

A thorough discussion of oak woodland habitat identification and values is contained in Appendix A.

D. Economic Activity, Land, and Ecosystem Values of Oak Woodlands

Agriculture and recreation-based tourism are important economic generators in El Dorado County. Oak woodlands provide value for these activities. Oak woodlands provide forage value for ranching, and contribute to the aesthetic qualities of agri-tourism. Oak woodlands contribute to soil retention and provide watershed benefits, which have benefits to the agricultural community. Deer and other game species are dependent on oak woodland habitat and provide recreational hunting opportunities, which can generate revenues for ranching land owners through hunting leases. Oak woodlands contribute to a high-quality visit for recreation tourists, whose activities among oak woodlands could include camping, fishing, hiking, bird-watching, and equestrian trail riding.

Studies have concluded that the presence of oak woodlands on properties enhance property value by providing shade, wind breaks, sound absorption, land use buffers, erosion control, and aesthetic beauty.

Oak woodlands contribute to healthy lands and watersheds. They do this by providing habitat for animals, maintaining water quality, and improving soil characteristics. Oak woodlands have been acknowledged in studies to contributing to the control of climate effects.

More information regarding economic activities, land values, and ecosystem values are available in Appendix A.

E. California Oak Woodlands Conservation Act

In September, 2004, the state Public Resources Code was amended to require a county to determine (as part of its CEQA review) whether a project may result in conversion of oak woodlands that will have a significant effect on the environment (PRC 21083.4). If it determines that a project may have a significant effect, a county shall require one or more oak woodland mitigation alternatives “to mitigate the significant effect of the conversion of oak woodlands.” Alternatives include: 1) conserve oak woodlands, 2) plant an appropriate number of replacement trees and maintain those trees for seven years, 3) contribute to the Oak Woodlands Conservation Fund, or 4) other mitigation measures developed by the County. Plantings shall not fulfill more than one half of the mitigation requirements for a project. Where a county adopts, and a project incorporates, one or more of these mitigation measures, the project is deemed to be in compliance with CEQA as it relates to effects on oaks and oak woodlands. This plan incorporates a range of mitigation alternatives which conform to these requirements.

2. Policy 7.4.4.4

A. Applicability and Exemptions

Policy 7.4.4.4 of the 2004 General Plan applies to all new development projects that would result in soil disturbance (see Appendix C for complete policy) on parcels that meet one of the following criteria:

- Less than or equal to one acre with at least 10% total oak woodland canopy cover; or
- Greater than one acre with at least 1% oak woodland canopy cover.

Development, as established by the policy, is any structure requiring a building permit or grading activity requiring a grading permit. Activities that do not require one of these two permit types, such as agricultural grading requiring an agricultural grading permit, tree removal for safety reasons, or the clearing of land for purposes other than construction or grading, do not trigger the provisions of this plan. The following activities are specifically exempted from Policy 7.4.4.4:

- agricultural cultivation, and
- actions pursuant to a County-approved Fire Safe Plan necessary to protect existing structures.

These exemptions are detailed below:

Agricultural Cultivation – The removal of native vegetation, including oaks, for the purposes of producing or processing plant and animal products or the preparation of land for this purpose is exempt. This is consistent with State PRC 21083.4.

Existing Structure Defensible Space/Fire Safe Measures – The intent of this exemption is to exempt oak tree removal from mitigation in the 100-foot defensible space zone around an existing building or structure. Defensible space, for the purposes of this plan, is the 100-foot area around an existing structure, or to the property line, whichever is closer. Defensible space is required pursuant to Public Resources Code (PRC) 4291 and Title 14 California Code of Regulations (CCR) 1299.

Fuel modification actions, inside and outside of the 100-foot defensible space zone, are also exempt from Policy 7.4.4.4 mitigation. Examples are actions to ensure the safety of emergency fire equipment and personnel; to allow evacuation of civilians; to provide a point of attack or defense for firefighters during a wildland fire; to prevent the movement of a wildfire from a structure to the vegetated landscape; and/or the maintenance or creation of fuel breaks for fire safety, where no grading permit or building permit is applicable.

