CHAPTER 4 TEXT CHANGES TO THE DRAFT ENVIRONMENTAL IMPACT REPORT

This chapter presents minor corrections, additions, and revisions made to the Draft Environmental Impact Report (EIR) initiated by the Lead Agency (El Dorado County), reviewing agencies, the public, and/or consultants based on their review. New text is indicated in <u>underline</u> and text to be deleted is reflected by <u>strikethrough</u>, unless otherwise noted in the introduction preceding the text change. Text changes are presented in the section and page order in which they appear in the Draft EIR and reflect the changes noted in Table 1-1, Summary of Draft EIR Text Changes.

The changes made to the Draft EIR represent minor clarifications/amplifications of the analysis contained in the Draft EIR based on ongoing review by El Dorado County staff and/or consultant or applicant review and do not constitute significant new information that, in accordance with CEQA Guidelines Section 15088.5, would trigger the need to recirculate portions or all of the Draft EIR.

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Resources Mitigation Program to govern evaluation, impact assessment, and mitigation for biological resources within the county with the objective of conserving:

- 1. Habitats that support special-status species;
- 2. Aquatic environments including streams, rivers, and lakes;
- 3. Wetland and riparian habitat;
- 4. Important habitat for migratory deer herds; and
- 5. Large expanses of native vegetation.

As proposed, revised Policy 7.4.2.8 establishes standards for completion of biological resources technical reports, defines the categories of plant and wildlife species that are considered special-status species, sets minimum ratios for mitigation of impacts to habitats that may support special-status species, and provides criteria for identification of mitigation sites.

It is anticipated that under the proposed General Plan Biological Resources policies, development projects within the County that require discretionary approvals would be required to submit to the County a biological resources technical report that meets the requirements of Policy 7.4.2.8, determine the area of impact to each habitat type supported at the project site, and mitigate impacts through preservation and/or creation to ensure that the current range and distribution of special-status species within the County are maintained. Off-site mitigation sites that are acquired (through conservation easements or in fee title) must meet the criteria in Policy 7.4.2.8.D (Habitat Protection).

The proposed amendments to the General Plan policies, objectives and measures are summarized in Table 3-1, and the full text of the proposed policies are included in Appendix B and available for review on the County's General Plan Biological Policies Update webpage at: http://www.edcgov.us/Government/LongRangePlanning/Environmental/BioPolicyUpdate.aspx

(See documents posted under the Notice of Preparation (NOP) Released July 17, 2015).

Table 3-1
Proposed General Plan Revisions

General Plan Objective/Policy/ Implementation Measure	Changes Made
Objective 7.4.1	Revise to focus on Pine Hill rare plant species
Policy 7.4.1.1	Add "where feasible" following-Update reference to County Code Chapter 130.71
Policy 7.4.1.2	Add "Pine Hill rare plant" before "preserve sites" to clarify which preserves are addressed by this policy
Policy 7.4.1.3	Add "Pine Hill rare plant" before "preserve areas" to clarify which preserves are addressed by this policy

Table 3-1 Proposed General Plan Revisions

General Plan Objective/Policy/ Implementation Measure	Changes Made				
Policy 7.4.1.4	Replace "Proposed rare, threatened, or endangered species preserves" with "The Pine Hill Preserves" to clarify which preserves are addressed by this policy				
Policy 7.4.1.5	Delete text				
Policy 7.4.1.6	Delete text				
Policy 7.4.1.7	Moved to Policy 7.4.2.2				
Policy 7.4.2.1	Revise language to address coordinating wildlife and vegetation protection programs with appropriate federal and state agencies				
Policy 7.4.2.2	Delete policy; replace with prior Policy 7.4.1.7 regarding noxious weeds				
Policy 7.4.2.4	Revise text to clarify that active management is not required				
Policy 7.4.2.6	Delete policy				
Policy 7.4.2.7	Delete policy to remove requirement to maintain the Plant and Wildlife Technical Advisory Committee (PAWTAC), but does not preclude the County from reconvening the PAWTAC when necessary.				
Policy 7.4.2.8	Revise to delete the Integrated Natural Resources Management Plan (INRMP) and to include: Requirement for wildlife movement studies for 4-, 6-, and 8-lane roadway projects Requirement for a biological resources technical report and establishment of mitigation ratios for special-status biological resources Identification of criteria for conservation lands Establish a voluntary database of willing sellers Biological resources mitigation program Habitat protection strategy				
Policy 7.4.2.8	Revise subsection (C) <i>Biological Resources Assessment</i> to include in the report recommendations for: pre-construction surveys and avoidance/protection measures for nesting birds; pre-construction surveys and avoidance/protection measures and roosting bats; avoidance and minimization measures to reduce impacts related to entrapment, entanglement, injury, or poisoning of wildlife; and avoidance and minimization measures to reduce indirect impacts to wildlife in open space adjacent to a project site.				
Policy 7.4.2.8	Add new subsection (F) Mitigation Monitoring. Prior to final approval of an individual development project, applicants shall submit to the County a Mitigation Monitoring Plan that provides for periodic monitoring of preserved lands to assess effectiveness of the measures implemented to protect special-status and native species. The Mitigation Monitoring Plan shall demonstrate that funding is secured to implement the monitoring strategy in perpetuity.				
Policy 7.4.2.9	Revise provisions for lands within the Important Biological Corridor (IBC) overlay to reflect new site-specific requirements				
Objective 7.4.3	Incorporate objective into Policy 7.4.2.1				
Objective 7.4.4	Consolidate Objective 7.4.4 and 7.4.5 to address oak woodlands and trees together				
Policy 7.4.4.2	Revise to reflect the conservation portion of the mitigation/conservation approach				
Policy 7.4.4.3	Revise to to encourage retention of contiguous area of forests and oak woodlands				
Policy 7.4.4.4	Revise to refer to oak woodland and oak tree mitigation requirements in the Oak Resources Management Plan (ORMP). The Draft ORMP reflects the following				

Impacts Related to Loss of Oak Woodland

According to the FRAP data, there is a total of 246,8068 acres of oak woodlands in the County below the 4,000-foot elevation. However, this area includes some land that is not subject to the County's regulations, such as state-owned and tribal lands. Of the land that is subject to the County's regulations, there is a total of 200,929 acres of oak woodlands, and of this amount, 95,843 acres (47.7%) of land is characterized in the FRAP data as supporting oak woodland habitat is already developed (CAL FIRE 2015).

Figure 5-1 displays the areas that currently support oak woodlands that are anticipated for development under the 2025 and 2035 scenarios, while Figure 5-2 displays anticipated impacts to all vegetation communities under the 2025 and 2035 scenarios.

As shown in Figure 5-1, most impacts to oak woodlands from future development are expected to occur on properties generally within the Highway 50 corridor and west of the City of Placerville. In particular, several properties that currently support oak woodland habitats within the communities of El Dorado Hills, Cameron Park, and Shingle Springs are projected to be developed under both the 2025 and 2035 scenarios. A few properties east of Placerville that currently support oak woodlands are also expected to be developed, including properties in the community of Camino and properties south of Placerville. In total, it is expected that development through 2025 would result in conversion of a maximum of 3,5014,071 acres of oak woodland to developed land uses. Ongoing development through 2035 would result in conversion of an additional 1,3472,433 acres of oak woodland to developed land uses (CAL FIRE 2015). For the purposes of this analysis, it is assumed that all oak woodlands would be removed from acreage proposed for development.

Many of the properties where new impacts to oak resources are anticipated are located adjacent to other properties that support oak woodland and either have already been developed or are not planned for development. Therefore, it is expected that some oak resources would be retained in each community. However, there is still a potential that localized community character could be degraded by ongoing development that results in a loss of oak woodland habitat or other natural vegetation communities.

Under the proposed ORMP, development projects that result in loss of oak woodlands would be required to mitigate for that loss through on-site and/or off-site replanting and conservation of existing woodlands. However, the ORMP would exempt several classes of development projects from these mitigation requirements. This includes construction of single-family homes on lots less than 1 acre in size and agricultural activities, except those uses requiring Conditional Use Permits. Additionally, where mitigation is required, the proposed ORMP would allow for mitigation to occur in any area within the ORMP Area (which includes all portions of the County

at or below the 4,000-foot elevation). Under this provision, mitigation for loss of oak woodlands may not necessarily be located within the same community where the impact occurred.

The conversion of oak woodland to developed uses would alter land use character in a given community by decreasing the prevalence of natural habitat and resources and increasing the presence of built environment and ornamental landscaping elements. In general these effects would be experienced at the individual community level; however, to the extent that conversion of oak woodlands to developed land uses occurs within the viewshed of Highway 50, the effects within individual communities could be combined to result in a cumulative degradation of land use character for the County overall.

As shown in Figure 5-1, it is expected that a substantial portion of the oak woodland along Highway 50 would remain in its current condition. There are large areas of already developed land that support oak woodland habitat, as well as large areas of land not anticipated to be developed under either the 2025 or 2035 scenarios. These areas occur on the south side of Highway 50 in the El Dorado Hills and Cameron Park communities and on both sides of Highway 50 between Shingle Springs and Placerville. Based on the areas of potential loss of oak woodland habitat shown in Figure 5-1, it is expected that the overall community character as experienced from Highway 50 would remain substantially the same as under existing conditions. Thus, the impacts of the project on community character would be significant at the local level and less than significant relative to County-wide community character.

Potential options to mitigate this impact include requiring a minimum level of oak woodland retention on every parcel. That option is evaluated as Alternative 2 in Chapter 10 of this EIR. Another mitigation option would be to require design review for every development project in the County. However this would place a new procedural burden on development projects and without new General Plan policies or development standards regarding retention of natural land forms and vegetation, a design review requirement would not ensure greater retention of natural landscapes and thus would not reduce this impact to a less-than-significant level. A third option for mitigation would be to modify General Plan policies and the Zoning Ordinance to reduce allowable development intensities. However this mitigation would not be feasible as it would be incompatible with the General Plan goals and policies (such as Policy 2.1.1.2 and 2.1.2.3) for arranging which arrange land uses by intensity, with higher intensity, more urban and suburban uses concentrated in the the communities of El Dorado Hills and Cameron Park, Community Regions and Rural Centers. This arrangement is designed to preserve the remaining Rural Regions as open space and natural resource areas (including agriculture and timber), which in turn allows for the rural communities to support with -lower intensity land uses so rural communities can-and retain their rural character. Reducing allowable development intensity would not necessarily ensure retention of oak woodlands, and may actually encourage more development in rural regions if intensity were decreased in Community Regions and Rural

Centers. Specifically, this mitigation would conflict with General Plan policies that encourage clustering of development and concentration of high-intensity uses in Community Regions and Rural Centers in order to preserve the remaining Rural Regions as open space and natural resource areas (including agriculture and timber). It is noted that these impacts are commensurate with the impacts identified in the 2004 General Plan EIR and the 2015 TGPA-ZOU EIR. While development that may occur under the proposed General Plan policies and ORMP would contribute to these impacts, it would not increase or exacerbate the impacts beyond the levels previously evaluated. Thus, the project impacts on community character associated with loss of oak woodland would be **significant and unavoidable** at the local level.

Impacts Related to Loss of Other Vegetation Communities

Figure 5-2 shows the existing development footprint within all vegetation communities, and Figure 5-3 displays anticipated impacts to all vegetation communities under the 2025 and 2035 scenarios. As shown in Figure 5-3, most impacts to non-woodland vegetation communities from future development are expected to occur on properties generally within the Highway 50 corridor and west of the City of Placerville. In particular, several properties that currently support natural vegetation communities within the communities of El Dorado Hills, Cameron Park, and Shingle Springs are projected to be developed under both the 2025 and 2035 scenarios. The natural communities that would possibly be affected are hardwood forest, conifer woodland, herbaceous, and shrub; additionally, approximately seven locations projected to be developed contain wetlands. A few properties east of Placerville that currently support herbaceous and hardwood forest communities are also expected to be developed, including properties in the community of Camino and properties south of Placerville. There is a potential that localized community character could be degraded by ongoing development that results in a loss of natural vegetation communities.

The conversion of natural communities to developed uses would alter land use character in a given community by decreasing the prevalence of natural habitat and resources and increasing the presence of built environment and ornamental landscaping elements. In general these effects would be experienced at the individual community level; however, to the extent that conversion of vegetation communities to developed land uses occurs within the viewshed of Highway 50, the effects within individual communities could be combined to result in a cumulative degradation of land use character for the County overall.

As shown in Figure 5-3, it is expected that a substantial portion of the natural communities along Highway 50 would remain in its current condition. There are large areas of already developed land especially in El Dorado Hills, Cameron Park, and Placerville. Based on the areas of potential loss of natural habitat shown in Figure 5-3, it is expected that the overall community character as experienced from Highway 50 would remain substantially the same as under

Project Impacts

The proposed project would not alter the land use or zoning designations of any property, and would not alter the allowable land uses or density and/or intensity of land use development projects. Thus, the project would not alter land use development locations, types of land uses throughout the county, or the growth and development projections for the county. However, the project would modify the requirements for evaluation and mitigation of impacts to biological resources and this analysis considers whether continued buildout of the General Plan land uses under the proposed biological resources policies and ORMP would result in a significant loss of habitat or a significant amount of habitat fragmentation.

Oak Resources Management Plan

Based on the assumptions and methodology described in Chapter 4, potential oak woodlands conversion resulting from projected development in the County over the study period is presented in Table 6-6. In calculating the total potential oak woodlands conversion, it was assumed that all of the oak woodlands on parcels projected to be developed would be impacted by that development. In other words, the oak woodlands conversion acreage assumes that no onsite oak woodlands retention would occur. Therefore, the conversion acreage totals likely overestimate potential impacts. For example, the FRAP data indicates that there is a total of 93,299 acres of oak woodlands within parcels that are characterized by the County Assessor's data as developed (CAL FIRE 2015). This indicates that parcel development does not necessarily result in a complete loss of the oak woodlands habitat on a given parcel.

Table 6-6
Acreage of Oak Woodlands Types Potentially
Converted under General Plan Buildout Scenarios

Oak Woodlands Type	Acreage in ORMP Area	Projected Land Cover Conversion under General Plan Buildout (2025)	Projected Land Cover Conversion under General Plan Buildout (2035)*
Blue oak woodland	46,521	1,642 1,484	2,469 2,023
Blue oak-foothill pine	64,740	1,689 <u>1,437</u>	2,813 2,009
Coastal oak woodland	2	0	0
Montane hardwood	98,930**	423 379	733 <u>568</u>
Montane hardwood-conifer	32,643**	8	26
Valley oak woodland	3,970	247 194	4 01 222
Total	246,806	4,009 3,501	6,442 4,848

Includes land cover type conversion projected to occur through 2025.

^{**} Acreages for montane hardwood and montane hardwood-conifer represent only those areas within the ORMP Area and therefore differ from those presented in Table 6-15, which represents acreage totals for the whole County.

requirements of Policy 7.4.4.4 by consolidating the two mitigation options in Policy 7.4.4.4 into one approach which would incentivize oak woodlands retention by ensuring that the per-acre cost for mitigation is greater where lesser levels of retention are achieved. Although the ORMP does not require on-site retention, mitigation would be required for impacts to oak woodland. As outlined in the ORMP, mitigation may include conservation of existing oak woodlands, replacement tree planting (of up to half of the required mitigation total), and/or payment of an inlieu fee to be used for conserving oak woodlands or replacement plantings.

