Draft Oak Resources Management Plan
Revised November 2015

(Clean Version)
1.0 Introduction

This Oak Resources Management Plan (ORMP) updates and revises the Oak Woodland Management Plan adopted by the El Dorado County Board of Supervisors on May 6, 2008 (El Dorado County 2008). It incorporates more recent oak resources mapping data for the County and reflects policy language changes made during the General Plan Biological Policy Review project conducted in 2015. This ORMP incorporates relevant information included in the 2008 Plan, where applicable, and was prepared in coordination with El Dorado County Community Development Agency staff. It also incorporates public input gathered during project-focused hearings and direction given by the El Dorado County Board of Supervisors.

1.1 Purpose

The purpose of this ORMP is to define mitigation requirements for impacts to oak woodlands, individual native oak trees, and Heritage Trees and to outline the County’s strategy for oak woodland conservation. This ORMP functions as the oak resources component of the County’s biological resources mitigation program, identified in General Plan Policy 7.4.2.8. This ORMP identifies standards for oak woodland and native oak tree impact determination, mechanisms to mitigate oak woodland and native oak tree impacts, technical report submittal requirements, minimum qualifications for technical report preparation, mitigation monitoring and reporting requirements, and projects or actions that are exempt from mitigation requirements. This ORMP also establishes an in-lieu fee payment option for impacts to oak woodlands and native oak trees, identifies Priority Conservation Areas (PCAs) where oak woodland conservation efforts may be focused, and outlines minimum standards for identification of oak woodland conservation areas outside the PCAs. Requirements for monitoring and maintenance of conserved oak woodland areas and identification of allowable uses within conserved oak woodland areas are also included in this ORMP. Lastly, this ORMP provides guidance for voluntary oak woodland and oak tree conservation and management efforts by landowners and land managers.

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 a less than significant level. 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. During the General Plan Biological Policy Review project conducted in 2015, these policies were edited and consolidated into one single policy (Policy 7.4.4.4). Implementation Measure CO-P was also modified during this process. The revised language in Policy 7.4.4.4 states that mitigation requirements for impacts to oak resources (oak woodlands, individual native oak trees, and Heritage Trees) shall be outlined in this ORMP. Revised Implementation Measure CO-P directs the County to develop and adopt an ORMP that addresses the following:

- Mitigation standards for oak resources impacts;
- Definitions of exempt projects and actions;
- Technical report requirements;
- Oak resources mitigation options and standards;
- Heritage Tree mitigation standards; and
- Oak resources mitigation monitoring and reporting requirements.

An Oak Resources Conservation ordinance that incorporates the standards outlined in this ORMP will be developed in conjunction with adoption of the ORMP.

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.

This ORMP serves multiple purposes. It defines the County’s conservation strategy for oak resources and provides a framework for mitigating impacts to oak resources. It also complies with Implementation Measure CO-P and constitutes the oak portion of the County’s biological resources mitigation program (General Plan Policy 7.4.2.8). Finally, it establishes 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.

1.2 Goals and Objectives of Plan

The ORMP 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, Oak Woodland, and Tree Resources*: Protect and conserve forest, oak woodland, and tree 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 set forth by the General Plan are met in this ORMP:

- Identify standards for determining oak woodland and native oak tree impacts, outline impact mitigation requirements and options, identify technical report submittal requirements, and outline impact mitigation monitoring and reporting requirements;
- Define Heritage Trees and identify impact mitigation requirements;
- Provide mitigation alternatives for impacts to oak resources consistent with state-level requirements;
- Provide a flexible framework for oak resources mitigation via on-site and off-site mechanisms, including an in-lieu fee payment program;
- Develop an oak woodland in-lieu fee and an individual native oak tree-based in-lieu fee;
- Identify Priority Conservation Areas (PCAs) within large expanses of contiguous oak woodland habitat where land or conservation easements may be acquired from willing sellers to offset the effects of increased habitat loss and fragmentation elsewhere;
- Identify minimum standards under which oak woodland conservation may occur outside of identified PCAs;
- 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).

### 1.3 Oak Resources in El Dorado County

#### 1.3.1 Oak Woodlands

The term “oak woodland” is defined in the Oak Woodlands Conservation Act (Article 3.5 (commencing with Section 1360) of Chapter 4 of Division 2 of the Fish and Game Code) as “an oak stand with a greater than ten percent canopy cover or that may have historically supported greater than ten percent canopy cover.” For the purposes of this ORMP, the conservation focus is on existing oak woodlands. This ORMP addresses the same study area (below 4,000 feet elevation) and same categories of oak woodlands (California Fire and Resource Assessment Program (FRAP)) as were addressed in the 2008 Oak Woodland Management Plan. These categories of oak woodland were also addressed in the 2004 General Plan using FRAP data from 2002. More recent oak woodland distribution data for El Dorado County available via FRAP (2006) identifies six oak woodland types, which are listed in Table 1 below, along with the acreage of each category found within the ORMP study area. Less than 3,500 acres of valley oak woodland is mapped for El Dorado County, which is designated as a “sensitive habitat” in the General Plan EIR. Finally, while coastal oak woodland is identified in the 2006 FRAP vegetation data set for the ORMP planning area, its presence is unlikely given the range of its dominant tree species (coast live oak (*Quercus agrifolia*)). This classification may be the result of an image processing error during creation of the 2006 FRAP data set and the area is likely another oak woodland type.

**Table 1**

<table>
<thead>
<tr>
<th>Oak Woodland Type</th>
<th>CWHR Code</th>
<th>Acreage</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue oak woodland</td>
<td>BOW</td>
<td>42,616</td>
<td>17.0%</td>
</tr>
<tr>
<td>Blue oak-foothill pine</td>
<td>BOP</td>
<td>12,915</td>
<td>5.2%</td>
</tr>
<tr>
<td>Coastal oak woodland</td>
<td>COW</td>
<td>13</td>
<td>&lt;0.1%</td>
</tr>
<tr>
<td>Montane hardwood</td>
<td>MHW</td>
<td>157,455</td>
<td>62.8%</td>
</tr>
<tr>
<td>Montane hardwood-conifer</td>
<td>MHC</td>
<td>34,322</td>
<td>13.7%</td>
</tr>
<tr>
<td>Valley oak woodland</td>
<td>VOW</td>
<td>3,434</td>
<td>1.4%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td>250,755</td>
<td>100%</td>
</tr>
</tbody>
</table>
A thorough discussion of oak woodland habitat identification and values is presented in Appendix A.

1.3.2 Oak Trees

There are six primary native oak tree species in El Dorado County, including blue oak (*Quercus douglasii*), valley oak (*Quercus lobata*), California black oak (*Quercus kelloggii*), interior live oak (*Quercus wislizeni*), canyon live oak (*Quercus chrysolepis*), and Oregon oak (*Quercus garryana*). Additionally, one native hybrid between California black oak and interior live oak exists, known as oracle oak (*Quercus x morehus*). These oak species comprise the County’s oak woodlands and also occur outside of oak woodlands as isolated individuals or small groups.