The County encourages the creation of defensible space around existing structures and the provisions of the OWMP are by no means intended to impede the fuels reduction required by law to protect existing structures. However, oak tree removal in the 100-foot defensible space zone, pursuant to PRC 4290 and Title 14 CCR 1270-1276 of the Fire Safe Regulations, and fuel modification actions pursuant to a Fire Safe Plan, inside and outside of

the 100-foot defensible space zone for all new development projects, is not exempt from Policy 7.4.4.4 mitigation. The 100-foot defensible space zone, and fuels modification necessary for a Fire Safe Plan, is part of the project footprint and oak canopy removed shall be counted in the project total oak canopy removal. Any oak trees that can be safely retained, even if separated from the oak woodland, will count as oak canopy retained.

The County further encourages developers and landowners to review the 100-foot defensible space information available from CAL FIRE; specimens of oak trees and native habitat can be retained in the 100-foot defensible space by keeping lower branches of oak trees pruned, removing surface litter, separating trees and shrubs (horizontally), and reducing ladder fuels (vertically separating trees and shrubs). See CAL FIRE’s website or brochures for detailed information.

Because of the ability to safely retain some of the oak canopy within the defensible space, when calculating oak tree canopy loss with new subdivisions and parcel maps, an applicant may assume 20% retention of the oak tree canopy within the defensible space area around building pads or sites.

Additionally, the OWMP provides for reductions to oak canopy mitigation for affordable housing projects as described below and provides for an exemption for public road safety projects and public utility projects.

Affordable Housing – Development projects that propose a minimum of 10 percent of the dwelling units as income restricted affordable units, as defined by California Health and Safety Code §50052.5, 50053, and 50093, shall be granted a reduction in the amount of oak canopy that is required to be protected under Option A, or the amount of fee to be paid under Option B, as set forth in Table 2.

Table 2: Affordable Housing Reduction

Affordable Housing Type (Household Income Level)	% Reduction of Oak Canopy Mitigation for portion of project that is income restricted
Very Low	200%
Lower	100%
Moderate	50%

Example: A project proposes 25% of the units to be affordable in the lower income category. The amount of on-site retention or Conservation Fund In-Lieu Fee may be reduced by 25%. A moderate income project that provides all units at that income level may reduce the retention and/or fee by 50%. A project with 20% very low income units would receive a 40% reduction. (Note: PRC §21083.4(d) provides exemptions for affordable housing projects in urbanized areas for lower income households.)

Public Road and Public Utility Projects Exempt from Policy 7.4.4.4 – Oak canopy removal necessary to complete County capital improvement projects are exempt from the canopy retention and replacement standards, when the new alignment is dependent on the existing alignment. This exemption applies to road widening and realignments which are necessary to increase capacity, to protect the public’s health, and to improve the safe movement of

people and goods in existing public road rights-of-way, as well as acquired rights-of-way necessary to complete the project. This exemption shall also apply to removal of oak canopy necessary to comply with the safety regulations of the Public Utilities Commission and necessary to maintain a safe operation of utility facilities. The County shall minimize, where feasible, the impacts to oaks through the design process and right-of-way acquisition for such projects.

This exemption to the oak canopy retention and replacement standards does not apply to new roads or utility installation, or to internal circulation roads within new development.

B. Replacement Objectives

When determining the amount of oak canopy replacement on a parcel, consistency can be achieved by a combination of Policy 7.4.4.4 Options A and B. These replacement objectives may be achieved, subject to County approval, by:

1. Replacement planting on-site at a 1:1 canopy surface area ratio; or
2. Contributing to the County’s INRMP/Conservation fund at a 2:1 ratio; or
3. Acquiring an off-site conservation easement on oak woodlands at a 2:1 ratio; or
4. A combination of 1, 2, or 3 above.