Although mitigation would be required for impacts to oak woodland, buildout of the General Plan through 2025 and 2035 has the potential to cause a significant amount of oak woodlands habitat loss and fragmentation, as discussed in the conclusions section of this Impact analysis, below. The impacts include the 3,5014,009 acres of oak woodlands that would be lost under buildout of the General Plan through 2025, the additional 1,3472,433 acres that would be lost under buildout of the General Plan through 2035, and the additional acres that would be lost and for which mitigation would not be required based on the following exemptions discussion.

Exemptions

The ORMP proposes to exempt specific project types/actions from the requirement to mitigate for oak resource impacts. To evaluate the effect of some of these exemptions on oak woodlands, a geographic information systems (GIS)-based analysis was conducted comparing the extent of oak woodlands vegetation communities and available GIS datasets identifying the locations of actions which would be exempt from oak woodlands mitigation requirements. Some actions that are exempt from oak resources mitigation (e.g., impacts associated with emergency firefighting operations) are not quantifiable in GIS and are therefore discussed qualitatively. Impacts to individual native oak trees outside of oak woodlands are also not quantifiable in GIS so are also discussed qualitatively.

The spatial extent of the GIS analysis conducted to evaluate the effect of oak woodlands mitigation exemptions is limited to the ORMP Area, which is the area within El Dorado County below 4,000 feet elevation and excluding the City of Placerville. The ORMP Area encompasses approximately 560,000 acres. Additionally, the spatial extent of the GIS analysis included only lands that would be subject to mitigation requirements in the ORMP Area (County-owned or privately owned land). Oak woodlands distribution data analyzed for all exemptions presented in the following sections was derived from the 2015 FRAP vegetation coverage dataset made available by the CAL FIRE (CAL FIRE 2015). For this analysis, oak woodlands areas are those identified as blue oak woodland, blue oak-foothill pine, coastal oak woodland, montane hardwood, montane hardwood-conifer, and valley oak woodland in the 2015 FRAP vegetation coverage dataset.

acreage of oak woodlands area contained within them calculated. Table 6-10 summarizes the acreage of oak woodlands potentially covered under the County Road Project Exemption, by woodland type.

Table 6-10
Oak Woodlands Located in County CIP Widening or Realignment Areas

Oak Woodlands Type (FRAP 2015)	Total Oak Woodlands in ORMP Area (acres)	Total Oak Woodlands Area within County CIP Widening or Realignment Area (acres)
Blue Oak Woodland	46,521	22
Blue Oak-Foothill Pine	64,740	76
Coastal Oak Woodland	2	0
Montane Hardwood	98,930	133
Montane Hardwood-Conifer	32,643	70
Valley Oak Woodland	3,970	11
Total	246,806	312

Based on the analysis of oak woodlands data and the County's CIP data, a total of 312 acres of oak woodlands are located within the CIP widening or realignment areas. Quantification of the number of individual native oak trees located in CIP widening or realignment areas is infeasible. Impacts to oak resources under the County Road Project Exemption could result in the loss and fragmentation of wildlife habitat without mitigation. This exemption is specific to widening and realignment of existing County roads. Since these are existing roads, oak woodlands habitats are already fragmented by the linear nature of the roads. Widening or realignment would incrementally increase oak woodlands loss but would not increase fragmentation, dependent upon the improvement proposed. The effect of this exemption is expected to remove a potential of 312 acres of 246,8068 acres oak woodlands (0.1% of the total oak woodlands acreage in the ORMP Area). The loss of this small amount of habitat is considered less than significant.

Affordable Housing Exemption

As presented in the ORMP, 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 (as defined in California Government Code Section 65944), or within a sphere of influence (as defined pursuant to California Government Code Section 56076), would be exempted from oak woodlands mitigation requirements. In addition, the ORMP allows for oak woodlands mitigation reductions for affordable housing projects that do not meet the criteria for exemption. Specifically, the ORMP allows for a reduction in required oak woodlands mitigation for development projects that propose a minimum of 10% of the dwelling units as income restricted affordable units (as defined by California Health and Safety Code Sections 50052.5, 50053, and 50093).

To evaluate the effect of affordable housing exemptions and mitigation reductions, the FRAP oak woodlands coverage data was overlaid on the El Dorado County parcel dataset in GIS. Parcels that included any amount of oak woodlands coverage were selected. The selected subset of parcels with oak woodlands coverage was then queried to determine housing type (multifamily) and development status (vacant or developed). Determination of development status was based on an assigned value in the County's parcel dataset which identified undeveloped (vacant) parcels. All undeveloped, multi-family parcels with some level of oak woodlands coverage were then evaluated and the acreage of oak woodlands area contained within them calculated. Table 6-11 summarizes the acreage of oak woodlands potentially covered under the Affordable Housing Exemption, by woodland type.

Table 6-11
Oak Woodlands Located in Undeveloped Affordable Housing Areas

Oak Woodlands Type (FRAP 2015)	Total Oak Woodlands in ORMP Area (acres)	Total Oak Woodlands Area within Undeveloped Affordable Housing Areas (acres)
Blue Oak Woodland	46,521	69
Blue Oak-Foothill Pine	64,740	66
Coastal Oak Woodland	2	0
Montane Hardwood	98,930	28
Montane Hardwood-Conifer	32,643	2
Valley Oak Woodland	3,970	31
Total	246,806	196

Based on the analysis of oak woodlands and affordable housing data, a total of 196 acres of oak woodlands occur on lands that would qualify for the Affordable Housing Exemption. Quantification of the number of individual native oak trees located on these lands is infeasible. This exemption could result in the loss and fragmentation of wildlife habitat without mitigation; however the potential loss of 196 acres of oak woodlands from this exemption is 0.08% of the total oak woodlands acreage in the ORMP Area and occurs primarily within Community Regions with more intensive land use and would therefore be considered less than significant.

Agricultural Activities Exemption

As presented in the ORMP, certain agricultural activities (excluding commercial firewood operations and those uses requiring a Conditional Use Permit) would be exempt from oak woodlands mitigation requirements. Included in this exemption are activities conducted for the purposes of producing or processing plant and animal products, consistent with California Public Resources Code Section 21083.4. In addition, the preparation of land for this purpose, agricultural cultivation/operations, or activities occurring on lands in Williamson Act Contracts

or under Farmland Security Zone Programs is also exempt from oak woodlands mitigation requirements. However, the exemption does not apply to activities that require the County to issue a Conditional Use Permit. Thus, mitigation for impacts to oak resources would be required as described in the ORMP for projects that would construct, for example, a microbrewery, bed and breakfast inn, health resort and retreat center, feed and farm supply store, or wholesale storage and distribution facility. All uses that require a the County to issue a Conditional Use Permit to be constructed on lands that are zoned for or allow agricultural uses would be subject to the impact analysis and mitigation requirements of the ORMP.

To evaluate the effect of exempting oak woodlands impacts associated with agricultural activities, the FRAP oak woodlands coverage data was overlaid on the El Dorado County parcel dataset in GIS (Figure 6-2). Parcels within the ORMP Area that included any amount of oak woodlands coverage were selected. The selected subset of parcels with oak woodlands coverage was then queried to determine land planned for agricultural use or that could allow agricultural activities (AL, NR, RR, and Agricultural Districts [-A]) or Agricultural, Rural Lands, and Resource Zones (PA, LA, and AG, and RL), or in Williamson Act Contracts, under Farmland Security Zone Programs, or in/partially in a Mineral Resource zone. Commercial and residential agricultural uses are permitted in other zoning districts, such as the Rural Lands zoning district. However, such districts are not necessarily considered agricultural zones. The Rural Lands zoning district was omitted from the agricultural activities exemption because the Right-to-Farm protections that are guaranteed to lands in other agricultural zones do not extend to this district.

All parcels meeting these criteria with some level of oak woodlands coverage were then evaluated, and the acreage of oak woodlands area contained within them calculated. Table 6-12 summarizes the acreage of oak woodlands potentially covered under the Agricultural Activities Exemption, by woodland type.

Table 6-12
Oak Woodlands Located in Agricultural Lands

Oak Woodlands Type (FRAP 2015)	Total Oak Woodlands in ORMP Area (acres)	Total Oak Woodlands Area within Agricultural Lands (acres)
Blue Oak Woodland	46,521	29,279
Blue Oak-Foothill Pine	64,740	37,458
Coastal Oak Woodland	2	1
Montane Hardwood	98,930	50,655
Montane Hardwood-Conifer	32,643	12,785
Valley Oak Woodland	3,970	2,103
Total	246,806	132,281

Based on the analysis in Table 6-12, a total of 132,281 acres of oak woodlands occur on lands that would qualify for the Agricultural Activities Exemption. Table 6-13 presents oak woodland acreages located in Agricultural Lands by zoning district. The greatest area of oak woodlands is located in the Rural Lands zoning district. The Rural Lands zoning district is not necessarily considered an agricultural zone nor does it have Right to Farm protections guaranteed to lands in other agricultural zones, however it does allow commercial agricultural operations and therefore current exemption language is applicable.

Table 6-13
Oak Woodlands Located in Agricultural Lands by Zoning Designation

	Acreage by Oak Woodlands Type (FRAP 2015)						
Zoning Designation	Blue Oak Woodland	Blue Oak- Foothill Pine	Coastal Oak Woodland	Montane Hardwood	Montane Hardwood-Conifer	Valley Oak Woodland	Total
Agricultural Grazing (AG)	5,090	6,008	0	1,795	98	338	13,329
Commercial, General (CG)	0	0	0	5	0	0	5
Commercial, Limited (CL)	0	0	0	10	2	6	18
Forest Resource (FR)	0	0	0	37	77	0	114
Industrial – Light (IL)	0	18	0	2	6	2	28
Limited Agriculture (LA)	2,907	3,907	1	6,419	857	305	14,396
Open Space (OS)	12	40	0	71	27	0	150
Planned Agriculture (PA)	1,641	2,501	0	6,132	1,545	304	12,123
Two-acre Residential (R2A)	8	24	0	15	25	2	74
Three-acre Residential (R3A)	0	6	0	13	10	15	44
Residential Estate (RE)	44	223	0	702	173	1	1,143
Recreational Facilities (RF)	0	1	0	4	0	0	5
Rural Lands (RL)	19,518	24,713	0	34,150	9,370	1,108	88,859
Transportation Corridor (TC)	1	8	0	39	4	6	58
Timber Production (TPZ)	59	9	0	1,261	591	15	1,935
Total	29,280	37,458	1	50,655	12,785	2,102	132,281

Note: Zoning designations not specifically identified in the Agricultural Activities Exemption may be included if they may meet planned land use designations. For example, an R2A zoning designation may have a planned land use designation of RR.

that THP. A THP must also identify feasible mitigation measures and must identify re-planting efforts and best management practices (BMPs) to minimize environmental impacts.

As presented in Chapter 7, Forestry Resources, oak woodlands in the ORMP Area are not considered to be timberland as none of the oak species in the County are classified as Group A commercial species in the California Forest Practice Rules (Title 14, California Code of Regulations, Chapters 4, 4.5 and 10). Two oak species (California black oak and Oregon white oak [*Quercus garryana*]) are classified as Group B commercial species in the FPRs, but to be considered a commercial species, they must also be growing on lands dominated by Group A commercial species, which are predominantly conifer species. Oak woodlands are not typically subject to commercial timber harvesting operations given their tree species composition. Therefore, impacts associated with this exemption would be less than significant.

Dead, Dying, or Diseased Trees Exemption

The ORMP would exempt individual native oak tree removal from mitigation requirements when a tree is dead, dying, or diseased, or when a tree exhibits high failure potential with the potential to injure persons or damage property, as documented in writing by a qualified professional. Tree removal under such circumstances is intended to mitigate risk to persons or property. Removal of individual dead, dying, diseased, or hazard trees would not result in loss of oak woodlands habitat areas. Therefore, impacts associated with this exemption would be less than significant.

Personal Use Exemption

The ORMP would exempt from mitigation requirements removal of a native oak tree (excluding Heritage Trees) when cut down on the owner's property for the owner's personal use. It is infeasible to quantify the number of individual native oak trees that may be removed under this exemption; however, no limit on removal of oak trees under this exemption is specified and that removal could occur within oak woodlands. To ensure that the personal use exemption is applied as narrowly as possible to meet the General Plan goals for ensuring the maximum feasible protection of oak resources as well as ensuring the reasonable use of private property, the personal use exemption in the proposed ORMP is limited to removal of no more than 8 individual trees and no more than 140 inches dbh per parcel per year. The loss of individual oak trees under this exemption is not expected to result in the fragmentation of wildlife habitat.

As discussed under the agricultural activities exemption, the ORMP study area has not been subject to large-scale, permanent oak woodland conversion over the past 13 years. This time period is nearly the same as that under which the personal use exemption has been in effect (originating in Policy 7.4.5.2 of the County's 2004 General Plan (El Dorado County 2004). The contribution of the personal use exemption toward the observed oak woodland cover change is unknown; however, it is reasonable to assume that it accounts for only a portion of the total

change observed over 13 years (0.8%). Conservatively, however, with no required mitigation limiting individual tree removal, the effect of this exemption would be potentially significant.

Oak Resource Impact Conclusions

Oak Woodlands

As presented in Table 6-6, it is expected that General Plan implementation would result in the loss of 3,5014,009 acres of oak woodlands by 2025 with loss of another 1,3472,433 acres of oak woodlands occurring between 2025 and 2035 (total loss of 4,8486,442 acres of oak woodlands by 2035). As noted, these figures represent the total oak woodlands area occurring on parcels designated for residential, commercial, retail, and industrial development in 2025 or 2035 and likely overestimate potential impacts due to the assumption that 100% of the oak woodlands on any given parcel that becomes developed would be lost. Additionally, these figures do not include impacts associated with development of agricultural activities and production, which would be exempt from mitigation requirements.

As shown in Figure 5-1, most impacts to oak woodlands from future development are expected to occur on properties generally within the Community Regions along the Highway 50 corridor and west of the City of Placerville. In particular, several properties that currently support oak woodlands habitats within the communities of El Dorado Hills, Cameron Park, and Shingle Springs are projected to be developed under both the 2025 and 2035 scenarios. A few properties east of Placerville that currently support oak woodlands are also expected to be developed, including properties in the community of Camino and properties south of Placerville.

Mitigation for oak woodlands impacts within the 4,8486,442 acres of development would be required, as outlined in the ORMP, with the exception of impacts exempted under the Single-Family Lot Exemption (290 acres of oak woodland) and the Affordable Housing Exemption (196 acres of oak woodland³). Therefore, it is expected that up to 4,8486,442 acres of oak woodlands could be impacted under long-term General Plan buildout scenario (2035) and that mitigation would be provided for the impacts to 4,3625,956 acres (excluding exemptions). As outlined in the ORMP, mitigation ratios for oak woodlands impacts may be 1:1, 1.5:1, or 2:1, depending on the extent to which oak woodlands is retained on site for each individual project. It is not possible to predict the level of oak woodlands retention at this programmatic level of analysis. The following summarizes the range of potential mitigation scenarios under the 2035 General Plan buildout scenario:

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The oak woodlands acreage calculated for the Affordable Housing Exemption is an overestimate of that which would be entirely exempt from mitigation, as a portion of that impacted acreage would require mitigation at a reduced ratio. However, for the purposes of this analysis, a conservative value of 196 acres is used.

