V. Mitigation Standards for the Loss of Oak Woodlands

El Dorado County's 2004 General Plan and EIR identify mitigation standards and requirements for projects that remove oak woodlands. This OWMP provides a comprehensive approach for project-level oak woodland mitigation and simultaneously considers 'landscape level' conservation goals. In addition to the County's mitigation requirements, statewide requirements have also been established. This section reviews both the State- and County-level requirements for oak woodland mitigation standards.

A. California Oak Woodlands Conservation Law Requirements

Under Public Resources Code (PRC) 21083.4 (the California Oak Woodlands Conservation Law), 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) conservation of oak woodlands, 2) plantings, 3) contributions to the Oak Woodlands Conservation Fund, and 4) other mitigation measures developed by the County. Plantings shall not fulfill more than one-half of the mitigation requirements for a project.

CEQA Guidelines (§ 15370) for mitigation include:

- Avoiding the impact altogether by not taking a certain action or parts of an action.

  Giusti et al. (2005) recommend redesigning a project to avoid tree removal. For on-site mitigation, maintaining larger stands of trees of different age classes will provide improved habitat values.

- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

  Giusti et al. (2005) recommend redesigning a project to remove the least number of individual trees, thereby reducing total woodland losses.

- Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

  An example from Giusti et al. (2005) is riparian restoration associated with a project as a means to improve overall site condition. The mitigation can mitigate an impact from a previous land-use on the site.

- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

  Mitigation could be met by establishing a conservation easement within on-site oak woodland and managing it for oak woodland conservation.

- Compensating for the impact by replacing or providing substitute resources or environments.

  This mitigation could be met by on-site plantings or off-site mitigation actions or mitigation banking.

  The effectiveness of plantings for mitigation is limited, as demonstrated in a study that used data from 10-year-old plantings to model the development of blue oak stand structure attributes over 50 years (Standiford et al., 2002). After 50 years, trees in planted stands were still small and the wildlife habitat quality was not equivalent to that of mature oak woodland. This study emphasizes the need for a comprehensive approach to mitigation and to not rely solely on replacement of oak woodlands.

B. Policy 7.4.4.4 Mitigation Requirements

Mitigation standards under General Plan Policy 7.4.4.4 apply to new development projects (excluding agricultural cultivation/operations and actions pursuant to an approved Fire Safe Plan for existing structures) that will result in soil disturbance. The Policy 7.4.4.4 standards apply to the following parcels:

- Less than or equal to one acre with at least 10% total canopy cover by oak woodland, or
- Greater than one acre with at least 10% oak tree canopy cover on at least 1% of parcel

One of two mitigation options, discussed below, shall be required:

Option A – adherence to oak canopy retention and replacement standards, or
Option B – contribution to County oak woodland conservation fund.

If a project does not meet the oak tree canopy cover and parcel size requirements listed above, but has oak trees that will be removed, then the applicant shall adhere to the Oak Tree Preservation Ordinance (Appendix D).

C. Mitigation Option A

Retention: Under Option A, existing oak woodland canopy cover shall be retained per the following standards:

Table V-1: Canopy Cover

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

The development shall be designed to minimize the impacts to overall oak woodland values. Only retained contiguous oak woodland shall count in the retention. Within the constraints of the project, the retained oak woodland should:

- Maximize retention of contiguous areas of oak woodland;
- Avoid or minimize fragmentation;
- Provide the greatest mix of size classes of oak trees, including seedlings and saplings for regeneration and large trees, which provide high wildlife value;
- Retain trees that have cavity nests or granaries; and,
- Retain large snags except where a snag presents a hazard.

Replacement. In addition to retention, Option A requires that removed oak woodland be replaced at a 1:1 ratio. The 1:1 replacement ratio is based on acreage of oak woodland. For example, removal of two acres of oak woodland requires replacement of two acres of oak woodland; removal of 5,000 square feet of oak woodland requires replacement of 5,000 square feet of oak woodland.

Replacement objectives may be achieved, given County approval, by: 1) planting oak woodland on-site at a 1:1 land area ratio, 2) contributing to the County's oak woodland conservation fund in Option B at a 2:1 ratio, or 3) acquiring an off-site conservation on oak woodlands of equal or greater biological value to that removed. Subject to County approval, a combination of these three options may be used.

On-site mitigation
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.

A recorded covenant (e.g., conservation easement or notice of restriction) shall be recorded on each property by the County, project applicant, or landowner for all County-approved mitigation. Refer to Section IX, Monitoring and Reporting, for more information on the recorded covenant.

Biological value for any option shall be determined by a Biological Resources Study and Important Habitat Mitigation Program that incorporates the Site Assessment Form in Appendix E. The Site Assessment Form shall be completed by a qualified biologist, registered professional forester, certified rangeland manager, or certified arborist.

D. Mitigation Option B

Option B is intended to preserve existing oak woodland of equal or greater biological value as those lost (EDAW, 2004, Response to Comments). To compensate for both habitat loss and fragmentation, the preservation mitigation ratio was set at 2:1 based on the acreage of oak woodland affected. Replacing lost acres of oak woodland at a 2:1 ratio is consistent with guidance in "A Planner's Guide to Oak Woodland" (Giusti et al., 2005). For purposes of the fee

program, the standard for off-site mitigation is payment of the fee at a ratio of 2:1. In other words, for each acre of oak woodland that is lost, the payment is twice the fee per acre. The off-site mitigation funding program is presented in Section VIII and described in detail in Appendix B.