C. Mitigation Option A

Option A sets forth limitations on the amount of oak canopy that may be removed with each project, based on calculations of the percent of oak canopy existing on the subject parcel. Oak canopy must be retained in the amount established in the Table of Policy 7.4.4.4, provided below as Table 3.

Table 3: Canopy Retention Requirements from Policy 7.4.4.4

Percent Existing Canopy Cover	Canopy Cover to be Retained
80 – 100	60% of existing canopy cover
60 – 79	70% of existing canopy cover
40 – 69	80% of existing canopy cover
20 – 39	85% of existing canopy cover
10 – 19	90% of existing canopy cover
1 – 9 for parcels > 1 acre	90% of existing canopy cover

In addition to retention, Option A requires that removed oak canopy be replaced at a 1:1 ratio. The size of the designated replacement area shall equal the total area of the oak canopy cover proposed to be removed. For example, removal of 2 acres of oak canopy requires replacement of 2 acres of oak canopy; removal of 5,000 square feet of oak canopy requires replacement of 5,000 square feet of oak canopy.

D. On-Site Mitigation – Replanting and Replacement (Option A)

As provided under Option A, Policy 7.4.4.4, all oak canopy removed for development must be replaced at a 1:1 ratio. In lieu of on-site replacement, where such replacement is not feasible due to soil/habitat considerations and/or land use constraints, off-site mitigation may be substituted for replacement plantings by payment of the Conservation Fund In-Lieu Fee at a 1:1 canopy surface area ratio or dedication of an off-site conservation easement as described in Section 4.C, also at a 1:1 ratio. Off-site replacement at a 1:1 ratio is offered to avoid circumstances that would result in replacement plantings occurring in marginal habitat or at the expense of other existing habitat. The following provisions apply to on-site and off-site replacement:

- Replacement plantings may be accepted if adequate openings exist on-site and the replanting area likely would support oak woodland (e.g., soil type and general environment). The intent is not to remove existing natural habitats for plantings or to create a continuous canopy that would reduce wildlife value or contribute to increased fire hazard. Replacement plantings shall meet the County’s replanting and replacement standards and is subject to County approval.
- Oak canopy replacement plans shall be prepared by a qualified professional (such as a certified arborist, registered professional forester, certified rangeland manager, or biologist, as described in Section 8.A, Appendix A). Replacement plans shall address the following: (For more detailed criteria, please see Appendix E.)
 - An oak planting mitigation plan consistent with the standards established in the 2004 University of California publication, Regenerating Rangeland Oaks in California, How to Grow California Oaks, How to Collect, Store and Plant Acorns, and other publications and protocols that may be established by the University of California Integrated Hardwood Range Management Program.
 - The suitability of the site for oak woodlands shall be demonstrated with soil information, aerial photography, or other resources. The qualified professional shall demonstrate that the replanting plan does not remove existing non-oak woodland and enhances existing oak woodland habitat.
 - The density of replanting shall be determined by the qualified professional, based on accepted practice and current research.
 - The intent of the replacement plan is to provide replacement oak trees or acorns with a similar mix of species as those removed, however, the species may vary based on site specific conditions, as determined by the qualified professional.
 - The source of acorns or saplings for replanting shall be from local sources when available, to maintain local genetic strains.
 - Replacement planting should not be located within the 0-100’ defensible space zone from an existing or proposed structure unless otherwise consistent with CAL FIRE’s defensible space guidelines and fuels reduction requirements mandated under California Public Resources Code (PRC) §4291.
 - Replacement plantings shall be maintained in a manner determined by the qualified professional, based on the site-specific conditions, which may include

weed control, irrigation (if appropriate), herbivory/grazing protection, fertilization, and planting methods.