- Retention of 50% or more of oak woodlands results in a 1:1 mitigation ratio. Under the 2035 buildout scenario, if 50% retention was achieved on every parcel, 2,1812,978 acres of oak woodlands would be retained and 2,1812,978 acres would be mitigated via conservation, replacement planting, and/or in-lieu fee payment.
- Retention of more than 25% but less than 50% of oak woodlands results in a 1.5:1 mitigation ratio. If every project retains 25% of the site's oak woodlands, under the 2035 buildout scenario, 1,0911,489 acres of oak woodlands would be retained and 4,9076,701 acres would be mitigated via conservation, replacement planting, and/or in-lieu fee payment.
- Retention of less than 25% of oak woodlands results in a 2:1 mitigation ratio. Under the 2035 buildout scenario, if no oak woodlands was retained, 8,72411,912 acres would be mitigated via conservation, replacement planting, and/or in-lieu fee payment.

Oak woodlands impacts and mitigation would be addressed in an oak resources technical report prepared for individual projects. A deed restriction or conservation easement would be placed over retained on-site woodlands, and those woodlands retained on site would not be counted towards the impacted amount or towards the required mitigation. Mitigation for oak woodlands impacts would occur at a ratio of 1:1, 1.5:1, or 2:1, depending on the extent of on-site impact. Oak woodlands mitigation would be achieved by one or more of the following options:

- Deed restriction or conservation easement acquisition (off site), and/or acquisition in fee title by a land conservation organization (off site);
- In-lieu fee payment;
- Replacement planting on site within an area subject to a deed restriction or conservation easement; and/or
- Replacement planting off site within an area subject to a conservation easement.

Consistent with California Public Resources Code Section 21083.4, replacement planting would not account for more than 50% of the oak woodlands mitigation requirement. As described in the ORMP, the in-lieu fee for oak woodlands impacts has been calculated based on an approach that considers the actual costs to acquire and manage oak woodlands areas in El Dorado County. The County would use collected in-lieu fees to acquire and manage lands containing oak woodlands and/or conservation easements over existing oak woodlands in perpetuity and/or to undertake replacement planting efforts. Thus while buildout of the General Plan could result in the loss of 4,3625,956 acres of oak woodlands, this loss would be sufficiently mitigated via the requirements in the ORMP and the impact would be less than significant.

revised to omit or limit this exemption. However, the County's General Plan expresses a commitment to preserving and enhancing the County's agricultural economy, as identified in General Plan Goals 8.1 and 8.2, Objectives 8.1.1 and 8.2.2, and Policies 8.1.1.1, and 8.2.2.1. However, this exemption exists for three primary reasons. First, there is no substantial evidence in the record that current or forecasted agricultural activities will result in large-scale permanent oak woodland conversion. This is supported by examining the California Department of Forestry and Fire Protection's Fire Research and Assessment Program oak woodland coverage data in the ORMP study area from 2002 to 2015, which shows a relatively minimal 0.8% reduction in oak woodland coverage on agricultural lands during that 13-year period. Second, However, the County's General Plan expresses a commitment to preserving and enhancing the County's agricultural economy, as identified in General Plan Goals 8.1 and 8.2, Objectives 8.1.1 and 8.2.2, and Policies 8.1.1.1, and 8.2.2.1. Removing the agricultural exemption would directly contradict these goals. Finally, exemptions for agricultural activities are consistent with state law. California Public Resources Code Section 21083.4 (Senate Bill 1334, Kuehl) requires counties to determine whether projects will result in conversion of oak woodlands and identifies mitigation options to mitigate the significant effect of any identified conversion. This law also identifies projects/actions that are exempt from its requirements, including but not limited to actions on agricultural land used to make products for commercial purposes. For these reasons, it would be infeasible to omit this exemption.

Potential mitigation for the loss and fragmentation of oak woodlands habitat could include requiring a minimum level of oak woodlands retention on every parcel. That project revision is evaluated as Alternative 2 in Chapter 10 of this EIR. A second option for mitigation would be to modify General Plan policies and the Zoning Ordinance to reduce allowable development intensities, which would increase the amount of open space that would remain after development. This could increase the feasibility and likelihood of on-site oak woodlands retention. However this mitigation would not be feasible as it would be incompatible with the General Plan goals and policies (such as Policy 2.1.1.2 and 2.1.2.3) for keeping higher intensity, more urban and suburban uses in the communities of El Dorado Hills and Cameron Park, so that the rural communities can support lower intensity land uses. Community Regions and Rural Centers. These goals preserve the remaining Rural Regions as open space and natural resource areas (including agriculture and timber) to allow for the rural communities to support lower intensity land uses and retain their rural character. Reducing allowable development intensity would not necessarily retain oak woodlands, and may push development into rural regions. Additionally, increased density in rural regions would impact the large contiguous blocks of oak woodlands that have high value because they are more likely to contain multiple habitat types and have the potential to support the highest wildlife diversity and abundance.

General Plan Biological Resources Policies

The proposed project would result in similar levels of development and resultant habitat conversion as described in the 2004 General Plan EIR and the TGPA-ZOU EIR. Proposed policy revisions would change how habitat impacts from development are identified and mitigated. This analysis considers the degree to which the proposed General Plan Biological Resources Policies and Objectives could result in fragmentation of wildlife habitat.

Proposed Policy 7.4.2.8 creates a Biological Resources Mitigation Program (Program) for the County, focused on the acquisition and preservation in perpetuity of habitat and migratory corridors, including aquatic/wetland habitat and large expanses of native vegetation. The Program would establish fixed mitigation ratios for habitat types aside from oak woodlands and Pine Hill plants. The proposed Program also requires that a site-specific biological resources technical report be prepared for each project, and requires a wildlife movement studies for 4-, 6- and 8-lane highway projects.

Proposed Policy 7.4.2.9 establishes a requirement that there be "no net loss" of wildlife movement functions and values for projects located within the County's designated IBCs. No net loss of wildlife movement is defined for purposes of this policy as sustainably maintaining wildlife movement post-development.

Based on the assumptions and methodology described in Chapter 4, the maximum land cover conversion resulting from projected development in the County over the study period is presented in Table 6-15.

Table 6-15
Maximum Conversion of Land Cover Types Under the Proposed Project

Land Cover Type (FRAP 2015)	Existing Land Cover in ORMP Area (acres)	Projected Land Cover Conversion by 2025 (acres)	Projected Land Cover Conversion by 2035 ¹				
Upland							
Alpine-Dwarf Scrub	306	0	0				
Annual Grassland	74,584	<u>3,802</u> 7,343	<u>4,792</u> 13,108				
Aspen	47	0	0				
Chamise-Redshank Chaparral	452	0	0				
Closed-Cone Pine-Cypress	390	0	0				
Douglas Fir	7,008	0	0				
Eastside Pine	12	0	0				
Eucalyptus	9	0	0				
Jeffrey Pine	11,538	0	0				
Lodgepole Pine	4,676	0	0				
Mixed Chaparral	32,336	<u>412</u> 4 95	<u>681</u> 1,028				
Montane Chaparral	46,424	0	0				
Perennial Grassland	12,923	0	0				

Table 6-15
Maximum Conversion of Land Cover Types Under the Proposed Project

Land Cover Type (FRAP 2015)	Existing Land Cover in ORMP Area (acres)	Projected Land Cover Conversion by 2025 (acres)	Projected Land Cover Conversion by 2035 ¹
Ponderosa Pine	86,025	7	15
Red Fir	77,882	0	0
White Fir	21,560	0	0
	Oa	k Woodland	
Blue Oak Woodland	46,521	<u>1,484</u> 1,702	<u>2,023</u> 2,528
Blue Oak-Foothill Pine	64,740	<u>1,437</u> 1,691	<u>2,009</u> 2,816
Coastal Oak Woodland	2	0	0
Montane Hardwood	104,076	<u>379</u> 4 23	<u>568</u> 733
Montane Hardwood-Conifer	38,267	8	26
Valley Oak Woodland	3,979	<u>194<mark>247</mark></u>	<u>222</u> 401
	Herba	ceous Wetland	
Fresh Emergent Wetland	639	<u>97</u> 144	<u>105</u> 206
Wet Meadow	2,354	0	0
		Water	
Lacustrine	15,085	6	<u>34</u> 35
	Shrub a	nd Tree Wetland	
Riverine	1,175	1	1
Montane Riparian	1,296	0	0
Valley Foothill Riparian	3,764	<u>112</u> 163	<u>125</u> 282
Sagebrush	83	0	0
Sierran Mixed Conifer	296,721	3	3
Subalpine Conifer	4,069	0	0
		Other	
Urban	38,674	<u>1,358<mark>2,15</mark>4</u>	<u>2,042</u> 4 ,412
Barren	37,003	0	0
Cropland	3,601	40	<u>40</u> 44
Deciduous Orchard	378	3	5
Evergreen Orchard	210	22	22
Pasture	418	0	0
Vineyard	972	0	0
Total	1,040,199	<u>9,364</u> 14,452	<u>12,713</u> 25,665

Note:

General Plan Biological Resources Policies Conclusions

Aside from the Pine Hill endemic species, the special-status species within the County occur in a variety of different land cover types. The proposed project would preserve each of these different upland land cover types in locations throughout the County, below 4,000 feet where impacts

¹ Includes land cover type conversion that occurred through 2025.

occur. The PCAs, IBCs, and other areas prioritized for conservation are located throughout this area below 4,000 feet elevation. With the exception of oak woodlands, which would be mitigated at varying ratios depending on the level of on-site avoidance (see ORMP discussion above), the proposed General Plan policies require that following all upland land cover types would be preserved at a ratio of 1:1 to ensure that the current range and distribution of special-status species within the County are maintained. The development projections for the County indicate that the following four upland land cover types would be affected by continued implementation of the General Plan:

- Annual Grassland
- Mixed Chaparral
- Ponderosa Pine
- Sierran Mixed Conifer

Wetlands would be mitigated in a few different ways, sometimes focusing only on creation of new wetlands and sometimes balancing creation with preservation. Under the CWA, both preservation and creation of wetlands activities are subject to USACE permitting/approval and must meet minimum aquatic function performance standards. The following ratios would be used under the project:

- Fresh Emergent Wetland 1:1 preservation and 1:1 creation
- Lacustrine 1:1 creation
- Riverine 2:1 preservation and 1:1 creation
- Valley Foothill Riparian 2:1 preservation and 1:1 creation

The greater preservation requirement for Riverine and Valley Foothill Riparian would mitigate for temporal loss (the time required for planted shrub and tree wetland to replace the functions lost). As for the upland land cover types, this mitigation would ensure that the current range and distribution of special-status species within the County are maintained (refer to Table 6-15).

As demonstrated in Table 6-16, sufficient acreage is available in the existing PCA and IBC areas to meet the mitigation ratios for estimated impacts to nearly all land cover types, with a substantial surplus available for oak woodlands. When considering all land cover types available in the County, there is sufficient acreage available to meet the required mitigation ratios. Proposed Policy 7.4.2.8D establishes criteria for identifying preservation sites outside the PCAs and IBCs.

Table 6-16
Potential Mitigation of Land Cover Types Conversion Under the Proposed Project

Land Cover Type (FRAP 2015)	Projected Land Cover Type Conversion by 2035 ¹ (acres)	Preservation Mitigation Requirement (acres)	Land Cover Type Available for Preservation in PCAs² (acres)	Land Cover Type Available for Preservation in IBCs² (acres)	Land Cover Type Available Outside PCAs and IBCs² (acres)		
Upland							
Annual Grassland	<u>4,792</u> 13,108	<u>4,792</u> 13,108	3,209 <u>2,607</u>	2,324 <u>7,525</u>	38,921 <u>49,009</u>		
Mixed Chaparral	<u>681</u> 1,028	<u>681</u> 1,028	2,662 709	622 2,652	20,859 <u>16,652</u>		
Ponderosa Pine	15	15	4 02 154	142 835	72,547 <u>45,708</u>		
Sierran Mixed Conifer	3	3	23 77	69 <u>30</u>	281,346 <u>102,687</u>		
		Oak l	Voodland				
Blue Oak Woodland	<u>2,023</u> 2,528	<u>4,046</u> 5,056	2,945 10,980	10,344<u>6,969</u>	14,319 <u>19,247</u>		
Blue Oak-Foothill Pine	<u>2,009</u> 2,816	<u>4,018</u> 5,632	5,875 <u>10,051</u>	8,775 <u>12,814</u>	20,990 <u>26,392</u>		
Montane Hardwood	<u>568</u> 733	<u>1,136</u> 1466	6,100 <u>11,558</u>	9,017 11,908	50,000 44,361		
Montane Hardwood-Conifer	26	52	563 2,214	2,068 <u>1,529</u>	23,680 18,467		
Valley Oak Woodland	<u>222</u> 4 01	<u>444</u> 801	164 <u>410</u>	315 615	1,178 <u>2,070</u>		
		Herbace	ous Wetland				
Fresh Emergent Wetland	<u>105<mark>206</mark></u>	<u>105</u> 206	33 24	2 4 <u>52</u>	302 415		
		V	Vater				
Lacustrine	<u>34</u> 35	None	84 <u>17</u>	47 <u>158</u>	13,965 <u>3,398</u>		
		Shrub and	Tree Wetland				
Riverine	1	2	93 49	4 <u>2</u> 75	799 365		
Valley Foothill Riparian	<u>125<mark>282</mark></u>	<u>250</u> 565	4 <u>19</u> 367	283 760	1,584 <u>1,749</u>		
Other (Not Mitigated)							
Cropland	<u>40</u> 44	None	79 69	38 <u>363</u>	1,5810 2,806		
Deciduous Orchard	5	None	0	0	128 <u>335</u>		
Evergreen Orchard	22	None	12 <u>32</u>	18 <u>63</u>	60 <u>75</u>		
Barren	0	None	<u>98</u>	<u> 512</u>	36,005 <u>1,863</u>		
Urban	<u>2,042</u> 4 ,412	None	559 91	28 3,705	8,501 <u>13,613</u>		

Note:

¹____4___Includes land cover type conversion that occurred through 2025.

Calculations of land cover types available for mitigation include only lands under private or local agency control, and exclude the City of Placerville. Only parcels greater than 5 acres are included in these calculations, to provide a "worst case" scenario for availability of mitigation lands. Under the proposed project, parcels smaller than 5 acres could be acquired as mitigation if they are contiguous to other preserved lands. Therefore, available mitigation lands are reasonably expected to be greater than the amounts presented in this table.

Impacts to all oak woodlands types resulting from the proposed project are evaluated under Impact BIO-1. Based on the analysis of oak woodlands impacts occurring under anticipated General Plan buildout, 194247 acres of valley oak woodlands could be impacted by 2025 with impacts to another 29154 acres of valley oak woodlands occurring between 2025 and 2035 (total impact of 222401 acres of valley oak woodlands by 2035). These figures represent the total valley oak woodlands area occurring on parcels designated for residential, commercial, retail, and industrial development in 2025 or 2035 and likely overestimate potential impacts due to the assumption that 100% of the oak woodlands on any given parcel that becomes developed would be lost. Additionally, these figures do not include impacts associated with development of agricultural activities and production, which would be exempt from mitigation requirements.

Mitigation for the anticipated impacts to 222401 acres of valley oak woodland would be required, as outlined in the ORMP, with the exception of impacts exempted under the Single-Family Lot Exemption (8 acres of valley oak woodland) and the Affordable Housing Exemption (31 acres of valley oak woodland⁴). Therefore, 183362 acres of oak woodlands impacted under the General Plan buildout (2035) would be mitigated at no less than a 1:1 ratio. Depending on the extent of impacts at the project level, the mitigation ratio may reach 1.5:1 or 2:1. This could result in mitigation of up to 275543 acres of valley oak woodlands (1.5:1 ratio) or 366724 acres of valley oak woodlands (2:1 ratio).