1.4 Economic Activity, Land, and Ecosystem Values of Oak Resources

Agriculture and recreation-based tourism are important economic generators in El Dorado County. Oak resources provide value for these activities, including forage value for ranching, soil retention and watershed function benefits that contribute to agricultural activities, and aesthetic value for agri-tourism. Oak resources 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 resources contribute to a high-quality visit for recreation tourists, whose activities may include camping, fishing, hiking, bird-watching, and equestrian trail riding.

Studies have also concluded that the presence of oak resources enhances property value by providing shade, wind breaks, sound absorption, land use buffers, erosion control, and aesthetic beauty. Oak resources also contribute to healthy lands and watersheds. They do this by providing habitat for animals, maintaining water quality, and improving soil characteristics. Oak resources have also been identified as a valuable component in greenhouse gas reduction, trapping and storing atmospheric carbon dioxide.

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

1.5 State-level Regulations

California Public Resources Code (PRC) Section 21083.4 requires a county to determine (as part of its project review required under the California Environmental Quality Act) whether a project may result in conversion of oak woodlands that will have a significant effect on the environment. 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 ORMP incorporates a range of mitigation alternatives that conform to these requirements.
No state-level regulations exist that require mitigation for impacts to individual oak trees that occur outside of oak woodlands; however, this ORMP identifies mitigation requirements for individual native oaks trees and Heritage Trees to meet the goals and objectives of the General Plan.
2.0 Oak Resources Impact Mitigation Requirements

The following sections outline mitigation requirements for impacts to oak resources. These mitigation requirements meet the goals and objectives of the General Plan and fulfill the requirements of General Plan Policy 7.4.4.4.

2.1 Applicability and Exemptions

The oak resources impact mitigation requirements outlined in this section apply to new development projects or actions that result in impacts to oak woodlands and/or individual native oak trees, including Heritage Trees. Specifically, oak resources impact mitigation is required for any non-exempt action requiring discretionary development entitlements or approvals from El Dorado County or ministerial actions requiring a building permit or grading permit issued by El Dorado County. All impacts to Heritage Trees are subject to the mitigation requirements contained herein. Oak woodland impacts or removal of individual native oak trees (excluding Heritage Trees) associated with the projects or actions outlined in the following sections are exempted from the mitigation requirements included in this ORMP.

2.1.1 Single-Family Lot Exemption

Projects or actions occurring on single-family residential lots of 1 acre or less that cannot be further subdivided are exempted from the mitigation requirements included in this ORMP.

2.1.2 Fire Safe Activities Exemption

Actions taken pursuant to an approved Fire Safe Plan for existing structures or in accordance with defensible space maintenance requirements for existing structures as identified in California Public Resources Code (PRC) Section 4291 are exempted from the mitigation requirements included in this ORMP. Oak resources impacts for initial defensible space establishment for new development are not exempt from the mitigation requirements included in this ORMP. After establishment of defensible space for new development, maintenance of that defensible space thereafter is exempt from the mitigation requirements included in this ORMP.

In addition, fuel modification activities outside of defensible space areas that are associated with fuel breaks, corridors, or easements intended to slow or stop wildfire spread, ensure the safety of emergency fire equipment and personnel, allow evacuation of civilians, provide a point of attack or defense for firefighters during a wildland fire, and/or prevent the movement of a wildfire from a structure to the vegetated landscape, where no grading permit or building permit is applicable, are exempted from the mitigation requirements included in this ORMP.

2.1.3 Utility Line Maintenance Exemption

Actions taken to maintain safe operation of existing utility facilities in compliance with state regulations (PRC 4292-4293 and California Public Utilities Commission (CPUC) General Order 95) are exempted from the mitigation requirements included in this ORMP. Actions associated with development of new utility facilities, including transmission or utility lines, are not exempt.

2.1.4 County Road Project Exemption

Road widening and realignment projects necessary to increase capacity, protect public health, and improve safe movement of people and goods in existing public rights-of-way (as well as acquired rights-of-way necessary to complete the project) where the new alignment is dependent
on an existing alignment are exempted from the mitigation requirements included in this ORMP. New proposed roads within the County Circulation Element and internal circulation roads within new or proposed development are not exempt.

### 2.1.5 Affordable Housing Exemption

Affordable housing projects for lower income households, as defined pursuant to Section 50079.5 of the California Health and Safety Code, that are located within an urbanized area, or within a sphere of influence as defined pursuant to California Government Code §56076 are exempted from the mitigation requirements included in this ORMP.

### 2.1.6 Agricultural Activities Exemption

The following activities are exempted from the mitigation requirements included in this ORMP:

- Agricultural activities conducted for the purposes of producing or processing plant and animal products or the preparation of land for this purpose;
- Agricultural cultivation/operations, whether for personal or commercial purposes (excluding commercial firewood operations);
- Activities occurring on lands in Williamson Act Contracts or under Farmland Security Zone Programs.

### 2.1.7 Emergency Firefighting Operations Exemption

Actions taken during emergency firefighting operations and associated post-fire activities are exempted from the mitigation requirements included in this ORMP.

### 2.1.8 Timber Harvest Plan Exemption

Tree removal permitted under a Timber Harvest Plan approved by CAL FIRE is exempted from the mitigation requirements included in this ORMP.

### 2.1.9 Dead, Dying, or Diseased Trees Exemption

Individual native oak tree removal is exempted from the mitigation requirements included in this ORMP when:

- The tree is dead, dying, or diseased, as documented in writing by a Certified Arborist or Registered Professional Forester; and/or
- The tree exhibits high failure potential with the potential to injure persons or damage property, as documented in writing by a Certified Arborist or Registered Professional Forester.

### 2.1.10 Personal Use Exemption

Removal of a native oak tree, other than a Heritage Tree, when it is cut down on the owner’s property for the owner’s personal use, is exempted from the mitigation requirements included in this ORMP.

### 2.1.11 Mitigation Reductions for Affordable Housing

This ORMP also provides for reductions to oak woodland mitigation for affordable housing projects that are not exempted as defined above. Specifically, 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 woodland that is required to be mitigated, as set forth in Table 2. The reduction is to be applied to the mitigation ratio presented in Table 3 and shall only be applied to the residential portion(s) of the proposed project. This reduction for affordable housing projects applies to oak woodland and individual native oak tree impacts and but not to Heritage Tree impacts. In no case shall the mitigation requirement be less than zero.