- The replacement plan shall identify the frequency and methods of maintenance and monitoring, as well as contingencies or alternatives if the success criteria are not met at the end of the monitoring term along with a means to ensure compliance with the replacement plan. The monitoring term shall be seven years (PRC 21083.4).
 - Best Management Practices (BMPs) for protection of retained oaks during and after construction (refer to Appendix D).
 - An estimate of the total costs associated with implementation of the replacement plan.
- An oak tree easement shall be recorded on each property by the County, project applicant, or landowner for all replanting areas approved by the County as mitigation, prior to issuance of a permit.

E. Mitigation Option B

Option B does not require the retention of a minimum percentage of oak canopy on-site. This mitigation alternative is intended to preserve existing oak woodland canopy of equal or greater biological value as those lost. To compensate for both habitat loss and fragmentation, the preservation mitigation ratio was set at 2:1 based on the acreage of oak canopy affected. For purposes of the fee program, the standard for off-site mitigation under Option B is payment of the Conservation Fund In-Lieu fee at a ratio of 2:1. In other words, for each acre of oak canopy that is lost, the payment is the fee per acre multiplied by two. The Conservation In-Lieu Fee Mitigation Method is described in detail in Appendix B.

Alternatives to the Conservation Fund In-Lieu Fee, including dedication of off-site conservation easements by a landowner/developer as direct mitigation at a 2:1 ratio are considered the functional equivalent of the Option B in-lieu fee, and will be permitted, subject to County approval. While landowners/developers will not have to pay the Acquisition Component of the fee as they are themselves acquiring a conservation easement, they are still required to pay the Management Component and Monitoring Component of the Conservation Fund In-Lieu Fee to provide for the ongoing endowment for management and monitoring.

F. Mitigation Program Flexibility

The OWMP provides for flexibility in meeting the oak canopy mitigation requirements. An applicant for a development project may comply with the provisions of Policy 7.4.4.4 by meeting the retention and 1:1 replacement requirements of Option A, providing off-site mitigation through the payment of the OWMP fee as established by the OWMP and the implementing fee ordinance, or a combination of the two provisions. Additionally, off-site mitigation may be accomplished through private agreements between the applicant and another private party consistent with the 2:1 replacement provisions of Option B and subject to approval by the County of the suitability of the oak woodland to be protected. When dedication of off-site conservation easements is proposed by a developer, a biological study shall be required for the

off-site mitigation location to demonstrate that the site is of equal or greater biological value as the oak woodland proposed to be removed. The biological study shall evaluate and demonstrate parity of habitat elements such as snags, large woody debris, and the diversity and structure of the understory between the oak woodlands lost and those being protected. If the off-site conservation easement is to mitigate for Valley Oak Woodland removed, then the easement must be within Valley Oak Woodland of equal or greater biological value. A developer that dedicates a County-approved conservation easement is not subject to the Acquisition Component of the Conservation Fund In-Lieu Fee, but is subject to the Management Component and Monitoring Component of the fee.

3. Conservation Fund In-Lieu Fee Methodology

The Conservation Fund In-Lieu Fee is based on the costs of acquisition of conservation easements, along with management, monitoring, and administrative costs. A breakdown of costs per acre is provided in Table 4. Details of the analysis to establish the fee is contained in Appendix B.

Table 4: Conservation Fund In-Lieu Fee

Activity	Cost Per Acre
Acquisition ¹	\$ 2,300
Management ²	\$1,200
Monitoring ³	\$ 1,200
Total Cost/Fee Per Acre	\$4,700

(1) Conservation easement on rural land acquisition of 125 acres, which is the average parcel size within the PCAs. Acquisition costs include the easement land value (approximately \$1,800, or 40% discount value) and conveyance costs.

(2) Includes biological survey/baseline documentation, weed control and fuels treatment.

(3) Includes endowment for on-going monitoring.