Valley oak woodlands impacts associated with all of the exemptions included in the ORMP total 2,236 acres, as presented in Tables 6-7 through 6-12. This total is based on available datasets and likely overestimates the acreage of oak woodlands impacted under exempt activities and actions given the datasets analyzed (e.g., transmission line buffers, fire safe project areas). Impacts to individual valley oak trees associated with the exemptions in the ORMP are not quantifiable. While the acres presented in Tables 6-7 through 6-12 likely overestimate impacts from exempt activities, valley oak tree and woodland impacts associated with ORMP exemptions would result in the loss and fragmentation of valley oak woodlands and the loss of individual valley oak trees without mitigation. This would be a significant impact due to the loss and degradation of a sensitive habitat. Mitigation Measure BIO-2 requires that the ORMP be modified to require mitigation for impacts to valley oak tree and valley oak woodlands impacts for all activities, including all of the proposed exempt activities. The exempt activities would therefore be exempt from mitigation only for impacts to other oak woodland types. With implementation of Mitigation Measure BIO-2, unmitigated impacts to valley oak woodlands would be reduced by 2,236 acres, and all impacts to valley oak woodlands and individual valley oak trees would be mitigated, as outlined in the ORMP. This would reduce this impact to less than significant.

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The valley oak woodland acreage calculated for the Affordable Housing Exemption is an overestimate of that which would be entirely exempt from mitigation, as a portion of that impacted acreage would require mitigation at a reduced ratio. However, for the purposes of this analysis, a conservative value of 31 acres is used.

General Plan Biological Resources Policies and Objectives

Implementation of the proposed General Plan Biological Resources Policies and Objectives could result in loss and degradation of habitat. The maximum projected loss of habitat is presented in Impact BIO-1, Table 6-15.

The proposed Biological Resources Mitigation Program requires that a site-specific biological resources technical report be prepared for each project, which would identify any sensitive habitat that might be present on a parcel. Proposed Policies 7.4.2.8 and 7.4.2.9 would also require that preservation offset impacts from all types of land cover conversion, including loss of sensitive habitats. Policy requirements would ensure that preserved lands would be on a minimum contiguous block of 5 acres, and the proposed policies establish selection criteria for preservation areas that emphasize connectivity with adjacent preserved parcels. Implementation of these policy requirements would avoid habitat fragmentation to the extent possible and provide preservation or creation of sensitive habitat as mitigation.

Conclusions

Overall, Impact BIO-4 would have effects similar to those described for Impact BIO-1. Buildout of the General Plan under the proposed general plan policies would result in the loss of approximately 10,60421,182 acres of a wide range of sensitive habitats. In addition, an unquantified amount of additional sensitive habitat would be degraded as a result of buildout of the General Plan. While the proposed policies would require preservation and creation of habitat to offset this loss, there would be a net decrease in the amount of sensitive habitat within the County. Compared to the pattern of development and conservation under existing General Plan policies, the proposed project would result in reduced impacts to sensitive habitats by ensuring a greater amount of habitat preservation and creation than is required under the existing policies. However, as with the 2004 General Plan Policies, development allowed under the proposed project would result in significant and unavoidable impacts due to the extent of the overall loss of sensitive habitats.

6.4 MITIGATION MEASURES

Mitigation Measure BIO-1: Conservation Area Monitoring. The Biological Resources Mitigation Program developed by the County under proposed Policy 7.4.2.8 shall be revised to include requirements for periodic monitoring of preserved lands by individual development project applicants or their designee to assess effectiveness of the Program for protection of special-status and native species. Prior to final approval of an individual development project, the applicant shall demonstrate to the County that they have a comprehensive monitoring strategy in place for preserved lands, and that funding is secured to implement the monitoring strategy in perpetuity.

and U.S. Army Corps of Engineers), and local stormwater quality standards and ordinances. These requirements would not be altered as a result of the proposed project. Therefore, impacts of the proposed project to the water quality value of oak woodlands would be less than significant.

The oak woodland areas of the County covered under the ORMP do not meet the definition of timberland, and impacts to recreation and water quality values would be less than significant. However, the oak woodland areas of the County covered under the ORMP do meet the definition of forest land. As addressed in other chapters of this DEIR, impacts to the biological resources (Chapter 6), greenhouse gas (Chapter 8), and aesthetic (Chapter 9) values of oak woodlands are considered significant and unavoidable. Buildout of the General Plan could result in the loss of 4,8486,442 acres of forest land by 2035 resulting in a significant and unavoidable impact.

Impact FOR-2

Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

Determination: Significant and Unavoidable

2004 General Plan EIR and TGPA-ZOU EIR Conclusions

A summary of impact conclusions reached in the 2004 El Dorado County General Plan EIR (County of El Dorado 2004) and the final El Dorado County Targeted General Plan Amendment and Zoning Ordinance Update (TGPA-ZOU) Program EIR (County of El Dorado 2015b) is presented for Impact FOR-1. These documents did not specifically evaluate whether the project would involve other changes in the existing environment that could result in conversion of forest land to non-forest use.

Project Impacts

The proposed project would not involve changes to the existing environment, as no specific development is proposed. Rather, the proposed project would define the County's biological resource management and mitigation strategy. The proposed policies would establish requirements for identification of biological resources and analysis of impacts to those resources from future development within the County and identify standards for mitigation of such impacts. The ORMP would also outline the County's strategy for oak woodland conservation. Potential indirect impacts of future development that could occur as a result of the proposed project are addressed under Impact FOR-1. As identified under Impact FOR-1, impacts to recreation and water quality values would be less than significant. Impacts to the biological resources, greenhouse gas, and aesthetic values of oak woodlands would be significant and unavoidable, as addressed in other chapters of this DEIR. Buildout of the General Plan could

result in the conversion of $\frac{4,8486,442}{4}$ acres of forest land to non-forest use by 2035 and is considered a significant and unavoidable impact.

7.4 MITIGATION MEASURES

The proposed project would result in significant and unavoidable impacts related to Forestry Resources. Implementation of *Mitigation Measure BIO-2 (Require Mitigation for Valley Oak Tree and Valley Oak Woodlands Impacts)* would require mitigation for all impacts to valley oak woodlands thereby reducing un-mitigated impacts; however, this measure would not reduce impacts to Forestry Resources to less than significant.

	Carbon		d Impacts under Buildout (2025)	Oak Woodland Impacts under General Plan Buildout (2035)		
Oak Woodland Type	Stocks (MT CO₂E per Acre)	Acres	Sequestered Carbon (MT CO₂E)	Acres*	Sequestered Carbon (MT CO₂E)	
Blue oak woodland	137.7	<u>1,484</u> 1,642	204,347 <mark>226,103</mark>	<u>2,023</u> 2,469	<u>278,567</u> 339,981	
Blue oak-foothill pine	129.9	<u>1,437</u> 1,689	<u>186,666</u> 219,401	<u>2,009</u> 2,813	<u>260,969</u> 365,409	
Coastal oak woodland	N/A	0	0	0	0	
Montane hardwood	204.4	<u>379</u> 423	<u>77,468</u> 86,461	<u>568</u> 733	<u>116,099</u> 149,825	
Montane hardwood-conifer	211.8	8	1,694	26	5,507	
Valley oak woodland	209.4	194 247 40,624 51,722		<u>222</u> 401	<u>46,487</u> 83,969	
	Total	3,5014 ,009	510,799 585,381	4,848 6,442	707,629944,691	

Table 8-3
Sequestered Carbon Impacts by Woodland Type and General Plan Buildout Scenario

As presented in Table 8-3 and as discussed in Chapter 6, Biological Resources, conversion of 3,5014,009 acres of oak woodland could occur by 2025, with conversion of another 1,3472,433 acres of oak woodland occurring between 2025 and 2035 (total conversion of 4,8486,442 acres of oak woodland by 2035). This could result in a release of up to 193,133257,235 metric tons of carbon (equal to 707,629944,691 MT CO₂E) that is currently sequestered in oak woodlands. This represents an average value of 146.06 MT CO₂E per acre, as calculated from the sequestered carbon content (707,629944,691 MT CO₂E) and the oak woodland acreage (4,8486,442) converted under the 2035 scenario.

The COLE data set was also analyzed to identify the specific amount of biomass within oak woodlands that would likely be used for landscaping materials and the amount that would likely be used for firewood. For the purposes of this analysis, it is assumed that all forest-floor materials (litter and duff) would be used for landscape materials and that sequestered carbon in this material would be released via decomposition. This analysis also assumes that the remaining, non-forest—floor woodland biomass (live trees, standing dead trees, understory vegetation, and downed dead wood) would be used as firewood and the sequestered carbon in this material would be released via burning. The COLE data identifies that the following percentages of carbon content for each oak woodland type are contained in forest floor litter:

- Blue oak woodland 34% forest floor
- Blue oak-foothill pine, montane hardwood, and montane hardwood-conifer 26% forest floor
- Valley oak woodland 21% forest floor

^{*} Includes land cover type conversion that occurred through 2025.

These percentages were applied to the total MT CO₂E per acre for each forest type to determine the amount of sequestered carbon that would be released through decomposition and burning, as shown in Table 8-4.

<u>Table 8-4</u> Carbon Stock Release per Acre by Process

	% of Forest Floor	<u>Carbon Stocks</u> (MT CO₂E)			
Oak Woodland Type	<u>Litter</u>	Total	Carbon Released through Decomposition (Landscaping)	<u>Carbon Released</u> <u>through Burning</u> (Firewood)	
Blue oak woodland	<u>34</u>	137.7	46.8	90.9	
Blue oak-foothill pine	<u>26</u>	129.9	33.8	<u>96.1</u>	
Coastal oak woodland*	N/A	N/A	<u>N/A</u>	<u>N/A</u>	
Montane hardwood	<u>26</u>	204.4	<u>53.1</u>	<u>151.3</u>	
Montane hardwood-conifer	<u>26</u>	<u>211.8</u>	<u>55.1</u>	<u>156.7</u>	
Valley oak woodland	<u>21</u>	209.4	44.0	<u>165.4</u>	

Notes: MT CO₂E = metric tons carbon dioxide equivalent.

The per acre MT CO₂E amounts shown in Table 8-4 were used to estimate the total CO₂ and CH₄ emissions that could result from the proposed project, based on the total acreage of impact to each oak woodland type. The total woodland impact acreages and the MT CO₂E release by process type identified in Table 8-4 were used in calculating the estimates of CH₄ emissions associated with the proposed project, as presented in the following sections.

Emissions from Decomposition of Landscaping Materials

CH₄ is produced when decomposition of vegetative materials, such as wood pellets and wood chips, occurs in the presence of anaerobic (lacking oxygen) conditions. These conditions are typically found in the middle of large storage piles, such as at biomass to energy facilities. "On the other hand, similar behavior [occurrence of anaerobic conditions] was not observed from garden waste, which contained a lot of lignin. In this case more air could get into the compost and anaerobic conditions cannot occur, because compost is loosely packed" (Jamsen 2015). Thus, it is expected that decomposition of the materials harvested from oak woodlands and used for landscaping applications would not be a source of new CH₄ emissions and that the majority of GHG emissions from decomposition of such material would be in the form of CO₂.

Based on the carbon content of the forest floor litter, as presented in Table 8-4, the amount of CO₂ emissions anticipated from decomposition of landscaping materials as an indirect effect of the proposed project is identified in Table 8-5.

Table 8-5
GHG Emissions from Decomposition of Landscaping Materials

Oak Woodland Type	Forest Floor Litter Carbon Stock per Acre (MT CO ₂ E)	Maximum Impacted Acres	Maximum GHG Emissions (MT CO ₂ E)
Blue oak woodland	<u>46.8</u>	<u>2,023</u>	<u>94,713</u>
Blue oak-foothill pine	<u>33.8</u>	<u>2,009</u>	<u>67,852</u>
Montane hardwood	<u>53.1</u>	<u>568</u>	<u>30,186</u>
Montane hardwood- conifer	<u>55.1</u>	<u>26</u>	1,432
Valley oak woodland	<u>44.0</u>	<u>222</u>	<u>9,762</u>
<u>Total</u>	=	4,848	203,945

Notes: GHG = greenhouse gas; MT CO₂E = metric tons carbon dioxide equivalent.

As discussed, actual impacts may be less than the maximum impacts indicated in Table 8-5, depending on the amount of on-site oak woodland retention that occurs as individual development projects proceed. Thus, it is expected that actual GHG emissions from decomposition of landscaping materials would be between 101,973 MT CO₂E (the emissions that would occur if 50% of the existing amount of each type of oak woodland is retained) and 203,945 MT CO₂E (the emissions that would be generated if no on-site retention occurs). Further, these emissions would occur over the 19 years between 2016 and the General Plan's 2035 planning horizon. Thus, decomposition of landscaping materials would be responsible for between 5,367 and 10,734 MT CO₂E of GHG emissions annually. Additionally, the GHG emissions from decomposing landscaping materials would not represent a new source of GHG emissions in the County. The use of materials from oak woodlands for landscaping applications would be similar to the existing condition, in which organic matter on the ground (forest floor litter) releases sequestered carbon as it decomposes.

Emissions from Burning Firewood

Production of CO₂ and CH₄ from burning firewood occurs at various rates depending on the methods and equipment used. The California Emissions Estimator Model (CalEEMod) air pollutant emission modeling program was used to develop an estimate of the GHG emissions from burning firewood. Modeling was conducted for a hypothetical scenario of 350 single-family dwelling units to identify the proportion of CO₂ and CH₄ emissions from wood burning using various fireplace and woodstove types, and the resulting MT CO₂E emission levels. The results are provided in Table 8-6.

Table 8-6
Relative GHG Emissions from Various Wood-Burning Devices

	<u>CO₂</u>	CH ₄	<u>CO₂E</u>
Wood-Burning Device	Metric Tons per Year		
Conventional fireplace	809.67	<u>0</u>	<u>831.81</u>
Catalytic woodstove	702.98	<u>2.76</u>	<u>760.99</u>
Non-catalytic woodstove	702.98	<u>3.81</u>	<u>782.99</u>
Conventional woodstove	702.98	<u>7.14</u>	<u>853.00</u>

Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; CH_4 = methane; CO_2E = carbon dioxide equivalent.

As shown in Table 8-6, when wood is burned in conventional woodstoves, approximately 10% of the emissions (by mass) would occur as CH₄, and 90% as CO₂. With both catalytic and non-catalytic woodstoves, the CH₄ emissions are reduced to about half that of the conventional woodstove. With the conventional fireplace, all of the emissions are reported as CO₂, with no CH₄ emissions; however, the amount of CO₂ emissions is higher than that of the woodstoves. As also shown in Table 8-6, the total MT CO₂E for the hypothetical scenario ranges from a low of 760.99 to a high of 853.00. The MT CO₂E for the conventional fireplace (from which all emissions are CO₂) is higher than the average MT CO₂E for all four types of wood-burning appliances (the average is 807 MT CO₂E). In actuality, all four types of wood-burning devices are in use throughout the County and are expected to remain in use throughout implementation of the General Plan. Therefore, the assumption that all emissions would be in the form of CO₂ provides a reasonable estimate for this programmatic analysis because assuming that emissions would be a mixture of CO₂ and CH₄ would not result in a substantially higher or lower total MT CO₂E.