### Table 2

<table>
<thead>
<tr>
<th>Affordable Housing Type (Household Income Level)</th>
<th>Percent Oak Woodland Mitigation Reduction (for portion of project that is income restricted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>200%</td>
</tr>
<tr>
<td>Lower</td>
<td>100%</td>
</tr>
<tr>
<td>Moderate</td>
<td>50%</td>
</tr>
</tbody>
</table>

Example: A project proposes 25% of the units to be affordable in the Lower income category. The oak woodland mitigation ratio may be reduced by 25%. A Moderate income project that provides all units at that income level may reduce the oak woodland mitigation ratio by 50%. A project with 20% Very Low income units would receive a 40% reduction in oak woodland mitigation ratio.

### 2.2 Oak Woodland Permits and Mitigation

The policy of the County is to preserve oak woodlands when feasible, through the review of all proposed development activities where woodlands are present on either public or private property, while at the same time recognizing individual rights to develop private property in a reasonable manner. As such, the County shall require mitigation for impacts to oak woodlands. The following sections outline oak woodland permit and mitigation requirements and Figure 1 outlines the permit and mitigation process.

#### 2.2.1 Oak Woodland Removal Permits

An oak woodland removal permit shall be required for discretionary or ministerial (e.g., building permits) projects to authorize removal of any trees that are a component of an oak woodland. An oak resources technical report shall accompany any oak woodland removal permit application submitted to the County. The County may impose such reasonable conditions of approval as are necessary to protect the health of existing oak woodlands, the public, and the surrounding property. Oak woodland removal permit review will occur concurrently with the environmental review process for discretionary projects or concurrent with other permit review and processing for ministerial projects. In addition to findings of consistency with the requirements and standards of this ORMP, the County shall make the following findings before approving an oak woodland removal permit application:

- The proposed action is consistent with the General Plan; and
• The proposed action would not be detrimental to the public health, safety and welfare, or injurious to the neighborhood; and

• The proposed action is specifically allowed by an oak woodland removal permit pursuant to this ORMP.

An appeal to the fees established through this ORMP shall be in accordance with the appeal procedure set forth in Section 130.22.220 of the County Code.

Commercial firewood cutting operations in oak woodlands shall also require an oak woodland removal permit. In reviewing an oak woodland removal permit application for firewood cutting operations, the County shall consider the following:

• Whether the removal of the tree(s) would have a significant negative environmental impact;
• Whether the proposed removal would not result in clear-cutting, but would result in thinning or stand improvement;
• Whether replanting would be necessary to ensure adequate regeneration;
• Whether the removal would create the potential for soil erosion;
• Whether any other limitations or conditions should be imposed in accordance with sound tree management practices; and
• What the extent of the resulting oak woodland coverage would be.

Fines shall be issued to any person, firm, or corporation that is not exempt from the standards included in this ORMP who impacts an oak woodland without first obtaining an oak woodland removal permit. Fines may be as high as three times the current oak woodland in-lieu fee amount. If an oak woodland is impacted without an oak woodland removal permit, in addition to issuing a fine, the County may choose to deny or defer approval of any applications for development of that property for a period of up to 5 years. All monies received as fines for illegal oak tree and woodland removal shall be deposited in the County’s Oak Woodland Conservation Fund.

2.2.2 Oak Woodland Mitigation

In order to incentivize on-site retention of oak woodlands, mitigation for impacts to oak woodlands shall be based on the ratios presented in Table 3.

Table 3
Oak Woodland Mitigation Ratios

<table>
<thead>
<tr>
<th>Percent of Oak Woodland Impact</th>
<th>Oak Woodland Mitigation Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-50%</td>
<td>1:1</td>
</tr>
<tr>
<td>50.1-75%</td>
<td>1.5:1</td>
</tr>
<tr>
<td>75.1-100%</td>
<td>2:1</td>
</tr>
</tbody>
</table>
Oak woodland impacts and mitigation shall be addressed in an oak resources technical report. As presented in Table 3, all of a project’s oak woodland impacts shall be mitigated at a 1:1 ratio where 50 percent or less of on-site oak woodlands are impacted, all of a project’s oak woodland impacts shall be mitigated at a 1.5:1 ratio where 50.1 to 75 percent of on-site oak woodlands are impacted, and all of a project’s oak woodland impacts shall be mitigated at a 2:1 ratio where greater than 75 percent of on-site oak woodlands are impacted. Non-exempt County road projects shall provide oak woodland mitigation at a ratio of 1:1 regardless of the amount of onsite retention. A deed restriction or conservation easement shall be placed over retained on-site woodlands and those woodlands retained on site shall not be counted towards the impacted amount or towards the required mitigation. Mitigation for the impacted oak woodlands shall occur at the ratio required under Table 3 using one or more of the following options:

1. Deed restriction or conservation easement acquisition (off-site), and/or acquisition in fee title by a land conservation organization (off-site);
2. In-lieu fee payment;
3. Replacement planting on-site within an area subject to a deed restriction or conservation easement;
4. Replacement planting off-site within an area subject to a conservation easement; or
5. A combination of numbers 1 through 4 above.

Consistent with California PRC 21083.4, replacement planting shall not account for more than 50 percent of the oak woodland mitigation requirement.
Figure 1. Oak Resources Permitting and Mitigation Process

Oak Resources Removal Permit Flow Chart

(Must Answer Questions 1, 2, and 3)

Question 1: Oak Trees on Property?
- No → No Action Required
- Yes → Question 2:

Question 2: Oak Woodlands on Property?
- No → No Oak Woodland Mitigation Required
- Yes → Question 3:

Question 3: Oak Trees on Property 6" or Greater and Outside of Woodlands?
- No → No Oak Tree Mitigation Required
- Yes → Do Qualifying Exemptions Apply?
- No → Oak Resources Technical Report
- Yes → Mitigate for Oak Woodland Impacts as outlined in ORMP:
  - Conservation
  - Tree Planting
  - In-lieu Fee

No Action Required

Do Qualifying Exemptions Apply?
- No → Oak Resources Technical Report
- Yes → Determine Impact and Mitigation Requirement

Mitigate for Non-Woodland Oak Tree Impacts as outlined in ORMP:
- Tree Planting
- In-lieu Fee
2.3 Individual Native Oak Tree and Heritage Tree Permits and Mitigation

The policy of the County is to preserve native oak trees when feasible, through the review of all proposed development activities where such trees are present on either public or private property, while at the same time recognizing individual rights to develop private property in a reasonable manner. As such, the County shall require mitigation for impacts to individual native oak trees and Heritage Trees.

2.3.1 Oak Tree Removal Permits

A tree removal permit shall be required for discretion ary or ministerial (e.g., building permits) projects to authorize removal of any individual native oak tree not located within an oak woodland and/or for removal of any Heritage Tree. An oak resources technical report shall accompany any tree removal permit application submitted to the County. The County may impose such reasonable conditions of approval as are necessary to protect the health of existing oak trees, the public, and the surrounding property. Oak tree removal permit review will occur concurrent with the environmental review process for discretionary projects or concurrently with other permit review and processing for ministerial projects (e.g., building permits). The County will prepare a permit application for ministerial review. In addition to findings of consistency with the requirements and standards of this ORMP, the County shall make the following findings before approving an oak tree removal permit application:

- The proposed action is consistent with the General Plan; and
- The proposed action would not be detrimental to the public health, safety and welfare, or injurious to the neighborhood; and
- The proposed action is specifically allowed by an oak woodland removal permit pursuant to this ORMP.