As provided in Option B of Policy 7.4.4.4, off-site mitigation in the form of payment of the fee shall be made at a 2:1 canopy surface area ratio, requiring the payment of \$9,400 for every acre of oak canopy removed in excess of the amount provided in the table of Option A. To meet the Option A 1:1 replacement standard, an applicant may opt to pay the Conservation Fund In-Lieu Fee at the 1:1 rate for that portion of oak canopy removed consistent with the table. If payment into the Conservation Fund is utilized for the replacement portion of Option A, then on-site retention requirements would still apply.

The County shall deposit all Conservation Fund In-Lieu fees into an Oak Woodland Conservation Fund, which shall be used to acquire conservation easements from willing sellers in the PCAs as described below in Section 4. This fund shall also be used for ongoing monitoring and management activities, including but not limited to fuels treatment, weed control, periodic surveys, and reporting. The County may provide management services by employees or

contract management and monitoring activities with a qualified firm, individual, outside agency, or non-profit organization. Funding to support the identification of willing sellers, negotiation of the purchase price, and oversight of the land transaction is included in the management component of the Conservation Fund In-Lieu Fee.

As costs for off-site mitigation change over time, there will be a need to adjust the fee to closely match future cost increases or decreases. Appendix B details the fee adjustment approach. A report regarding fee adjustments will be included in an annual report to be submitted to the Planning Commission and Board of Supervisors each March, as described in Appendix A. The first fee adjustment study would occur at least 12 months after adoption of the OWMP.

4. Priority Conservation Areas

A. Identification of Priority Conservation Areas

Figure 1 identifies the areas in which conservation easements shall be acquired from willing sellers using the Oak Woodland Conservation Fund generated by the payment of the Conservation Fund In-Lieu Fee described above. These areas were identified using the FRAP classification of the five oak woodland habitat types in the county. After those areas were mapped, the areas were narrowed down to large expanses consisting of 500 acres or more. Those large expanses were further narrowed to lands where oak woodland habitat would not likely undergo substantial fragmentation and oak woodland conservation would be consistent with the 2004 General Plan land use designations. Areas specifically excluded were lands within Community Regions and Rural Centers and lands designated Low Density Residential. These resulting areas are classified as Priority Conservation Areas (PCAs).

The 500-acre PCAs are generally made up of 40-acre and larger privately owned parcels. A breakdown of parcel sizes within the large expanses is shown in Table 5. A more detailed description of the mapping process and data used to identify PCAs is provided in Appendix G. Figure 1 also shows existing public lands with high-value oak woodlands contiguous to the PCAs.

Table 5 – PCA Parcel Statistics

Parcel size (Acres)	# of parcels	Acres
40-60	170	7,666.3
60.1-120	155	13,176.7
120.1-340	175	31,674.3
340.1+	29	13,535.5
Total	529	66,052.8
	Avg. Size	124.9
	Median Size	84.3
*Data produced using parcel data from El Dorado County and the PCA shapefile for the Draft Plan (VOWH_PRVT_grtr500ac.shp)		

Oak woodland offered as mitigation must be configured in such a manner as to best preserve the integrity of the oak woodland ecosystem. Priority should be given to conserving oak woodland habitat within PCAs adjacent to existing woodlands under or subject to an Important Biological Corridor, conservation easement, public lands, open space lands, riparian corridors, ecological preserves or other PCAs lying west of the National Forest.

Valley Oak Woodland within the PCAs will be specifically acquired to mitigate for losses of Valley Oak Woodland as a result of new development. Only Valley Oak Woodlands will be targeted this way in order to provide a method ensuring that this General Plan-designated “sensitive habitat” is adequately preserved. If the Valley Oak Woodland habitat within currently designated PCAs becomes insufficient, then additional acreage of this habitat type will be added to the PCAs as necessary upon annual review of the OWMP.