<u>Using the carbon content values identified in Table 8-4, Table 8-7 identifies the maximum MT CO₂E emissions if all of the emissions from burning firewood occurred as CO₂.</u>

<u>Table 8-7</u> GHG Emissions from Burning of Firewood

Oak Woodland Type	NonForestFloor Litter Carbon Stock per Acre (MT CO₂E)	Maximum Impacted Acres	Maximum MT CO₂E Emissions from Burning Firewood
Blue oak woodland	90.9	<u>2,023</u>	<u>183,854</u>
Blue oak-foothill pine	<u>96.1</u>	<u>2,009</u>	<u>193,117</u>
Montane hardwood	<u>151.3</u>	<u>568</u>	<u>85,913</u>
Montane hardwood-conifer	<u>156.7</u>	<u>26</u>	<u>4,075</u>
Valley oak woodland	<u>165.4</u>	<u>222</u>	<u>36,725</u>
<u>Total</u>	=	<u>4,848</u>	<u>503,684</u>

Notes: GHG = greenhouse gas; MT CO2E = metric tons carbon dioxide equivalent.

Estimated Range of Indirect GHG Emissions

Mitigation for oak woodland impacts from the anticipated General Plan buildout would be required, as outlined in the ORMP, with the exception of impacts exempted under the Single-Family Lot Exemption (290 acres of oak woodland) and the Affordable Housing Exemption (196 acres of oak woodland¹). Therefore, up to 4,3625,956 acres of oak woodlands impacts under the 2035 General Plan buildout scenario would be mitigated. The ORMP requires mitigation in the form of conserving off-site oak woodlands and replanting (up to a maximum of 50% of the required mitigation). As outlined in the ORMP, mitigation ratios for oak woodland impacts may be 1:1, 1.5:1, or 2:1, depending on the extent of on-site impacts. The following summarizes potential mitigation scenarios under the 2035 General Plan buildout scenario:

• Retention of 50% or more of oak woodlands results in a 1:1 mitigation ratio. Under the 2035 buildout scenario, and assuming on-site retention on each development site of only 50%, other than those that are exempt from mitigation requirements (single-family residential lots and affordable housing), 2,181 acres of oak woodland would be retained within the development area and 2,667 acres would be impacted (removed). Assuming the 50% retention is applied equally to each oak woodland type, loss of 2,667 acres of oak woodland could result in the release of 112,281 MT CO₂E through decomposition and 277,101 MT CO₂E through firewood burning, with a total release of 389,382 MT CO₂E. Retained woodlands would include represent retention of approximately 318,426436,575 MT CO₂E in retained woodland biomass. In addition, approximately 318,426436,575 MT CO₂E could be retained in woodlands conserved as mitigation for project impacts. This scenario would result in total emissions of approximately 507,822 MT CO₂E from release of sequestered carbon to the atmosphere, based on impacts to 3,464 acres (6,442 total acres minus 2,978 retained acres).

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• Retention of more than 25% but less than 50% of oak woodlands results in a 1.5:1 mitigation ratio. Under the 2035 buildout scenario, and assuming on-site retention on each development site of only 25%, other than those that are exempt from mitigation requirements (single-family residential lots and affordable housing), 1,4891,091 acres of oak woodland would be retained and 3,757 acres would be impacted. Assuming the 25% retention is applied equally to each oak woodland type, loss of 3,757 acres of oak woodland could result in the release of 158,170 MT CO₂E through decomposition and 390,352 MT CO₂E through firewood burning, with a total release of 548,522 MT CO₂E. Retained woodlands include would represent retention of approximately 159,286218,287

The oak woodland acreage calculated for the Affordable Housing Exemption is an overestimate of what would be exempt from mitigation, as a portion of that impacted acreage would require mitigation at a reduced ratio. For the purposes of this analysis, a conservative value of 196 acres was used.

MT CO₂E in retained woodland biomass. In addition, up to <u>716,349</u>982,367 MT CO₂E could be retained in woodlands conserved as mitigation for project impacts. This scenario would result in total emissions of approximately 726,110 MT CO₂E from release of sequestered carbon to the atmosphere, based on impacts to 4,953 acres (6,442 total acres minus 1,489 retained acres).

• Retention of less than 25% of oak woodlands results in a 2:1 mitigation ratio. Under the 2035 buildout scenario, and assuming no on-site oak woodland retention occurs would be retained, 4,848 acres of oak woodland would be impacted and could result in the release of 203,945 MT CO₂E through decomposition and 503,684 MT CO₂E through firewood burning, with a total release of 707,629 MT CO₂E. conservatively—Aassuming that no projects retain any on-site woodlands,—Uup to 1,273,7041,746,299 MT CO₂E could be retained in woodlands conserved as mitigation for project impacts. This scenario would result in total emissions of approximately 944,397 MT CO₂E from release of sequestered carbon to the atmosphere, based on impacts to 6,442 acres.

Averaged over the 19-year buildout timeline, the proposed project would result in between 20,49426,727 and 37,24449,705 MT CO₂E emissions annually from release of sequestered carbon to the atmosphere. This would represent a substantial contribution to the overall GHG inventory for the County. To the extent that tree planting is used to mitigate oak woodland impacts, the amount of existing oak woodland that would be conserved would be reduced. This could reduce the amount of sequestered carbon that is retained in the short-term, but over the lifetime of each planted tree, a greater total amount of new carbon sequestration would occur.

In addition to the estimated oak woodland impacts from buildout of the General Plan with residential, commercial, retail, and industrial uses, there is a potential for an additional 138,704 acres of woodland that could be lost without mitigation under the exemptions in the ORMP. This could contribute an additional 1,065,8311,070,210 MT CO₂E annually from release of sequestered carbon to the atmosphere. However, 132,281 acres of oak woodlands would be impacted without mitigation as a result of expanded agricultural production activities, which could provide a replacement source of future carbon sequestration, depending on the type of agricultural activities. Additionally, implementation of Mitigation Measure BIO-2 (Require Mitigation for Valley Oak Tree and Valley Oak Woodland Impacts) would reduce the total exempted acreage to 136,468 acres of woodland, resulting in a reduction of annual sequestered carbon releases from 1,065,8311,070,210 MT CO₂E to 1,048,6491,052,958 MT CO₂E.

This analysis does not attempt to quantify the lost opportunities for carbon sequestration due to the loss of woodlands on an annual basis. Variables such as stand age, species composition, understory characteristics, and climate influence the annual and total amounts of sequestration. In addition to the release of sequestered carbon into the atmosphere when a development project removes woodlands, there is also less opportunity for carbon sequestration to occur in future years. This increases the overall contribution of GHG emissions and associated climate change effects from a project. Thus, this would increase the severity of the impact compared to the emissions estimates provided above.

Similarly, this analysis does not attempt to quantify the total volume of carbon that may be sequestered in the future within oak woodlands set aside for conservation and new trees planted as mitigation for development impacts under the proposed project. Although conservation would be of existing woodlands that are already sequestering carbon, conservation in perpetuity would be guaranteed so that this source of carbon sequestration is permanently retained. However, the annual and total amounts of sequestration that could occur would vary depending on the specific woodland area to be conserved and other factors, and, therefore, cannot be quantified. This source of sequestration would serve to offset some of the proposed project's impacts. It is also not possible to predict the total number of trees that may be planted as mitigation for development impacts, and thus not feasible to estimate the total new carbon sequestration that would be associated with such mitigation efforts.

Further, this analysis does not consider potential sequestration and reductions in energy consumption from landscaping that would be installed by future development projects. Although the Scoping Plan Update recognizes that urban forests provide substantial benefits in these areas, at this programmatic level of analysis, it would be speculative to attempt to quantify the effects of presently unknown landscaping plans. Landscaping would serve to offset some of the proposed project's impacts. Although these potential offsets cannot be quantified, they are not expected to provide a substantial reduction in project impacts.

The El Dorado Air Quality Management District, in cooperation with the Sacramento Metropolitan Air Quality Management District and other air districts in the region, have adopted guidance recommending that the following emissions levels be used by local agencies as thresholds of significance when evaluating GHG impacts (SMAQMD 2014):

- 10,000 MT CO₂E annually for stationary source projects (such as new industrial operations)
- 1,100 MT CO₂E annually for land development projects (in consideration of both construction and operational emissions)

The estimated annual MT CO₂E emissions resulting from General Plan implementation under the proposed Biological Resource Policy Update and ORMP would exceed the stationary source emissions threshold by between 10,49416,727 and 27,24439,705 MT CO₂E annually, and would exceed the development projects emissions threshold by between 19,39425,627 and 36,14448,605 MT CO₂E annually. Therefore, the proposed project would have a significant impact related to GHG emissions and climate change.

• Cultural Modifications – Human-made alterations that either add or detract from the character of a natural area.

Scenic Viewpoints in El Dorado County

A list of the County's key scenic views and resources is presented in Table 9-1. This list is similar to that used in the visual impact analysis prepared for the TGPA-ZOU EIR and the 2004 General Plan EIR. The viewpoints are general locations where the public can access scenic views and resources. Many of the viewpoints are areas along highways where viewers can see large water bodies (e.g., Lake Tahoe and Folsom Reservoir), river canyons, rolling hills, or forests. Other viewpoints are the locations of historical structures or districts that are reminiscent of El Dorado County's heritage. Table 9-1 indicates where the scenic viewpoints are located and the scenic views and resources that can be seen from those viewpoints.

Rivers are important visual resources that draw tourists to the area for recreational opportunities. The American, Cosumnes, Rubicon, and Upper Truckee Rivers run through El Dorado County. Scenic views and corridors that include river views may be accessible by roads for public access for recreation such as rafting and kayaking on the Middle Fork of the American River and whitewater boating on the South Fork of the American River.

Table 9-1 does not provide an exhaustive list of scenic views and resources. However, it identifies representative scenic views and resources within the County that could potentially be affected by the 2025 and 2035 development buildout scenarios.

Table 9-1
Key Public Scenic Viewpoints in El Dorado County

Viewpoint	Location	Predominant Direction of View	Scenic View (V) or Resource (R)		
Highways					
U.S. Highway 50, westbound	East of Bass Lake Road	South	Marble Valley (V)		
	Between the South Shingle Road / Ponderosa Road interchange and Greenstone Road	East	Crystal Range (V)		
	East of Placerville, various locations	East, north, and south	Sierra Nevada peaks (V), American River canyon (V, R), Sacramento Valley (V)		
	Echo Summit	East	Lake Tahoe (V), Christmas Valley (V, R)		
U.S. Highway 50, eastbound	East of Bass Lake Road	South	Marble Valley (V)		
	Between Echo Summit and Placerville	West, north, and south	Horsetail Falls and Lovers Leap (R), lower Sierra Nevada ridgelines (V), American River canyon (V, R), Sacramento Valley (V)		
	Camino Heights	West	Sacramento Valley (V)		

and intactness of scenic views, and, therefore, would result in a significant and unavoidable impact (County of El Dorado 2015a).

The TGPA-ZOU also assessed impacts to scenic vistas resulting from the TGPA-ZOU project's proposed provisions for Ranch Marketing, Agricultural and Timber Resource Lodging, Ski Area, and Industrial General land uses. The EIR concluded that such provisions could result in new development that adversely affects the vividness, intactness, and unity of rural views. Despite requirements for compatibility and design review, it was determined that the proposed activities could adversely affect scenic views and resources. Even with implementation of mitigation measures, the EIR concluded that the TGPA-ZOU's overall impact to scenic vistas would be significant and unavoidable (County of El Dorado 2015a).

Project Impacts

The proposed project would not alter the land use or zoning designations for any property, and no specific development is proposed. Rather, the proposed project would modify the County's existing policies and procedures for evaluating and mitigating the impacts of future development to biological resources. This analysis considers the potential for the proposed project to result in development that would degrade existing scenic resources within the County. Specifically, this analysis considers potential impacts to the discrete scenic views and resources identified in Table 9-1, and potential impacts to general scenic views such as views that are typical within rural areas of the County. The impact on general community character within the County is evaluated in Impact LU-2 in Chapter 5, Land Use.

Continued buildout of the General Plan land uses under the proposed Biological Resource Policy Update and ORMP could impact scenic vistas and/or resources in individual communities and the County as a whole.

Impacts Related to Loss of Oak Woodland

As discussed in Chapter 5, Land Use, and shown in Figure 5-1, impacts to oak woodlands from future development are expected to occur on properties generally within the Highway 50 corridor and west of the City of Placerville. In particular, several properties that currently support oak woodland habitats within the Community Regions of El Dorado Hills, Cameron Park, and Shingle Springs are projected to be developed under both the 2025 and 2035 scenarios. A few properties east of Placerville that currently support oak woodlands are also expected to be developed, including properties in the rural center of Camino and properties south of Placerville. It is expected that development through 2025 would result in conversion of a maximum of 3,5014,071 acres of oak woodland to developed land uses. Development through 2035 would result in conversion of an additional 1,3472,433 acres of oak woodland to developed land uses. The conversion of oak woodland to developed uses would affect scenic resources and scenic

vistas in a given community by decreasing the prevalence of natural habitat and resources, and increasing the presence of built environment and ornamental landscaping elements.

To assess the loss of oak woodlands and its potential to degrade the quality of scenic vistas and resources, each of the County-identified scenic resources and viewpoints listed in Table 9-1 were located in relation to areas that currently support oak woodlands anticipated for development under the 2025 and 2035 scenarios (see Figure 5-1 in Chapter 5, Land Use). Comparing the identified resources and viewpoints to the oak woodland areas anticipated for future development, it was determined that one viewpoint listed in Table 9-1, the scenic view of Marble Valley from Highway 50 westbound and limited views from the eastbound direction, could be impacted by the loss of oak woodlands associated with development through 2035. All other listed scenic vistas and visual resources in Table 9-1 would not be expected to be affected by development under either the 2025 or 2035 buildout scenarios due to their not being located in an oak woodland area anticipated for development, within a scenic viewshed, or adjacent to an identified visual resource.

In determining the level of significance of visual impacts related to loss of oak woodlands within the Marble Valley scenic view, it was necessary to consider factors such as the level of viewer exposure and level of expected visual change that would be seen by a given viewer group. The scenic view of Marble Valley that could potentially be affected by the loss of oak woodlands associated with future development would be predominantly from the westbound direction, with limited views from eastbound Highway 50. The Specific Plan area is mostly located to the east of a ridgeline near Marble Ridge Road and south of Highway 50, which obscures views of the proposed development area for most of the eastbound direction. Additionally, the views from the westbound direction are constrained by the median divider on Highway 50. Thus, views of Marble Valley from both travel directions on Highway 50 are limited. —Although the conversion of oak woodland to developed uses in this area could result in a change to the scenic view, the change would not be expected to be substantial considering the level of viewer exposure and expected visual change. Because this scenic view is experienced by motorists traveling at high rates of speed along westbound Highway 50, the duration of the view is very limited. Although the rate of oak woodland loss is unknown, future development project(s) in the Marble Valley area are expected to occur over the next 20 years, as indicated in the 2025 and 2035 development projections. Due to the incremental nature of oak woodland loss and the requirement that development projects incorporate mitigation for loss of oak woodland, visual change is not expected to be substantial. Based on these considerations, visual impacts related to the loss of oak woodland in the Marble Valley scenic view are expected to be less than significant.