An appeal to the fees established through this ORMP shall be in accordance with the appeal procedure set forth in Section 130.22.220 of the County Code.

Commercial firewood cutting operations shall also require a tree removal permit if not approved under an oak woodland removal permit. In reviewing a tree removal permit application for commercial firewood cutting operations, the County shall consider the following:

- Whether the removal of the tree(s) would have a significant negative environmental impact;
- Whether the tree proposed for removal is a Heritage Tree;
- Whether replanting would be necessary to ensure adequate regeneration;
- Whether the removal would create the potential for soil erosion; and
- Whether any other limitations or conditions should be imposed in accordance with sound tree management practices.
Fines shall be issued to any person, firm, or corporation that is not exempt from the standards included in this ORMP who removes an oak tree without first obtaining an oak tree removal permit. Fines may be as high as three times the current market value of replacement trees, as well as the cost of replacement, and/or the cost of replacement of up to three times the number of required replacement trees. In the case of unpermitted Heritage Tree removal, fines may be as high as 9 times the current market value of replacement trees, as well as the cost of replacement, and/or the cost of replacement of up to 9 times the number of required replacement trees. If individual native oak trees or Heritage Trees are removed without an oak tree removal permit, in addition to issuing a fine, the County may choose to deny or defer approval of any applications for development of that property for a period of up to 5 years. All monies received as fines for illegal oak tree and woodland removal shall be deposited in the County’s Oak Woodland Conservation Fund.

2.3.2 Oak Tree Mitigation

Mitigation for removal of individual native oak trees shall be based on an inch-for-inch replacement standard (defined in Section 2.4) and shall be quantified and outlined in an oak resources technical report (defined in Section 6.0). Mitigation for removal of Heritage Trees shall be based on an inch-for-inch replacement standard at a 3:1 ratio and shall also be quantified and outlined in an oak resources technical report.

Options for individual native oak tree and Heritage Tree impact mitigation requirements include:

1. Replacement planting on-site within an area subject to a deed restriction or conservation easement;
2. Replacement planting off-site within an area subject to a conservation easement or acquisition in fee title by a land conservation organization;
3. In-lieu fee payment; or
4. A combination of numbers 1 through 3 above.

Mitigation for individual native oak tree and/or Heritage Tree impacts shall be addressed in an oak resources technical report.

2.4 Replacement Planting Guidelines

This section provides guidelines for projects that elect to mitigate via replacement planting. Replacement plantings may be accepted if the replanting area can support oak resources (e.g., proper soil type and general environment). The intent is not to remove existing natural habitats for replacement plantings or to create a continuous canopy that would reduce wildlife value or contribute to increased fire hazard. Replacement plantings are subject to County approval and shall be completed as follows:

- **Oak Woodland Impacts:** For impacts to oak woodlands, planting density shall be based on recommendations made by a qualified professional and presented in an oak resources technical report. Planting density shall be based on the density of impacted oak woodlands, which shall be documented in the oak resources technical report. Replacement trees shall be regularly monitored and maintained and shall survive for a
period of 7 years, calculated from the day of planting. Acorns may be used instead of container trees. If acorns are used, they shall be planted at a 3:1 ratio as determined by the tree replacement formula. The replacement is as follows:

Replacement planting with container trees (one-gallon or TreePot 4-sized container trees, that are locally sourced, shall follow this formula for ratios:

\[(\text{Impacted Oak Woodland Area in acres}) \times (\text{Impacted Oak Woodland Density in trees/acre}) = \text{the total number of replacement trees to be replanted}\]

Replacement replanting by acorn shall be from locally-sourced acorns (acorns gathered locally). The replacement ratio by acorn replanting shall be obtained by the following formula

\[(\text{Impacted Oak Woodland Area in acres}) \times (\text{Impacted Oak Woodland Density in trees/acre}) \times (3 \ \text{acorns per tree}) = \text{the total number of acorns to be replanted}\]

This ORMP does not preclude over-planting so that the identified woodland density may be accomplished at the end of the 7-year maintenance and monitoring period. Replacement planting may use a combination of replacement tree sizes (one-gallon, TreePot 4, acorns) if consistency with these ratios is maintained and documented in an oak resources technical report. Monitoring reports shall be submitted to the County at least annually during the 7-year maintenance and monitoring period and documentation of replacement planting success shall be provided to the County at the end of the 7-year monitoring and maintenance period (final monitoring report).

- **Individual Native Oak Tree and Heritage Tree Impacts:** For impacts to individual native oak trees that are not otherwise mitigated, replacement planting shall be calculated based upon an inch-for-inch replacement of removed individual native oak trees. The total of replacement trees shall have a combined diameter of the tree(s) removed. Replacement tree species shall be the same proportion as those removed. Replacement trees shall be planted on-site and monitored and maintained for a period of 7 years, calculated from the day of planting. Documentation of replacement planting success shall be provided to the County at the end of the 7-year monitoring and maintenance period. Any trees that do not survive the 7-year monitoring and maintenance period shall be replaced by the responsible party listed on the Oak Tree Removal Permit and shall be monitored and maintained for 7 years.

Replacement tree sizes may vary and may include acorn plantings, based on documentation of inch-for-inch replacement consistency included in an oak resources technical report. Table 4 identifies replacement tree size options and associated quantity of trees, by size, required to meet the inch-for-inch replacement standard.
Table 4
Oak Woodland Mitigation Ratios

<table>
<thead>
<tr>
<th>Replacement Tree Size</th>
<th>Number of Trees Required Per Inch of Trunk Diameter Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acorn</td>
<td>3</td>
</tr>
<tr>
<td>1-gallon/TreePot 4</td>
<td>2</td>
</tr>
<tr>
<td>5-gallon</td>
<td>1.5</td>
</tr>
<tr>
<td>15-gallon</td>
<td>1</td>
</tr>
</tbody>
</table>

If acorns are used, they shall be planted at a 3:1 ratio (3 acorns for every 1-inch of trunk diameter removed) under the direction of a qualified professional. Acorn planting shall not exceed 25-percent of any project’s tree planting total. If 1-gallon/TreePot 4-sized containers are used, they shall be planted at a 2:1 ratio (2 container trees for every 1-inch of trunk diameter removed). If 5-gallon-sized containers are used, they shall be planted at a 1.5:1 ratio (1.5 container trees for every 1-inch of trunk diameter removed). Finally, if 15-gallon-sized containers are used, they shall be planted at a 1:1 ratio (1 container tree for every 1-inch of trunk diameter removed).