The OWMP establishes an oak woodlands resource base that, when managed for conservation and preservation purposes, conserves a substantial portion of oak woodland habitat to offset the effects of increased habitat loss and fragmentation elsewhere in the county. This approach is considered superior to one that attempts to conserve oak woodlands in areas designated for development. Such areas are less desirable for mitigation lands because they are more expensive, have reduced habitat values, and would conflict with approved General Plan land use designations. Subsequent adoption and implementation of the INRMP, and incorporation of this plan into that document, will ensure connectivity between the PCAs. The INRMP will also address north-south connectivity across Highway 50 and the potential role of oak woodlands less than 40 acres in maintaining connectivity between larger expanses of oak woodlands. Existing public lands, Important Biological Corridors as identified on the 2004 General Plan land use diagram, and stream setback requirements provided under Policy 7.3.3.4 provide sufficient interim connectivity to provide wildlife movement between the PCAs (See Figure 2).

B. Management of PCAs

Existing native oak woodland identified as mitigation for project impacts, whether on or off the project site, will be protected from further development through a conservation easement granted to the County or a land conservation group approved by the County. Management activities may include, but are not limited to, one or more of the following activities, as determined through monitoring of the sites: inspections, biological surveys, fuels treatment to reduce risk of wildfire and to improve habitat, weed control, database management, and mapping.

C. Conservation Easements

Conservation easements for oak woodlands shall be granted to the County in perpetuity. The easement shall be provided on a form approved by the County and shall be recorded with the County Clerk/Recorder.

5. Application of OWMP to Development Review Process

Determination of the applicability of the OWMP to a development project shall be made as follows:

1. Planning staff and applicant determines if oak woodland exists on the parcel and if the proposed project impacts any of the oak canopy.
2. Oak canopy loss is calculated by a consultant hired by the applicant, utilizing either an on-site survey by a qualified professional, aerial photography, or other means acceptable to the County to determine total oak canopy area and the area proposed to be removed as a part of the project. Canopy loss is calculated by identifying all disturbed areas as proposed, including:
 - a. Roads, driveways, and access drives;
 - b. Graded areas for building pads, parking lots and other improvements; and
 - c. Other disturbed areas resulting in tree removal including septic system leach fields and fire safety defensible space vegetation removal for new construction.
 - d. Fire Safe Plans allow for some retention of oak canopy. To simplify the calculation of oak canopy retention in this zone, the OWMP assumes 20% retention. A site specific analysis of tree removal may be utilized instead of the 20% retention assumption.
3. The proposed oak canopy removal is compared with the retention standards provided in the Option A table.
4. If the amount of oak canopy removed is within the retention standards set forth in the Option A table, the applicant may mitigate for the loss by one of the following:
 - a. Planting on-site at a 1:1 canopy surface area ratio the area of oak canopy removed; or
 - b. Paying into the Oak Woodland Conservation Fund an amount equal to 1:1 replacement for the oak canopy removed; or
 - c. Acquire a conservation easement from a willing seller for an area equal to the area (i.e., 1:1 ratio) of removed oak canopy, in an area either within the PCA or other area acceptable to the County; or
 - d. A combination of two or more of the above provisions.
5. If the amount of oak woodland canopy removed exceeds the amount permitted under the Option A retention table, in addition to the provisions of steps 1 through 3, above, the applicant shall do one of the following for oak canopy removed in excess of that permitted under Option A:

- a. Pay into the County's Oak Woodland Conservation Fund the fee amount based on a 2:1 replacement ratio; or
 - b. Acquire a conservation easement from a willing seller for two times the area of oak canopy removed in excess of that permitted under the Option A table, in an area either within the PCA or other area acceptable to the County, along with fees for management and monitoring; or
 - c. A combination of the above provisions.
6. Payment of applicable fees and granting of any required easements shall be required as a condition of approval of all discretionary permits for which these provisions apply, and shall be completed prior to issuance of a grading or building permit, filing of a parcel or final map, or otherwise commencing with the project. The payment of the fee may be phased to reflect the timing of the tree canopy removal.
 7. Payment of applicable fees and granting of any required easements if necessary shall be completed prior to issuance of a building or grading permit for ministerial projects.