Impacts Related to Loss of Other Vegetation Communities

Figure 5-2 in Chapter 5, Land Use, shows the existing development footprint within all vegetation communities in the County, and Figure 5-3 in Chapter 5 shows anticipated impacts to all vegetation communities under the 2025 and 2035 development scenarios. As shown in Figure 5-3, several properties that currently support natural vegetation communities within the Community Regions of El Dorado Hills, Cameron Park, and Shingle Springs are projected to be developed under both the 2025 and 2035 scenarios. The natural communities that would possibly be affected are hardwood forest, hardwood woodland, conifer woodland, herbaceous, and shrub; additionally, approximately seven locations projected to be developed contain wetlands. A few properties east of Placerville that currently support herbaceous and hardwood forest communities are also expected to be developed, including properties in the community of Camino and properties south of Placerville. As with the loss of oak woodlands, the conversion of natural vegetative communities to developed uses would impact scenic resources and scenic vistas in a given community by decreasing the prevalence of natural habitat and resources, and increasing the presence of built-environment and ornamental landscaping elements.

As with the assessment of visual impacts related to the loss oak woodlands, each of the County-identified scenic resources and viewpoints listed in Table 9-1 were located in relation to areas that currently support vegetation communities anticipated for development under the 2025 and 2035 scenarios (see Figure 5-2 in Chapter 5). Consistent with the loss of oak woodland discussed above, Table 9-1 listsone scenic viewpoints of Marble Valley. listed in Table 9-1, tThe scenic view of Marble Valley from westbound Highway 50; was determined to potentially be impacted by buildout through 2035, and limited views from eastbound Highway 50 would also be impacted. Vegetation communities within this viewshed are hardwood woodland and herbaceous. It is not expected that loss of herbaceous communities would be visible from Highway 50, and the loss of hardwood woodlands are evaluated under loss of oak woodlands, above. Impacts to visual resources related to the loss of hardwood woodland in the Marble Valley scenic view are expected to be less than significant.

Impact VIS-2

Substantially degrade the existing visual character or quality of the area or region

Determination: Significant and Unavoidable

Visual character varies throughout the County, with higher-density urban and suburban development occurring along the Highway 50 corridor and in Community Regions, and other areas supporting rural residential uses, agricultural activities, and large areas of open space. The vegetation communities, including oak trees and oak woodlands, within the open space and rural areas of the County, are a key element of the County's overall character. The General Plan identifies a primary goal of the County as the "Protection and conservation of existing communities and rural centers; creation of new sustainable communities; curtailment of

The proposed project would not alter the land use or zoning designations of any property, and would not make any changes to the General Plan policies that encourage most new development to be located in the Community Regions and Rural Centers. It also would not alter the allowable land uses or density and/or intensity of land use development projects. Thus, the proposed project would not alter land use development locations or types of land uses throughout the County. However, the proposed project would modify the requirements for evaluation and mitigation of impacts to biological resources. Continued buildout of the General Plan land uses under the proposed Biological Resources Policy Update and ORMP could alter the character of individual communities and the County as a whole.

Figure 5-1 in Chapter 5, Land Use, shows the areas that currently support oak woodlands that are anticipated for development under the 2025 and 2035 scenarios; Figure 5-3 shows all anticipated impacts to vegetation communities under the 2025 and 2035 scenarios.

Because the visual character of the County is comparable to that of community character at the general plan level, the following impact discussion provides a summary of the conclusions reached in Chapter 5, Land Use, for Impact LU-2 and the assessment of impacts to the existing community character. Refer to Impact LU-2 in Chapter 5 for a complete evaluation.

As discussed in Impact LU-2, it is expected that development through 2025 would result in conversion of a maximum of 3,5014,071 acres of oak woodland to developed land uses and development through 2035 would result in conversion of an additional 1,3472,433 acres of oak woodland to developed land uses. Most impacts to oak woodlands from future development are expected to occur on properties generally within the Highway 50 corridor and west of the City of Placerville (see Figure 5-1). In terms of conversion, natural vegetation communities that would possibly be affected by buildout through 2035 are hardwood forest, conifer woodland, herbaceous, and shrub; additionally, seven locations projected to be developed contain wetlands (see Figure 5-3).

The conversion of oak woodlands and natural communities to developed uses would alter land use character in a given community by decreasing the prevalence of natural habitat and resources and increasing the presence of built-environment and ornamental landscaping elements. In general, these effects would be experienced at the individual community level; however, to the extent that conversion of vegetation communities to developed land uses occurs within the viewshed of Highway 50, the effects within individual communities could be combined to result in a cumulative degradation of land use character for the County overall.

Impact LU-2 concluded that the impacts of the proposed project related to loss of oak woodlands and vegetation communities would be potentially significant. Impact LU-2 further concluded that mitigation options related to requiring design review for every new development and requiring

Table 10-1 Summary of Effects of Proposed ORMP

Change	Effects
Update oak woodland in-lieu fee amount and identify an in-lieu amount for individual tree mitigation.	As Option B of Policy 7.4.4.4 is currently inoperative, in-lieu fee payment is not a viable option for mitigating impacts to oak woodlands. However, including in-lieu fee payment as a mitigation option for oak woodland impacts would be consistent with the requirements in PRC 21083.4 and therefore would have no effect. Identification of an in-lieu fee for impacts to individual native oak trees would not result in increased impacts and therefore would have no effect.
Identify permit requirements for impacts to oak resources.	Identifying permit requirements would have no effect.
Add standards for identifying oak woodland mitigation areas outside of Priority Conservation Areas (PCAs).	Identification of standards for identifying oak woodland mitigation areas outside of PCAs would not result in increased impacts or lower the threshold for determining oak woodland mitigation site suitability, and would have no effect.

Table 10-2 Summary of Effects of Proposed Changes to General Plan Policies

Change	Effects
Objective 7.4.1: Revised to focus on Pine Hill plants.	No effect. Existing policy would allow preserves to be established for any state or federally recognized rare, threatened, or endangered species and their habitats. Under proposed Policy 7.4.2.8, preserves would be established for all habitat types that have a mitigation requirement. The purpose of this revised Objective is to limit the applicability of the detailed policies that relate only to the Pine Hill Preserves.
Policy 7.4.1.1 Add "where feasible" following Correct reference to County Code Chapter 130.71 relating to consistency with the USFWS's Gabbro Soil Plants for the Central Sierra Nevada Foothills Recovery Plan (USFWS 2002).	No effect. Conservation of lands in the Pine Hill Preserves will be consistent with the Recovery Plan, to the extent feasible. This is no change from existing application of policy, as Recovery Plans are not binding requirements and consistency is always "to the extent feasible Change made to ensure consistency with renumbered County
	Code".
Policy 7.4.1.2 Add "Pine Hill rare plant" before "preserve sites" to clarify which preserves are addressed by this policy.	Potential to expand the opportunities for preserve acquisition as it eliminates the limit on acquisition from willing sellers to only Pine Hill Plan preserves. However, the Biological Resource Mitigation Program proposed under Policy 7.4.2.8 would establish a database of willing sellers for use in preserve acquisition. Further, use of eminent domain to acquire preserve lands is highly unlikely so for the purposes of this EIR it is assumed that this would have no effect.
Policy 7.4.1.3 Add text "Pine Hill rare plant" before "preserve areas" to clarify which preserves are addressed by this policy.	Would limit the application of the land use restrictions in the policy to Pine Hill Preserves. Other conservation lands established through the Biological Resource Mitigation Program proposed under Policy 7.4.2.8 would not be subject to this policy.

would also result in less than significant impacts to recreation and water quality. As discussed in Chapter 7, Forestry Resources, the oak woodlands potentially converted under both General Plan buildout scenarios (2025 and 2035) are privately owned and consequently do not currently offer recreation opportunities. With respect to water quality, all future projects, including those that affect oak woodlands, would be required to meet the applicable water quality and stormwater management requirements of the General Plan and the National Pollutant Discharge Elimination System. This would ensure that impacts to water quality remain less than significant. A similar level of development is expected to occur with buildout of the General Plan under the proposed project and the No-Project Alternative. Therefore, the No Project Alternative would have the same significant and unavoidable impacts to forestry resources as the proposed project.

Greenhouse Gas Emissions

The proposed project would result in a significant and unavoidable impact due to GHG emissions that could occur as sequestered carbon within the oak woodlands affected by future development is released back into the atmosphere. The No Project Alternative includes a minimum retention standard for oak canopy ranging between 60 % and 90% of the existing canopy coverage. This would reduce the total acreage of oak woodlands lost due to development, which would reduce the total amount of sequestered carbon released back to the atmosphere. Due to the sliding scale of retention requirements relative to existing canopy coverage, it is not feasible to calculate the acreage of oak woodlands that would be retained under the No Project Alterative. As discussed in Chapter 6, Biological Resources, it is expected that buildout of the General Plan through 2035 would result in loss of 4,8486,442 acres of oak woodlands if no onsite retention occurs. If 60% of the existing woodland on each project site was retained, this would result in loss of 1,9392,577 acres of oak woodlands. This would result in emissions of 283,094377,788 metric tons of carbon dioxide equivalents (MTCO₂E). Averaged over the 19year buildout timeline, this would represent emissions of 14,90019,884 MTCO₂E annually. This exceeds the GHG emissions thresholds recommended by the El Dorado County Air Quality Management District, and impacts would remain significant and unavoidable. However, the No Project Alternative would result in a substantial reduction in GHG emissions compared to the proposed project.

Visual Resources

The proposed project would result in a less-than-significant impact related to degradation of the quality of scenic vistas and scenic resources and a significant and unavoidable impact to degradation of the existing visual character of the region. As the development projections for the County would not change under the No Project Alternative, this alternative would result in similar impacts to scenic vistas and scenic resources as the proposed project.

wildlife movement. Thus, Alternative 2 could slightly reduce impacts to wildlife movement compared to the proposed project.

Removal, Degradation, and Fragmentation of Sensitive Habitats

The addition of a minimum oak woodland retention standard to the ORMP would have no effect on the removal, degradation, and fragmentation of sensitive habitats other than valley oak woodland. The retention requirement would ensure that a greater amount of valley oak woodland is preserved within development areas, but would not increase the total amount of valley oak woodland preserved within the County. Therefore Alternative 2 would result in similar impacts to sensitive habitats as the proposed project.

Forestry Resources

The proposed project would result in a significant and unavoidable impact related to loss or conversion of forest land due to the loss of oak woodlands (which meet the definition of forest land). Neither the proposed project or the Minimum Oak Woodland Retention Requirement Alternative would adversely affect forest land values related to recreation and water quality. Potential effects from loss or conversion of forest land related to biological and visual resources and GHG emissions are evaluated in other sections of this EIR. Under the Minimum Oak Woodland Retention Requirement Alternative, the total acreage of forest land lost to development would be reduced through the requirement to maintain 30% oak woodlands on-site. On-site retention of oak woodlands under Alternative 2 would reduce impacts related to the loss of forest land to development.

Greenhouse Gases

The proposed project would result in a Significant and Unavoidable impact due to GHG emissions that could occur as sequestered carbon within the oak woodlands affected by future development is released back into the atmosphere. The Minimum Oak Woodland Retention Requirement Alternative would require that a minimum of 30% of all oak woodlands on a project site be retained on site. This is likely to reduce the total acreage of oak woodlands lost due to development, which would reduce the total amount of sequestered carbon released back to the atmosphere. As discussed in Chapter 6, Biological Resources, it is expected that buildout of the General Plan through 2035 would result in loss of 4,8486,442 acres of oak woodlands if no on-site retention occurs. If 30% of the existing woodland on each project site was retained, this would result in loss of 3,3944,509 acres of oak woodlands. This would result in emissions of 495,524661,019 MTCO₂E. Averaged over the 19-year buildout timeline, this would represent emissions of 26,08034,790 MTCO₂E annually. This exceeds the GHG emissions thresholds recommended by the EDCAQMD, and impacts would remain significant and unavoidable. As evaluated in Chapter 8, Greenhouse Gasses, the proposed Project would result in between

20,49426,727 and 37,24449,705 MTCO₂E emissions annually from loss of carbon sequestration. Thus, Alternative 2 would result in similar impacts as the proposed project.

Visual Resources

The proposed project would result in a less-than-significant impact related to degradation of the quality of scenic vistas and scenic resources and a significant and unavoidable impact to degradation of the existing visual character of the region. As the development projections for the County would not change under Alternative 2, this alternative would result in similar impacts to scenic vistas and scenic resources as the proposed project.

The Minimum Oak Woodland Retention Requirement Alternative would have a reduced impact on the visual character on the County as it would ensure that greater amounts of oak woodlands are maintained as future development projects are implemented. This would retain more of the natural elements that contribute to community character than the proposed project. However, the impact would remain significant and unavoidable, consistent with the prior analysis of the impacts associated with General Plan buildout. Further, as development intensity on individual lots is reduced to accommodate the minimum required oak woodland retention, this alternative may increase developmental pressure in rural areas and thus lead to a greater loss of community character in those areas. Therefore, impacts to visual character under Alternative 2 would remain significant and unavoidable.

Feasibility: This alternative is considered potentially feasible as it accomplishes most of the basic project objectives. However, the alternative may be considered to frustrate implementation of the General Plan in that it would be likely to result in greater amounts of development outside the County's identified Community Regions than is anticipated under the existing General Plan.

10.5 SUMMARY MATRIX

A matrix displaying the major characteristics and significant environmental effects of each alternative is provided in Table 10-3 to summarize the comparison with the proposed project.

Table 10-3
Project Alternatives Impacts Summary

Environmental Issue	Proposed Project Impacts	Alternative 1: No Project/No General Plan Amendment or ORMP	Alternative 2: Minimum Oak Woodland Retention Requirement
	Land Use		
Plan Consistency	LTS	_	_
Community Character	SU	_	_
Land Use Compatibility	LTS	_	_

other activities (such as potential ski areas and public utility service facilities) could result in significant and unavoidable impacts. The TGPA-ZOU EIR concluded that impacts to biological resources under buildout of the General Plan would be significant and unavoidable and would make a cumulatively considerable contribution to the significant cumulative impact.

As evaluated in Chapter 6, Biological Resources, buildout of the General Plan under the proposed project would also result in significant and unavoidable impacts to biological resources. Although the proposed project does not include any development activities and would not alter the land use or zoning designations or allowable development density and intensity of any property, development that occurs subject to the proposed General Plan policies, ORMP, and Oak Resources Conservation Ordinance would contribute to loss of habitat, habitat fragmentation, adverse effects on special-status wildlife and plant species, and loss of wildlife movement corridors. Table 6-1514 in Chapter 6 identifies the projected amount of land cover types within the County that would be converted to developed land by 2035, indicating that a total of 12,71321,109 acres of natural vegetation communities could be impacted through buildout of the General Plan. This would include 4,8486,442 acres of oak woodland that could be impacted by buildout of projects that are not exempt from the ORMP. In addition the ORMP exemptions could allow for impacts to an additional 138,704 acres of oak woodland.

The Cumulative Projects would also convert additional natural vegetation communities within the County and the City of Folsom to developed land uses. It is expected that they could affect an additional 5,929 acres of natural vegetation communities, including 2,000 acres of oak woodland. For each of the Cumulative Projects, Table 11-2 indicates the acreage of new impact to each applicable land cover type. For some projects, the General Plan buildout projections already assume development on the project site or a portion of the site. The data in Table 11-2 reflects only the acreage that was not already assumed to be developed as part of General Plan buildout by the year 2035.