The replacement planting area shall be suitable for tree planting, shall not conflict with current or planned land uses, and shall be large enough to accommodate replacement plantings at a density no greater than 200 trees per acre. This ORMP does not preclude over-planting so that the minimum survival rate may be accomplished at the end of the 7-year maintenance and monitoring period. Monitoring reports shall be submitted to the County at least annually during the 7-year maintenance and monitoring period and documentation of replacement planting success shall be provided to the County at the end of the 7-year monitoring and maintenance period (final monitoring report).

For impacts to Heritage Trees, replacement planting shall adhere to the standards identified for individual native oak trees; however, replacement totals shall be calculated based upon an inch-for-inch replacement at a 3:1 ratio.

- **On-Site Replacement Planting:** On-site replacement trees are to be planted to the satisfaction of the Development Services Director. The replacement planting area shall be suitable for tree planting, shall not conflict with current or planned land uses, and shall be large enough to accommodate replacement plantings at a density equal to the density of oak woodlands impacted. A deed restriction or conservation easement to the satisfaction of County Counsel and the Director shall be required to ensure the long term conservation of any on-site replacement trees planted. The Conservation Easement shall be in favor of the County or a County-approved conservation organization. Maintenance and monitoring shall be required for a minimum of 7 years after planting. Any trees that do not survive during this period of time shall be replaced by the responsible party listed on the Oak Tree Removal Permit and monitored to ensure survival for a period of 7 years from the date of planting.

- **Off-Site Replacement Planting:** The applicant may be permitted to procure an off-site planting area for replacement planting, preferably in proximity and/or in connection with oak woodlands contiguous to the project site or within or adjacent to a PCA or an Important Biological Corridor as designated in the General Plan or important ecological
The replacement planting area shall be suitable for tree planting, shall not conflict with current or planned land uses, and shall be large enough to accommodate replacement plantings at a density no greater than 200 trees per acre. A conservation easement to the satisfaction of County Counsel and the Development Services Director shall be required to ensure the long term maintenance and preservation of any on-site replacement trees planted. The Conservation Easement shall be in favor of the County or a County approved conservation organization. Maintenance and monitoring shall be required for a minimum of 7 years after planting. Any trees that do not survive during this period of time shall be replaced by the responsible party listed on the Oak Tree Removal Permit and monitored to ensure survival for a period of 7 years from the date of planting.

- **Replacement Planting Plans**: Oak resources replacement planting plans shall be prepared for all replacement planting efforts (on- and off-site) by a qualified professional and may be prepared in conjunction with oak resources technical report. Replacement planting plans shall address the following:
  
  - Consistency with the accepted native oak tree planting standards, including those outlined in *Regenerating Rangeland Oaks in California* (McCreary 2009), *How to Grow California Oaks* (McCreary 1995), *How to Collect, Store and Plant Acorns* (McCreary undated), and other publications and protocols that may be established by the University of California, Division of Agriculture and Natural Resources.
  
  - The suitability of the site shall be demonstrated with soil information, aerial photography, or other resources.
  
  - The density of replanting shall be determined by the qualified professional, based on accepted practice and current research, but shall not exceed 200 trees per acre.
  
  - The intent of the replacement planting 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.
  
  - Acorns or container trees for replanting shall be from local sources, when available, to maintain local genetic strains.
  
  - Replacement planting shall not be located within the 100-foot defensible space zone from an existing or proposed structure unless otherwise consistent with CALFIRE’s defensible space guidelines and fuels reduction requirements mandated under 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, tree protection, pest management, and/or fertilization.
  
  - The replacement planting plan shall identify the frequency and methods of maintenance and monitoring, as well as contingencies or alternatives if the success criteria are not met annually or at the end of the monitoring term along with a means to ensure compliance with the replacement planting plan. The monitoring term shall be 7 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.

2.5 Oak Resources Technical Reports

This section provides guidelines for projects that require preparation of an oak resources technical report. An oak resources technical report is a stand-alone report prepared by a qualified professional that includes the following:

- Identification, location, and quantification of all oak resources on the property:
  - Oak woodlands shall be mapped and assessed in accordance with the CDFG 2009 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities and subsequent updates, and the List of Vegetation Alliances and Associations (CDFG 2010) and subsequent updates;
  - Data collected for individual native oak trees and Heritage Trees shall include: location, species, trunk diameter (dbh), height, canopy radius, and general health and structural condition;

- Identification and quantification of project-related impacts to oak resources;

- Measures identifying how specific trees and woodlands (or retained portions thereof) shall be protected during development and related work;

- Proposed actions to mitigate impacts to oak resources, consistent with the requirements included in this ORMP:
  - For replacement planting, the report shall provide detail regarding the quantity, location, planting density, replacement tree size(s), and acorn/seedling source consistent with the definition of Replacement Planting included in this ORMP;
  - For conservation easement placement/acquisition and/or land acquisition in fee title, the report shall provide documentation of easement placement on-site and/or documentation of easement or land acquisition off-site to the satisfaction of the County;
  - For in-lieu fee payment, the report shall document the quantity of impacts (acreage of oak woodlands and/or total diameter inches of individual native oak trees/Heritage Trees) and the total in-lieu fee payment necessary (presented separately for oak woodlands, individual native oak trees, and Heritage Trees, where applicable);

- Identification of responsible parties;

- Identification of maintenance, monitoring, and reporting requirements;

- Analysis of non-PCA conservation easement areas, where applicable;

- A site map(s) depicting the location of all oak woodlands, individual native oak trees, and Heritage Trees and the location of all proposed project-related improvements (including,
but not limited to, the limits of grading, fuel modification/defensible space areas, and above- and below-ground infrastructure). The site map(s) shall also clearly identify impacted oak resources.

2.6 Mitigation Program Flexibility

This ORMP provides for flexibility in meeting oak resources mitigation requirements. An applicant for a development project may comply with the provisions of this ORMP by combining mitigation options, except as specified for replacement planting to mitigate oak woodland impacts. Off-site mitigation may be accomplished through private agreements between the applicant and another private party consistent with the standards included in this ORMP and subject to approval by the County. When dedication of off-site conservation easements outside of PCAs is proposed by a developer, the proposed site shall be prioritized based on the standards set forth in this ORMP (Section 4.0). A developer that dedicates a County-approved conservation easement is not subject to the acquisition component of the in-lieu fee, but is subject to the management component and monitoring component of the fee.
3.0 In-Lieu Fee

The methodology for determining the in-lieu fee for impacts to individual native oak trees and oak woodlands is provided in detail in Appendix B. In general, the in-lieu fee for oak woodlands is based on the costs of acquisition of land and conservation easements, along with management, monitoring, and administrative costs. For individual native oak trees, the in-lieu fee is based on an inch-for-inch replacement approach that accounts for costs associated with purchasing and planting 1-inch of trunk diameter.

3.1 Oak Woodlands

As noted, the in-lieu fee for impacts to oak woodlands is based on the costs of acquisition of land and conservation easements, along with management, monitoring, and administrative costs. A breakdown of costs per acre is provided in Table 5.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition</td>
<td>$4,400</td>
</tr>
<tr>
<td>Initial Management and Monitoring</td>
<td>$2,300</td>
</tr>
<tr>
<td>Long-Term Management and Monitoring</td>
<td>$875</td>
</tr>
<tr>
<td>Administration</td>
<td>$379</td>
</tr>
<tr>
<td><strong>Total Cost per Acre</strong></td>
<td><strong>$7,954</strong></td>
</tr>
</tbody>
</table>

Source: New Economics & Advisory Draft Oak Resource In-Lieu Fee Nexus Study (November 2015)

The in-lieu fee payment option for impacts to oak woodlands shall be made at the ratio outlined in Table 3, which provides for a variable mitigation ratio depending on the percentage of oak woodland impacted on a project site. The County shall deposit all oak woodland in-lieu fees into its Oak Woodland Conservation Fund, which shall be used to fund the acquisition of land and/or conservation easements from willing sellers as described 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. It is anticipated that conservation easements and mitigation lands would be held by a land conservation organization; therefore, ongoing monitoring and management activities would be conducted by such organizations. Funding to support the negotiation of the purchase price and oversight of the land transaction is included in the management component of the oak woodland in-lieu fee.

If a project applicant independently negotiates purchase of a conservation easement with a willing seller to mitigate oak woodland impacts, the applicant shall be responsible for paying the Initial and Long-Term Management and Monitoring components of the Oak Woodland In-Lieu Fee to the County, unless the applicant also independently negotiates acceptance of the conservation easement management and monitoring with a land conservation organization approved by the County.

As costs 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 a report to be submitted to the Planning Commission and Board of Supervisors every other March, as described in Appendix A. The first fee adjustment study would occur at least 12 months after adoption of this ORMP.

### 3.2 Oak Trees

For individual native oak trees, the in-lieu fee is based on an inch-for-inch replacement approach that accounts for costs associated with purchasing and planting 1-inch of trunk diameter and maintaining those trees for a period of seven years. Specifically, two 1-gallon/TreePot 4-sized container trees are assumed to represent one inch of trunk diameter. The acquisition and planting component of the per-inch mitigation fee is then based on the costs to purchase and plant two 1-gallon/TreePot 4-sized container trees. To determine the per-inch fee, the median price of 1-gallon/TreePot 4-sized container trees was calculated from a survey of nurseries in El Dorado County and the surrounding region. This price was then doubled for each tree to account for costs associated with planting. Doubling the per-tree cost to account for purchasing and planting a tree (inclusive of labor and materials) is a standard approach in the landscape/habitat restoration industry. The management and monitoring component of the per-inch mitigation fee is based on annual costs associated with maintaining planted trees for a period of seven years. Data for this fee was derived from cost estimates provided by a habitat restoration contracting firm, Habitat Restoration Sciences, Inc. Based on this analysis, the per-inch individual native oak tree mitigation fee was calculated to be $153.00. In the case of Heritage Trees, the per-inch mitigation fee shall be $459.00 (3:1 ratio). Table 6 summarizes the cost breakdown associated with the in-lieu fee for individual native oak trees.

#### Table 6

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost per Inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition and Planting</td>
<td>$31.92</td>
</tr>
<tr>
<td>Initial Management &amp; Monitoring (Years 1-7)</td>
<td>$113.40</td>
</tr>
<tr>
<td>Administration (5%)</td>
<td>$7.27</td>
</tr>
<tr>
<td><strong>Total Cost per Inch</strong></td>
<td><strong>$153</strong></td>
</tr>
</tbody>
</table>

*Source: New Economics & Advisory Draft Oak Resource In-Lieu Fee Nexus Study (November 2015)*

As described in this ORMP, this per-inch mitigation fee may be paid as mitigation for impacts to individual native oak trees or Heritage Trees. The per-inch fee shall be multiplied by the total number of trunk diameter inches removed (dbh). The County shall deposit all oak tree in-lieu fees into its Oak Woodland Conservation Fund and shall use collected per-inch mitigation fees for native oak tree planting projects or may use such funds to acquire oak woodland conservation easements, with documentation that the number of diameter inches meets those for which mitigation fees have been paid.

As costs 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 a report to be submitted to the Planning Commission and Board.
of Supervisors every other March, as described in Appendix A. The first fee adjustment study would occur at least 12 months after adoption of this ORMP.
4.0 Priority Conservation Areas

4.1 Identification of Priority Conservation Areas

Figure 2 identifies the areas in which acquisition of land or conservation easements from willing sellers shall be prioritized using the Oak Woodland Conservation Fund generated by the payment of the in-lieu fees described above. These areas were identified using the FRAP classification of oak woodland habitat 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 7. A more detailed description of the mapping process and data used to identify PCAs is provided in Appendix A. Figure 2 also shows existing public lands with oak woodlands contiguous to the PCAs.

Table 7
PCA Parcel Statistics

<table>
<thead>
<tr>
<th>Parcel size (Acres)</th>
<th>Number of Parcels</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-60</td>
<td>170</td>
<td>7,666.3</td>
</tr>
<tr>
<td>60.1-120</td>
<td>155</td>
<td>13,176.7</td>
</tr>
<tr>
<td>120.1-340</td>
<td>175</td>
<td>31,674.3</td>
</tr>
<tr>
<td>340.1+</td>
<td>29</td>
<td>13,535.5</td>
</tr>
<tr>
<td>Total</td>
<td>529</td>
<td>66,052.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Avg. Size</th>
<th>Median Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>124.9</td>
<td>84.3</td>
</tr>
</tbody>
</table>

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, particularly areas that are adjacent to existing woodlands lying west of the National Forest within the Important Biological Corridor overlay, under a conservation easement, on public lands, in open space lands, in riparian corridors, or ecological preserves.

Oak woodlands within the PCAs will be conserved to mitigate for losses of oak woodlands. Prioritization will be given to areas that provide a diversity of oak woodland types. The acreage of oak woodlands conserved shall be based on the quantity of those impacted as a result of new development.
FIGURE 2
Priority Conservation Areas, Oak Woodlands, and Public Lands in El Dorado County

Draft Oak Resources Management Plan

SOURCE: Bing Maps 2014; FRAP 2006; El Dorado County 2014
This ORMP establishes a strategy for conserving oak woodland habitat to offset the effects of increased habitat loss and fragmentation elsewhere in the county. Identification of PCAs and standards for prioritizing conservation of oak woodlands outside of PCAs (Section 4.3) fulfills the oak woodlands portion of the conservation requirements outlined in General Plan Policy 7.4.2.8.