Table 11-2
Cumulative Projects Additional Land Cover Conversion

		Acres Converted by Project							
	Central El	Village of	Lime Rock Valley					Folsom South of	
Land Cover Types	Dorado Hills Specific Plan	Marble Valley Specific Plan	Specific Plan	Dixon Ranch	Saratoga Estates	Tilden Park	Mill Creek	US Hwy 50	TOTAL
Annual Grassland	93.05	235.06	9.35	18.36	0.0002	0	0.20	2,998.5	3,354.52
Blue-Oak Foothill Pine	0	369.38	80.24	0.18	0	0	0.78	0	450.58
Blue Oak Woodland	19.99	928.20	9.40	8.49	0	0	0.31	516.6	1,482.99

Table 11-2 Cumulative Projects Additional Land Cover Conversion

		Acres Converted by Project							
Land Cover Types	Central El Dorado Hills Specific Plan	Village of Marble Valley Specific Plan	Lime Rock Valley Specific Plan	Dixon Ranch	Saratoga Estates	Tilden Park	Mill Creek	Folsom South of US Hwy 50	TOTAL
Coastal Scrub	0	0	0	0	0	0	0	0.9	0.9
Fresh Emergent Wetland	0	0.94	0.86	1.98	0	0	0	9.4	13.18
Lacustrine	0	10.37	0.09	2.90	0	0	0	4.7	18.06
Mixed Chaparral	0	188.92	241.28		0	0	0		430.2
Montane Hardwood	0	0	0	0	0	0	0	26.1	26.1
Urban	6.87	0.80	3.79	6.69	0	0	0.003	75.0	93.153
Valley Foothill Riparian	12.90	0	2.67		0	0	0	2.9	18.47
Valley Oak Woodland	5.07	31.96	3.32	0	0	0	0.007	0	40.357
Totals	137.88	1,765.63	351	38.6	0.0002	0	1.3	3,634.1	5,928.51

In total, under the cumulative scenario 18,64227,038 acres of natural vegetation communities, including 6,8488,442 acres of oak woodland, could be converted to developed uses. When the ORMP exemptions are also considered, a total of 145,552147,146 acres of oak woodland could be lost. Although mitigation for the loss and fragmentation of habitat, including sensitive habitats, and adverse effects on special-status species and wildlife movement would be required for projects within the County, the mitigation would not avoid or compensate for these impacts sufficiently to reduce the impacts to a less-than-significant level. The ORMP includes different mitigation ratios for different levels of on-site oak woodland retention and under the ORMP, mitigation would be required for the impacts to 6,3057,899 acres of oak woodland impacts within the county (543 acres of woodland impacts in the cumulative scenario would occur within the City of Folsom). Table 11-3 identifies the range of on-site oak woodland retention and off-site oak woodland conservation that may occur as development proceeds in the cumulative scenario.

Table 11-3
Cumulative Scenario Oak Woodland Development Impacts and Mitigation

	50% or More On-Site Retention, 1:1 Conservation Ratio	25.1% to 49.9% On-Site Retention, 1.5:1 Conservation Ratio	25% or Less On-Site Retention, 2:1 Conservation Ratio
Amount Retained	3,153 <mark>3,950</mark> or more	1,583 <mark>1,983</mark> to 3,1463,942	<u>1,576</u> 1,975 or less
Amount Conserved	3,1533,950 or less	7,0838,874 to 4,7395,936	9,45811,848 or more

Although mitigation would be required for development projects within the County, many project types would be exempt from the ORMP mitigation requirements. Up to 138,704 acres of woodland impacts could occur with no mitigation required. Thus the cumulative impacts to biological resources remain significant and unavoidable and the proposed project would result in a cumulatively considerable contribution to these impacts.

Forestry

As discussed in Chapter 7, Forestry, the oak woodland areas of the County covered under the ORMP do not meet the definition of timberland, and impacts to recreation and water quality values would be less than significant. However, oak woodlands do meet the definition of forest land and the loss of these woodlands with buildout of the General Plan under the proposed project would result in a significant loss of forest lands. The Cumulative Projects would affect land that includes oak woodlands and as these woodlands meet the definition of forest lands, the projects would convert forest land to non-forestry uses. In the cumulative scenario, impacts related to loss of forest resources would remain significant and unavoidable, and the proposed project would make a cumulatively considerable contribution to this impact.

Greenhouse Gases

As discussed in Chapter 8, Greenhouse Gases, oak woodlands provide for sequestration of substantial amounts of carbon. Conversion of oak woodlands to developed uses results in a one-time release of that sequestered carbon, which contributes to the total greenhouse gas (GHG) inventory in the region. As shown in Table 8-3, the loss of 4,8486,442 acres of oak woodlands as a result of buildout of the General Plan through 2035 would result in the release of 707,629944,691 metric tons of carbon dioxide equivalents (MT CO₂E). This assumes that no onsite retention of oak woodlands occurs as development proceeds. With varying levels of on-site retention possible, as discussed in Chapter 8, and averaged over the 19-year buildout timeline, the proposed project would result in between 20,49426,727 and 37,24449,705 MT CO₂E emissions annually from release of sequestered carbon to the atmosphere. This would substantially contribute to the regional GHG inventory and contribute to climate change effects.

With the addition of the Cumulative Projects, an additional 2,000 acres of oak woodlands could be impacted, resulting in a loss of 292,000293,291 additional MT CO₂E emissions from release of sequestered carbon to the atmosphere. In addition, the Cumulative Projects would develop residential, commercial, and office land uses that would increase GHG emissions as a result of the additional vehicle traffic and increased energy consumption associated with these development projects. In the cumulative scenario, the GHG emissions associated with release of sequestered carbon as well as increased vehicle traffic would result in a significant and unavoidable impact, and the proposed project would make a cumulatively considerable contribution to this impact.

While the proposed project would result in significant GHG emissions, the project is considered consistent with applicable plans and policies adopted for the purpose of reducing GHG emissions. As discussed in Chapter 8, the proposed project would meet the recommendation of the California Air Resources Board Scoping Plan Update that local land use planning efforts "more fully integrate and emphasize land conservation and avoid conversion of croplands, forests, rangelands, and wetlands, as well as [emphasize] expansion and promotion of urban forestry, urban agriculture, and green infrastructure" (CARB 2014). The proposed project would establish a program to manage and mitigate impacts to biological resources, including through conservation. The program includes a focus on habitat connectivity and provisions to ensure the long-term viability of agricultural production and activities within the County. Thus, the proposed project is consistent with statewide and regional planning, policies, and regulations related to GHG emissions and climate change.

It cannot be determined whether the Cumulative Projects would be consistent with statewide and regional planning, policies, and regulations related to GHG emissions and climate change. This determination would be made based on the individual project design and incorporation of measures to reduce GHG emissions. When combined with other development project in the region, it is possible that a significant conflict with statewide and regional GHG planning and requirements could arise. However, as the proposed project would be consistent with statewide and regional GHG planning and requirements, the proposed project would not make a cumulatively considerable contribution to any significant cumulative impacts associated with consistency with statewide and regional planning, policies, and regulations related to GHG emissions and climate change.

Visual Resources

The 2004 General Plan EIR found that buildout of the General Plan could result in a significant and unavoidable cumulative impact due to reduced natural aesthetic qualities of the Highway 50 corridor. The TGPA-ZOU EIR found that development intensities could be increased in some

Table 11-4
Sacramento Region Oak Woodland Inventory

County	Blue Oak Woodland (acres)	Blue Oak- Foothill Pine (acres)	Coastal Oak Woodland (acres)	Montane Hardwood (acres)	Montane Hardwood -Conifer (acres)	Valley Oak Woodland (acres)	Total (acres)
Solano	10,835	421	1,863	14,688	0	694	28,501
Tehama	293,016	166,572	300	90,138	18,957	7,207	576,189
Yolo	59,729	4,437	9	18,489	0	810	83,475
Yuba	42,323	25,987	74	20,926	12,121	1,241	102,671
Total:	821,615	480,814	36,725	728,840	287,159	30,522	2,385,676

Further, Oaks 2040 includes an estimate of the total number of oak trees greater than 1 inch diameter at breast height (dbh) and those greater than 5 inches dbh. Within the Sacramento region, there are an estimated 538.8 million trees greater than 1 inch dbh. Of those, it is estimated that 228.7 million are greater than 5 inches dbh (California Oaks Foundation 2006).

The Oaks 2040 report found that blue oak is California's dominant oak species by total acreage, representing more than one-third of the state's oak woodlands. Through the Sacramento and San Joaquin regions, this oak type occurs generally in the lower foothills of the western slope of the Sierra Nevada. Within El Dorado County, the lower foothills support the rapidly growing communities of El Dorado Hills and Cameron Park. Thus development pressures on blue oak woodlands in El Dorado County are high. According to the 2015 FRAP data, the portion of El Dorado County within the ORMP planning area contains an estimated 111,261 acres of blue oak-dominated woodland types, including 46,521 acres of blue oak woodland and 64,740 acres of blue oak-foothill pine.

More than one million acres of California's oak woodlands have already been developed and approximately 750,000 additional acres of California's oak woodlands are at risk of development before 2040 (California Oaks Foundation 2006). This represents approximately 20% of the statewide inventory; however development pressures on oak woodlands are not uniform throughout the state. Specifically, the analysis found that 80% of the woodlands that are at risk are within the Sacramento and San Joaquin regions, noting that the central valley and sierra foothills woodlands are particularly at risk for development. Additionally, climate change effects may reduce and shift the range of some types of oak woodlands (Gaman 2008).

It is expected that there will be a significant and unavoidable cumulative loss of oak woodlands statewide and particularly within the Sacramento Region identified in the Oaks 2040 report. As buildout of the General Plan under the proposed project could result in a loss of up to 4,8486,442 acres of oak woodland due to development, and an additional 138,704 acres of oak woodland due to

OBJECTIVE 7.4.1: PINE HILL RARE PLANT_SPECIES

The County shall protect Pine Hill rare plant species and their habitats consistent with Federal and State laws.

- Policy 7.4.1.1 The County shall continue to provide for the permanent protection of the eight sensitive plant species known as the Pine Hill endemics and their habitat through the establishment and management of ecological preserves consistent with County Code Chapter 130.71 and where feasible the USFWS's Gabbro Soil Plants for the Central Sierra Nevada Foothills Recovery Plan (USFWS 2002).
- Policy 7.4.1.2 Private land for Pine Hill rare plant preserve sites will be purchased only from willing sellers.
- Policy 7.4.1.3 Limit land uses within established Pine Hill rare plant preserve areas to activities deemed compatible. Such uses may include passive recreation, research and scientific study, and education. In conjunction with use as passive recreational areas, develop a rare plant educational and interpretive program.
- Policy 7.4.1.4 The Pine Hill Preserves, as approved by the County Board of Supervisors, shall be designated Ecological Preserve (-EP) overlay on the General Plan land use map.
- Policy 7.4.1.5 *Intentionally blank*.
- Policy 7.4.1.6 *Intentionally blank*.
- Policy 7.4.1.7 *Intentionally blank*.

OBJECTIVE 7.4.2: 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.

- Policy 7.4.2.1 The County will coordinate wildlife and vegetation protection programs with appropriate Federal and State agencies.
- Policy 7.4.2.2 The County shall continue to support the Noxious Weed Management Group in its efforts to reduce and eliminate noxious weed infestations to protect native habitats and to reduce fire hazards.

construction and widening projects. Impacts on public safety and wildlife movement for projects that include new roads of 4 or more lanes or the widening of roads to 4 or more lanes will be evaluated during the development review process (see Section C below). The analysis of wildlife movement impacts will take into account the conditions of the project site and surrounding property to determine whether wildlife undercrossings are warranted and, if so, the type, size, and locations that would best mitigate a project's impacts on wildlife movement and associated public safety.

- C. Biological Resources Assessment. A site-specific biological resources technical report will be required to determine the presence of specialstatus biological resources that may be affected by a proposed discretionary project. Vegetation communities and special-status plants 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. Any surveys conducted to evaluate potential presence of special-status wildlife species shall conform to practices recommended by CDFW and/or USFWS at the time of the survey. The report will include an assessment of direct, indirect and cumulative impacts to biological resources, including vegetation communities, plant and wildlife species and wildlife movement. The report shall include recommendations for:
 - pre-construction surveys and avoidance/protection measures for nesting birds;
 - pre-construction surveys and avoidance/protection measures for roosting bats;
 - avoidance and minimization measures to reduce impacts related to entrapment, entanglement, injury, or poisoning of wildlife; and
 - avoidance and minimization measures to reduce indirect impacts to wildlife in open space adjacent to a project site.

The results of the biological resources technical report shall be used as the basis for establishing mitigation requirements in conformance with this policy and the Oak Resources Management Plan (ORMP, see General Plan Policy 7.4.4.4).

D. Habitat Protection. Mitigation for impacts to vegetation communities defined above in Section A will occur within the County on a minimum contiguous habitat block of 5 acres. Wetlands mitigation may occur within mitigation banks and/or outside the County if within

F. Mitigation Monitoring. Prior to final approval of an individual development project, applicants shall submit to the County a Mitigation Monitoring Plan that provides for periodic monitoring of preserved lands to assess effectiveness of the measures implemented to protect special-status and native species. The Mitigation Monitoring Plan shall demonstrate that funding is secured to implement the monitoring strategy in perpetuity.

Policy 7.4.2.9

The Important Biological Corridor (-IBC) overlay shall apply to lands identified as having high wildlife habitat values because of extent, habitat function, connectivity, and other factors. Lands located within the overlay district shall be subject to the following provisions except that where the overlay is applied to lands that are also subject to the Agricultural District (-A) overlay or that are within the Agricultural Lands (AL) designation, the land use restrictions associated with the IBC policies will not apply to the extent that the agricultural practices do not interfere with the purposes of the -IBC overlay:

In order to evaluate project-specific compatibility with the -IBC overlay, applicants for discretionary projects (and applicants for ministerial projects within the Weber Creek canyon IBC) shall be required to provide to the County a biological resources technical report (meeting the requirements identified in Section A of Policy 7.4.2.8 above). The site-specific biological resources technical report will determine the presence of special-status species or habitat for such species (as defined in Section B of Policy 7.4.2.8 above) that may be affected by a proposed project as well as the presence of wildlife corridors particularly those used by large mammals such as mountain lion, bobcat, mule deer, American black bear, and coyote. Properties within the -IBC overlay that are found to support wildlife movement shall provide mitigation to ensure there is no net loss of wildlife movement function and value for special-status species, as well as large mammals such as mountain lion, bobcat, mule deer, American black bear, and coyote. Mitigation measures may include land use siting and design tools.

Wildland Fire Safe measures (actions conducted in accordance with an approved Fire Safe Plan for existing structures or defensible space maintenance for existing structures consistent with California Public Resources Code Section 4291) are exempt from this policy, except that Fire Safe measures will be designed insofar as possible to be consistent with the objectives of the Important Biological Corridor. Wildland Fire Safe measures for proposed projects are not exempt from this policy.

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, Exemptions and Mitigation Reductions

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, individual valley oak trees, and valley oak woodlands are subject to the mitigation requirements contained herein, regardless of whether or not the action requires a development permit (except for dead, dying, and diseased trees, as discussed in Section 2.1.9, Dead, Dying, or Diseased Trees Exemption). Oak woodland impacts or removal of individual native oak trees (excluding Heritage Trees, individual valley oak trees, and valley oak woodlands) outlined in the following sections are exempt from the mitigation requirements included in this ORMP. Exemptions do not apply to removal of Heritage Trees, individual valley oak trees, or valley oak woodlands.