4.2 Management of PCAs

Existing oak woodlands within the PCAs identified as mitigation for project impacts, whether on or off a 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 or by acquisition in fee title by a land conservation group. Management activities would be conducted by land conservation organizations and may include, but are not limited to, one or more of the following activities, as determined appropriate and/or necessary 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. Agricultural use (i.e., grazing) shall be allowed in conserved oak woodlands as long as the activity occurred prior to the establishment of the conservation easement, the spatial extent of the agricultural use is not expanded on conserved lands, and the agricultural use does not involve active tree harvest or removal (e.g., fuelwood operations, land clearing for crop planting, etc.).

4.3 Conservation Outside of PCAs

The PCAs have been delineated to prioritize the acquisition of land or oak woodland conservation easements either by the County (using the funds collected in the County’s Oak Woodland Conservation Fund) or privately by developers. However, acquisition of land or oak woodland conservation easements outside of the PCAs may also occur. The following criteria shall be used for selecting potential oak woodlands conservation lands or easements outside of PCAs, consistent with General Plan Policy 7.4.2.8 (D):

- Location within IBCs;
- Location within other important ecological areas as identified in the Initial Inventory and Mapping (June 2010);
- Woodlands with diverse age structure;
- Woodlands with large trees and dense canopies;
- Opportunities for active land management to be used to enhance or restore natural ecosystem processes;
- Potential to support special-status species;
- Connectivity with adjacent protected lands;
- Parcels that achieve multiple agency and community benefits;
- Parcels that are located generally to the west of the Eldorado National Forest; and
- Parcels that would preserve natural wildlife movement corridors such as crossings under major roadways (e.g., U.S. Highway 50 and across canyons).
Land or conservation easement acquisition as mitigation of oak woodland impacts that occurs outside of PCAs shall occur on minimum contiguous habitat blocks of 5 acres (the acquired land or conservation easement shall be contiguous to or shall create a contiguous area of no less than 5 acres of oak woodland in conserved or open space status (e.g., parks, national forest, other conserved oak woodlands on private property). For transactions where land is acquired or a conservation easement outside of the PCAs is negotiated between a developer and a private seller, an analysis of the proposed oak woodland conservation area shall be performed by a qualified professional to demonstrate that the proposed conservation area is of equal or greater biological value as the oak woodland proposed to be removed. The analysis of conservation areas shall be included as a component of an oak resources technical report.

Should the County elect to purchase land or oak woodlands conservation easements outside of PCAs using funds from its Oak Woodland Conservation Fund, an analysis of the proposed oak woodland conservation area shall be performed by a qualified professional to determine its suitability in meeting the criteria listed above.

4.4 Conservation Easements

Where the mitigation requirements of this ORMP are met through conservation easements for oak woodlands, whether within or outside of PCAs, the conservation easement shall be granted in perpetuity to the County or a land conservation group approved by the County. The easement shall be provided on a form approved by the County and shall be recorded with the County Clerk/Recorder prior to issuance of a grading or building permit, filing of a parcel or final map, or otherwise commencing with the project.

4.5 Deed Restrictions

Where the mitigation requirements of this ORMP are met through deed restrictions for oak woodlands, whether within or outside of PCAs, the deed restriction shall commit the property to oak woodland conservation use in perpetuity. The deed restriction shall be recorded with the County Clerk/Recorder prior to issuance of a grading or building permit, filing of a parcel or final map, or otherwise commencing with the project.
5.0 Application of ORMP to Development Review Process

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

1. Planning staff and applicant determine if oak resources exist on the property and if the proposed project would impact any of the oak resources.

2. Oak resources are mapped, quantified, and categorized (oak woodland, individual native oak tree, and/or Heritage Tree) by a qualified professional hired by the applicant and documented in an oak resources technical report.

3. Oak resources impacts are quantified in the oak resources technical report. Oak resources impacts are calculated by identifying all disturbed areas as proposed, including:
   a. Roads, driveways, and access drives;
   b. Graded areas for building pads, parking lots, staging areas, and other improvements; and
   c. Other disturbed areas resulting in oak resources impacts including septic system leach fields, above- and below-ground utilities, and defensible space vegetation removal for new construction.

4. The proposed oak woodland impact area is compared with the total on-site oak woodland area to determine the appropriate mitigation ratio.

5. Impacts to individual native oak trees and/or Heritage Trees are determined and the sum of impacted trunk diameter (dbh) calculated.

6. If applicable, the applicant proposes mitigation for impacts to oak woodlands in an oak resources technical report by one of the following mechanisms:
   a. Deed restriction and/or conservation easement dedication (on-site), conservation easement acquisition (off-site), acquisition in fee title by a land conservation organization (on-site and/or off-site);
   b. In-lieu fee payment at the ratio determined by percentage of on-site oak woodland impact and based on the currently-adopted per-acre fee amount;
   c. Replacement planting on-site within an area subject to a deed restriction or conservation easement;
   d. Replacement planting off-site within an area subject to a conservation easement or acquisition in fee title by the County or a County-approved land conservation organization; or
   e. A combination of two or more of the above provisions.

   In no case shall replacement planting exceed 50 percent of oak woodland mitigation requirement.

7. If applicable, the applicant proposes mitigation for impacts to individual native oak trees and/or Heritage Trees in an oak resources technical report by one of the following mechanisms:
a. Replacement planting on-site within an area subject to a deed restriction or conservation easement;

b. Replacement planting off-site within an area subject to a conservation easement or acquisition in fee title by the County or a County-approved land conservation organization;

c. In-lieu fee payment for all diameter inches removed (dbh), or 3 times the total diameter inches removed for Heritage Trees, and based on the currently-adopted per-inch fee amount; or

d. A combination of two or more of the above provisions.

8. Payment of applicable in-lieu fees and establishment of any required deed restrictions and/or granting of any required conservation easements and/or land acquisition in fee title shall be required as a condition of approval of all discretionary or ministerial 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 in-lieu fees may be phased to reflect the timing of the oak resources removal/impact. For phasing, permits issued for oak resources removal shall only be for the area covered by the fee payment.

9. Payment of in-lieu fees and establishment of any required deed restrictions and/or granting of any required conservation easements and/or land acquisition in fee title, if necessary, shall be completed prior to issuance of a building or grading permit for ministerial projects.
6.0 Definitions

For the purposes of this ORMP, the following terms and phrases shall have the meanings respectively ascribed to them by this section:

**Agricultural Conversion:** As defined by General Plan Policy 7.1.2.7.

**Agricultural Cultivation/Operations:** As defined by General Plan Policy 8.2.2.1.

**Agricultural Lands:** As defined by General Plan Policies 2.2.1.2 and 8.1.1.8, and further, Policy 8.2.2.1.

**Arborist:** A person certified by the International Society of Arboriculture (ISA) that provides professional advice regarding trees in the County.

**CAL FIRE:** California Department of Forestry and Fire Protection.

**Commercial Firewood Cutting:** Fuel wood production where a party cuts firewood for sale or profit.

**Conservation Easement:** An easement granting a right or interest in real property that is appropriate to retaining land or water areas predominately in their natural, scenic, open, or wooded 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 woodland impacts, a conservation easement to the satisfaction of County Counsel and the Development Services Director 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 woodland within the easement area. The conservation easement shall be in favor of the County or a County-approved conservation organization.

**Construction/Disturbance Area:** Any area in which movement of earth, alteration in topography, soil compaction, disruption of vegetation, change in soil chemistry, and any other change in the natural character of the land occurs as a result of site preparation, grading, building construction or any other construction activity.

**Deed Restriction:** Private agreements that restrict the use of the real estate and are listed in the deed. Restrictions travel with the deed, and cannot generally be removed by new owners.

**Defensible Space:** The area within the perimeter of a parcel, development, neighborhood or community where basic wildland fire protection practices and measures are implemented, in order to defend against encroaching wildfires or provide for people to escape structure fires.

Defensible space is required by any person who owns, leases, controls, operates or maintains a building or structure in or adjoining any mountainous area, forest-covered lands, brush-covered
lands, grass-covered lands or any land that is covered with flammable material. PRC 4291 requires 100 feet of Defensible Space (or to the property line if less than 100 feet) from every building or structure that is used for support or shelter of any use or occupancy.

**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. In the case of trees with multiple trunks, the diameter of all stems (trunks) at breast height shall be combined to calculate the diameter at breast height of the tree.

**Fire Safe Plan:** Defined in the El Dorado County General Plan (Policy 6.2.2.2) as a plan prepared by a Registered Professional Forester (RPF) and approved by the local Fire Protection District and/or California Department of Forestry and Fire Protection. The plan is prepared to demonstrate that development can be adequately protected from wildland fire hazard in areas of high and very high wildland fire hazard or in areas identified as “urban wildland interface communities within the vicinity of Federal lands that are a high risk for wildfire,” as listed in the Federal Register of August 17, 2001.

**Habitat:** The physical location or type of environment in which an organism or biological population lives or can be found.

**Heritage Trees:** 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 wislizenii*), canyon live oak (*Quercus chrysolepis*), Oregon oak (*Quercus garryana*), oracle oak (*Quercus x morehus*), or hybrids thereof) with a single main trunk measuring 36 inches dbh or greater, or with a multiple trunk with an aggregate trunk diameter measuring 36 inches or greater.

**Impact:** For individual native oak trees, the physical destruction, displacement or removal of a tree or portions of a tree caused by poisoning, cutting, burning, relocation for transplanting, bulldozing or other mechanical, chemical, or physical means. For ask woodlands, tree and land clearing associated with land development, including, but not limited to, grading, clearing, or otherwise modifying land for roads, driveways, building pads, landscaping, utility easements, fire-safe clearance and other development activities.

**In-lieu Fee:** Cash payments that may be paid into the County’s Oak Woodland Conservation Fund by an owner or developer as a substitute for deed restriction or conservation easement or replacement planting. In-lieu fee amounts for individual native oak trees, Heritage Trees, and oak woodlands are presented in this ORMP and may be adjusted by the County over time to reflect changes in land values, labor costs, and nursery stock costs.

**Individual Native Oak Trees:** 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 wislizenii*), canyon live oak (*Quercus chrysolepis*), Oregon oak (*Quercus garryana*), oracle oak (*Quercus x morehus*), or hybrids thereof) with a single main trunk measuring greater than 6 but less than 36 inches dbh, or with a multiple trunk with an aggregate trunk diameter measuring greater than 10 but less than 36 inches dbh.
Monitoring Report: A report prepared by a qualified professional documenting site observations and replacement planting survival totals for oak resources mitigation efforts. A Final Monitoring Report is one prepared at the end of the 7-year maintenance and monitoring period that summarizes replacement planting survival totals. A copy of the Final Monitoring Report shall be submitted to the County.

Oak Resources: Collectively, oak woodlands, individual native oak trees, and Heritage Trees.

Oak Resources Impacts: For individual native oak trees and Heritage Trees, removal or actions that cause the death of the tree shall constitute an impact. For oak woodlands, the oak woodland acreage that occurs within project-related disturbance areas shall be considered impacted.

Oak Tree Removal Permit: A permit issued by the County allowing removal of individual native oak trees not located within an oak woodland. An oak resources technical report shall accompany any tree removal permit application submitted to the County. Conditions of approval may be imposed on the permit. If a tree removal permit application is denied, the County shall provide written notification, including the reasons for denial, to the applicant. Oak tree removal permit processing and approval will be conducted concurrently with the environmental review process for discretionary projects or concurrent with other permit review and processing for ministerial projects (e.g., building permits).

Oak Woodlands: An oak stand with a greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover (California Fish and Game Code Section 1361).

Oak Woodland Removal Permit: A permit issued by the County allowing removal of oak trees that are a component of an oak woodland. An oak resources technical report shall accompany any oak woodland removal permit application submitted to the County. Conditions of approval may be imposed on the permit. If an oak woodland removal permit application is denied, the County shall provide written notification, including the reasons for denial, to the applicant. Oak woodland removal permit processing and approval will be conducted concurrently with the environmental review process for discretionary projects or concurrent with other permit review and processing for ministerial projects (e.g., building permits).

Qualified Professional: An arborist certified by the International Society of Arboriculture (ISA), a qualified wildlife biologist, or a registered professional forester (RPF).

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.

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. RPFs have an understanding of forest growth, development, and regeneration; soils, geology, and hydrology;
wildlife and fisheries biology and other forest resources. RPFs are also trained in fire management and, if involved in timber harvesting operations, have expertise in both forest road design and application of the various methods used to harvest.

**Replacement Tree:** A tree planted as mitigation for oak resources impacts. For oak woodland impact mitigation, replacement trees include container tree stock (1-gallon/TreePot 4 size) and acorns. If acorns are used, the planting ratio shall be 3:1 as compared with container tree stock. For individual native oak tree (including Heritage Tree) impact mitigation, replacement tree sizes may vary and may include the following: 1-gallon/TreePot 4, 5-gallon, or 15-gallon. Documentation of inch-for-inch replacement consistency shall be included in an oak resources technical report and shall be based on the following ratios: 1-gallon/TreePot 4 (2:1), 5-gallon (1.5:1), and 15-gallon (1:1). Acorns and container stock shall be locally-sourced (from within El Dorado County).

**Sensitive Habitat:** In El Dorado County, this includes the following habitat types: montane riparian, valley-foothill riparian, aspen, valley oak woodland, wet meadow, and vernal pools, as defined in the 2004 El Dorado County General Plan EIR.

**Woodland Habitats:** Biological communities that range in structure from open savannah to dense forest. In El Dorado County, major woodland habitats include blue oak-foothill pine, blue oak woodland, montane hardwood, montane hardwood-conifer, and valley oak woodland.