2.1.1 Single-Family Lot Exemption

Projects or actions occurring on lots of 1 acre or less allowing a single-family residence by right, and that cannot be further subdivided without a General Plan Amendment or Zone change 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

With the exception of uses/activities that require issuance of a Conditional Use Permit, and when such uses/activities are otherwise consistent with the Zoning Ordinance (Title 130 of County Code), 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 Operations Exemption

Actions taken during emergency firefighting operations or responses to natural disasters (e.g., floods, landslides) and associated post-fire or post-disaster remediation 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 (<u>including individual valley oak trees and valley oak trees within valley oak woodlands</u>) 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 provided that no more than 8 trees are removed from a single parcel per year and provided that the total diameter inches at breast height (dbh) of trees removed from a single parcel per year does not exceed 140 inches.

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 does not apply to removal of Heritage Trees or individual valley oak trees. This reduction for affordable housing projects also does not apply to impacts to valley oak woodlands impacts. This reduction for affordable housing projects applies to impacts to other oak woodland habitat and removal of other individual oak trees. In no case shall the mitigation requirement be less than zero.

Table 2
Affordable Housing Mitigation Reduction

Affordable Housing Type (Household Income Level)	Percent Oak Woodland Mitigation Reduction (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 <u>Lower</u> income category. The oak woodland mitigation ratio may be reduced by 25%. A <u>Moderate</u> income project that provides all units at that income level may reduce the oak woodland mitigation ratio by 50%. A project with 20% <u>Very Low</u> 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.

application. If oak woodlands have been impacted then copies of all permits for such actions must be attached to the certification. If the certification is not included with the application then the application is incomplete. If oak woodlands have been impacted within the 2 year period without the proper permits then the application is deemed incomplete until the applicant either: 1) enters into a remediation/settlement agreement with County (such remediation/settlement agreement shall be in full force and effect regardless of whether or not the County approves or denies the application); or, 2) all code enforcement proceedings are completed and all applicable penalties and fines are paid and/or all criminal proceedings are completed and all applicable penalties, fines and sentences are paid or fulfilled.

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

Percent of Oak Woodland Impact	Oak Woodland Mitigation Ratio
0-50%	1:1
50.1-75%	1.5:1
75.1-100%	2:1

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. Off-site deed restriction or conservation easement acquisition and/or acquisition in fee title by a land conservation organization for purposes of off-site oak woodland conservation;
- 2. In-lieu fee payment to be either used by the County to acquire off-site deed restrictions and/or conservation easements or to be given by the County to a land conservation organization to acquire off-site deed restrictions and/or conservation easements;
- 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.

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 impacted without an oak tree removal permit, in addition to issuing fines and penalties, any and all applications for development of that property shall be deemed incomplete unless and until the property owner enters into a settlement agreement with the County or all code enforcement and/or criminal proceedings are complete and all penalties, fines and sentences are paid or fulfilled. All monies received as fines for illegal oak tree and woodland removal shall be deposited in the County's Oak Woodland Conservation Fund.

Under penalty of perjury, a code compliance certificate shall be required to affirm no oak trees have been impacted (i.e., cut down) on the property that is the subject of an oak tree removal permit application within 2 years prior to the submission date of the application. If oak trees have been impacted then copies of all permits for such actions must be attached to the certification. If the certification is not included with the application then the application is incomplete. If oak trees have been impacted within the 2 year period without the proper permits then the application is deemed incomplete until the applicant either: 1) enters into a remediation/settlement agreement with County (such remediation/settlement agreement shall be in full force and effect regardless of whether or not the County approves or denies the application); or, 2) all code enforcement proceedings are completed and all applicable penalties and fines are paid and/or all criminal proceedings are completed and all applicable penalties, fines and sentences are paid or fulfilled.

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, Replacement Planting Guidelines) and shall be quantified and outlined in an oak resources technical report (Section 2.5, Oak Resources Technical Reports). 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 to be either used by the County to plant oak trees or to be given by the County to a land conservation organization to plant oak trees; 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.

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, Priority Conservation Areas). A developer that dedicates a County-approved conservation easement is not subject to the acquisition component of the inlieu fee, but is subject to the Initial and Long-Term Management and Monitoring and Administration components 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 5
Oak Woodland In-Lieu Fee

Activity	Cost per Acre
Acquisition	\$4,400
Initial Management and Monitoring	\$2,300
Long-Term Management and Monitoring	\$875
Administration	\$379
Total Cost per Acre	\$7,954

Source: New Economics & Advisory Draft Oak Resource In-Lieu Fee Nexus Study (June 2016)

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 4.0 (Priority Conservation Areas). 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 and Administration 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.

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, Conservation Outside of PCAs) 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 or acquisition in fee title by the County. 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 at the time the conservation easement is established, 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 on minimum contiguous habitat blocks of 5 acres, as described below. 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

5.0 Application of ORMP to Development Review Process

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

- 1. 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.
- 2. 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.
- 3. The proposed oak woodland impact area is compared with the total on-site oak woodland area to determine the appropriate mitigation ratio.
- 4. Impacts to individual native oak trees and/or Heritage Trees are determined and the sum of impacted trunk diameter (dbh) calculated.
- 5. If applicable, the applicant proposes mitigation for impacts to oak woodlands in an oak resources technical report by one of the following mechanisms:
 - 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 with the fee to be either used by the County to acquire off-site deed restrictions and/or conservation easements or to be given by the County to a land conservation organization to acquire off-site deed restrictions and/or conservation easements;
 - 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.
- 6. 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 with the fee to be either used by the County to plant oak trees or to be given by the County to a land conservation organization to plant oak trees; or
- d. A combination of two or more of the above provisions.
- 7. 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.
- 8. 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.

Mitigation Maintenance, Monitoring and Reporting: Required care, inspection and documentation of Replacement Trees, including acorns, when planted as mitigation for loss of oak woodlands, loss of individual native oak tree(s) or Heritage Tree(s) as defined in the ORMP. Mitigation maintenance, monitoring and reporting shall contain the following elements:

- 1) Annual monitoring and maintenance of Replacement Trees during the 7-year period after planting in which any trees that do not survive during this period are replaced as needed by the responsible party listed on the Oak Tree or Oak Woodland Removal Permit for a period of 7 years from the date of planting,
- 2) Monitoring reports documenting the success of Replacement Tree planting submitted to the County at the following intervals:
 - Oak Woodland Mitigation: Annually and at the conclusion of the 7-year period after planting (see Section 6.0, definition of "Monitoring Report" in this section).
 - Individual Native Oak Tree and Heritage Tree Mitigation: At the conclusion of the 7-year period after planting (see Section 6.0, definition of "Monitoring Report" in this section).

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. All Final Monitoring Reports shall contain contingencies or alternatives if the success criteria for replantings, as determined by a Qualified Professional, have not been met at the end of the monitoring term, along with a means to ensure compliance with the replacement planting plan. 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 Woodland Conservation Fund: A fund set up by the County to receive in-lieu fees (Oak Woodland In-Lieu Fee and Individual Tree In-Lieu Fee) which shall be used to fund the acquisition of land and/or oak woodland conservation easements from willing sellers, native oak tree planting projects, and ongoing conservation area monitoring and management activities, including but not limited to fuels treatment, weed control, periodic surveys, and reporting.

communities within the vicinity of Federal lands that are a high risk for wildfire," as listed in the Federal Register of August 17, 2001.

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 wislizeni*), 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.

<u>Impact:</u> 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 oak 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.

<u>In-lieu Fee:</u> Cash payments that may be paid into the County's Oak Woodland Conservation Fund by an owner or developer as a substitute for a Deed Restriction, Conservation Easement or replacement planting. In-lieu fee amounts for Individual Native Oak Trees, Heritage Trees, and Oak Woodlands as presented in the ORMP may be adjusted by the County over time to reflect changes in land values, labor costs, and nursery stock costs.

Individual Native Oak Tree(s): Any live native oak tree of the genus *Quercus* (including blue oak (*Quercus douglasii*), valley oak (*Quercus lobata*), California black oak (*Quercus kelloggii*), interior live oak (*Quercus wislizeni*), canyon live oak (*Quercus chrysolepis*), Oregon oak (*Quercus garryana*), 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.

Oak Resources: Collectively, Oak Woodlands, Individual Native Oak Trees, and Heritage Trees.

<u>Oak Resources Technical Report:</u> A stand-alone report prepared by a Qualified Professional containing information, documents and formatting as specified in Section 2.5 (<u>Oak Resources Technical Reports</u>) of the ORMP (<u>Oak Resources Technical Reports</u>).

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).

130.39.050 Exemptions and Mitigation Reductions

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. With the exception of dead, dying, and diseased trees, as discussed in Section 130.39.050.I (Dead, Dying, or Diseased Trees) below, all impacts to Heritage Trees, individual valley oak trees, and valley oak woodlands shall be subject to the provisions and mitigation requirements contained in the ORMP, regardless of whether or not the action requires a development permit. With the above noted exceptions, The provisions of this Chapter do not apply to the following activities, uses, and structures, except where provisions of a memorandum of understanding between the County and another governmental agency provide for County regulatory authority or otherwise provided by law:

- A. Existing Single-Family Parcels. Projects or actions occurring on parcels of 1 acre or less allowing a single-family residence by right, and that cannot be further subdivided without a General Plan Amendment or Zone change are exempted from the mitigation requirements included in this Chapter.
- **B.** Fire Safe Activities. Actions taken pursuant to an approved Fire Safe Plan for existing structures, or a Community Wildfire Protection Plan, 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 Chapter. Oak resources impacts for initial Defensible Space establishment for new development are not exempt from the mitigation requirements included in this Chapter.
 - 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 Chapter.
- C. Utility Line Maintenance. 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.
- **D.** County Road Projects. 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.

- **E. Affordable Housing.** 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 Chapter.
- F. Agricultural Activities. With the exception of uses/activities that require issuance of a Conditional Use Permit, and when such uses/activities are otherwise consistent with other provisions of County Code Title 130 (Zoning Ordinance), The following types of agricultural activities are exempted from the mitigation requirements included in this Chapter:
 - 1. Agricultural activities conducted for the purposes of producing or processing plant and animal products or the preparation of land for this purpose;
 - 2. Agricultural Cultivation/Operations, whether for personal or commercial purposes (excluding commercial firewood operations);
 - 3. Activities occurring on lands in Williamson Act Contracts or under Farmland Security Zone Programs.
- **G. Emergency Operations.** Actions taken during emergency firefighting operations or responses to natural disasters (e.g., floods, landslides, avalanches, etc.) and associated post-fire or post-disaster remediation activities are exempted from the mitigation requirements included in this Chapter.
- **H. Timber Harvest Plan.** Tree removal permitted under a Timber Harvest Plan approved by CAL FIRE is exempted from the mitigation requirements included in this Chapter.
- I. Dead, Dying, or Diseased Trees. Individual native oak tree removal <u>(including individual valley oak trees and valley oak trees within valley oak woodlands)</u> is exempted from the mitigation requirements included in this Chapter when:
 - 1. The tree is dead, dying, or diseased, as documented in writing by a Certified Arborist or Registered Professional Forester; and/or
 - 2. 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.
- J. Exemption for Personal Use. 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 Chapter provided that no more than 8 trees are removed from a single parcel per year and provided that the total diameter inches at breast height (dbh) of trees removed from a single parcel per year does not exceed 140 inches.
- K. Mitigation Reductions for Affordable Housing. Non-exempt affordable housing projects may qualify for partial oak woodland mitigation credit. 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

- **B.** Commercial Firewood. For purposes of this Section, Commercial Firewood Cutting operations shall be considered discretionary and subject to a Minor Use Permit pursuant to Section 130.52.020 (Minor Use Permits). In addition to the specific findings required for Minor Use Permits, a Minor Use Permit for Commercial Firewood Cutting operations shall also consider the following:
 - 1. Whether the removal of the tree(s) would have a significant negative environmental impact;
 - 2. Whether the proposed removal would not result in clear-cutting, but would result in thinning or stand improvement;
 - 3. Whether replanting would be necessary to ensure adequate regeneration;
 - 4. Whether the removal would create the potential for soil erosion;
 - 5. Whether any other limitations or conditions should be imposed in accordance with sound tree management practices; and
 - 6. What the extent of the resulting oak woodland coverage would be.
- C. Mitigation Requirement. Impacts to oak resources on a property subject to a discretionary approval shall be addressed in the discretionary application review process and shall be incorporated as conditions of project approval.
 - 1. **Mitigation Oak Woodlands Removal.** If identified Oak Woodlands will be impacted as part of the permit, the applicant shall mitigate for loss of oak woodlands. Mitigation shall occur at the ratio identified in Table 1 (Oak Woodland Mitigation Ratios) using one or more of the following options as specified in the ORMP:
 - a. In-lieu Fee payment based on the percent of on-site Oak Woodland impacted by the development as shown in Table 5_-(Oak Woodland In-Lieu Fee) in the ORMP to be either used by the County to acquire off-site deed restrictions and/or conservation easements or to be given by the County to a land conservation organization to acquire off-site deed restrictions and/or conservation easements;
 - b. Off-site Deed Restriction or Conservation Easement acquisition for purposes of off-site oak woodland conservation consistent with Chapter 4.0 (Priority Conservation Areas) of the ORMP;
 - c. Replacement planting within an area on-site for up to 50 percent of the total Oak Woodland mitigation requirement consistent with Section 2.4 (Replacement Planting Guidelines) of the ORMP. This area shall be subject to a Deed Restriction or Conservation Easement;
 - d. Replacement planting within an area off-site for up to 50 percent of the total Oak Woodland mitigation requirement. Off-site replacement planting areas shall be consistent with Section 2.4 (Replacement Planting Guidelines) and Chapter 4.0 (Priority Conservation Areas) of the ORMP. This area shall be subject to a Deed Restriction or Conservation Easement;
 - e. A combination of options a through d above.

- 2. **Mitigation Individual Native Oak Tree/Heritage Tree Removal.** If Individual Native Oak Trees, including Heritage Trees, will be impacted as part of the permit, the applicant shall mitigate for loss of individual tree(s) by one or more of the following options as specified in the ORMP:
 - a. In-lieu Fee payment for individual oak tree removal to be either used by the County to plant oak trees or to be given by the County to a land conservation organization to plant oak trees as shown in Table 6 (Individual Oak Tree In-Lieu Fee) of the ORMP;
 - b. Replacement planting on-site consistent with Section 2.4 (Replacement Planting Guidelines) of the ORMP within an area subject to a Deed Restriction or Conservation Easement and utilizing the replacement tree sizes and quantities shown in Table 2. On-site replacement planting shall be consistent with Section 2.4 (Replacement Planting Guidelines) of the ORMP;
 - c. Replacement planting off-site within an area subject to a Conservation Easement or acquisition in fee title by a land conservation organization utilizing the replanting sizes and quantities specified in Table 2. Off-site replacement planting shall be consistent with Section 2.4 (Replacement Planting Guidelines) of the ORMP; or
 - d. A combination of options a through c above.

Table 1
Oak Woodland Mitigation Ratios

Percent of Oak Woodland Impact	Oak Woodland Mitigation Ratio
0-50%	1:1
50.1-75%	1.5:1
75.1-100%	2:1

Table 2
Oak Tree Replacement Quantities

our rive representatives				
Replacement Tree Size	Number of Trees Required Per Inch of Trunk Diameter Removed			
Acorn	3			
1-gallon/TreePot 4	2			
5-gallon	1.5			
15-gallon	1			

- **D.** Oak Resources Technical Report. An Oak Resources Technical Report shall accompany any discretionary development project and include all pertinent information, documents and recommended mitigation as specified in the ORMP. Oak Resources shall not be removed from such property until the discretionary review process is completed and a permit has been issued.
- F. Security Deposit for On-Site Oak Tree/Oak Woodland Retention. If Oak Resources are identified for on-site retention as part of a discretionary project, a bond or other