# **Final Mitigation Monitoring and Reporting Program**

## Introduction

Section 21081.6 of the California Environmental Quality Act (CEQA) and Section 15097 of the State CEQA Guidelines require a lead agency that adopts an environmental impact report (EIR) to establish a program to monitor and report on the adopted mitigation measures to ensure that approved mitigation measures are implemented subsequent to project approval. Specifically, the lead agency must adopt a reporting or monitoring program for mitigation measures incorporated into a project or imposed as conditions of approval. The program must be designed to ensure compliance during project implementation. As stated in California Public Resources Code Section 21081.6(a)(1):

The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.

This mitigation monitoring and reporting program (MMRP) is designed to meet that requirement. As lead agency for this project, El Dorado County will use this MMRP to ensure compliance with mitigation measures associated with implementation of the proposed project. Mitigation measures identified in this MMRP were developed in the EIR prepared for the proposed project. The MMRP will provide for monitoring of construction activities as necessary and in-the-field identification and resolution of environmental concerns.

The following table indicates the mitigation measure number, the mitigation measure text, implementation timing, the monitoring agency, and an area to record monitoring compliance.

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	Incorporation into Central El Dorado		Implementing			ation of oletion
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Party	Monitoring	Date	Initia
Aesthetics						
Mitigation Measure AES-2: Apply aesthetic design treatments to buildings within oak woodland and grassland areas  Appendix B, Site Design Standards, of the CEDHSP shall include Section B.6, Building Design Standards, as follows. These requirements will be adopted as Conditions, Covenants, and Restrictions with approval of individual subdivision maps and planned development permits.  B.6 BUILDING STANDARDS  Buildings associated with the proposed project that are to be located in oak woodland and grassland areas will be designed to blend with the surrounding built and natural environments so that these structures complement the visual landscape. The following measures will be applied.  Roofing materials within oak woodlands will be colored using a shade that is two to three shades darker than the general surrounding area.  Building facades within oak woodlands shall be painted in mid-range to darker earth tones to help buildings blend better within the oak canopy. Lighter beiges and tans, which would make buildings stand out and contrast against the oak canopy, will be avoided.  Roofing materials within grasslands will use colors that are similar to the mid-range earth toned colors used on existing residences because these colors blend well within grassland areas and provide visual continuity with surrounding development.  Building facades within grasslands shall be painted in mid-range earth tones to help buildings blend better within grassland areas. Very light off-whites, beiges, and tans that make buildings stand out and contrast against grassland areas, will be avoided.	Inclusion in the Design Standards Appendix B	Prior to issuance of building permits	Project Applicant	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action Review CC&Rs with subdivision maps for aesthetic design treatments		
Mitigation Measure AES-4: Design proposed noise barriers to be visually consistent with existing noise barriers in the project vicinity  Existing noise barriers in the project vicinity utilize a combination of solid barriers, earthen berms, and landscaping to mitigate the effects of noise and improve site aesthetics. The earthen berms and landscaping not only improve the quality of views along roadways, but also act to screen and reduce the visibility and apparent scale of the solid barrier. Any noise barriers constructed along Serrano Parkway and El Dorado Hills Boulevard and the Park Drive Extension (see Figure 3.10-2) within the CEDHSP shall be designed and constructed in a manner as to complement and blend with nearby existing noise barriers. New noise barriers shall be visually consistent with the design of existing noise barriers in the project vicinity, such as the noise wall at the southeast corner of El Dorado Hills Boulevard and Harvard Way and the shallow berm along Serrano Parkway. The design will include similar dimensions, barrier materials, berm dimensions, and plant species as the existing barriers along El Dorado Hills Boulevard and Serrano Parkway and the barriers proposed to be installed east of the project area.	Inclusion in the Design Standards Appendix B	During project design and construction	Project Applicant/ Contractor	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County to review design prior to approval of roadway and/or subdivision improvements Periodically check construction site to verify noise barriers being constructed are aesthetically similar to existing		
Air Quality						
Mitigation Measure AQ-2a: Use low-VOC coatings during construction  The project applicant will require all construction contractors to use low-VOC coatings that have a VOC content of 10 g/L or less during construction. The project applicant shall submit evidence of the use of low-VOC coatings to EDCAQMD prior to the start of construction.	Inclusion in Appendix D	Prior to and during construction	Project Applicant/ Contractor	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County to verify incorporation of measure in permit documentation and plans prior to issuance of building permits Check to ensure low-VOC coatings are being used during construction		

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#### Verification of Incorporation into Completion Central El Dorado Implementing Proposed Mitigation Measure(s) Hills Specific Plan Monitoring Date Initial Timing Party Mitigation Measure AO-2b: Implement best management practices to reduce construction-related exhaust Inclusion in Prior to and **Project Reviewing Party** emissions during early construction Appendix D during project Applicant/ County of El Dorado-Planning and Building construction Contractor The project applicant, or its designee, will provide a plan for approval by EDCAOMD that demonstrates the heavy-Department and County of El Dorado Air duty off-road vehicles (50 horsepower or more) to be used 8 hours or more during the construction project will **Quality Management District** achieve a project-wide fleet-average 10% NOX reduction compared to the most recent ARB fleet average. **Monitoring Action** Acceptable options for reducing emissions may include use of cleaner engines (e.g., Tier 3 or Tier 4 engines), low-County to verify incorporation of measure emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other in permit documentation and plans and options as they become available. The plan will have two components: an initial report submitted before review and verify compliance, construction and a final report submitted at the completion. documentation to be provided by Project • Submit the initial report at least 4 business days prior to construction activity using SMAQMD's Construction Applicant Mitigation Tool (http://www.airquality.org/businesses/cega-land-use-planning/mitigation). • Provide project information and construction company information. Include the equipment type, horsepower rating, engine model year, projected hours of use, and the ARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased, and subcontracted equipment to be used. • Submit the final report at the end of the job, phase, or calendar year, as pre-arranged with EDCAQMD staff and documented in the approval letter, to demonstrate continued project compliance. EDCAOMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation will supersede other EDCAQMD, state or federal rules or regulations. The NOx performance standard will sunset on January 1, 2028, provided that full implementation of the ARB In-Use Off-Road Regulation has occurred or equally effective or superior regulations have been implemented, as determined by EDCAQMD.

• Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 3 minutes (5-minute limit is required by the state airborne toxics control measure [Title 13, sections 2449(d)(3) and 2485 of CCR]). Provide clear signage that posts this requirement for workers at the entrances to the site.

In addition to the NOx performance standard, the project applicant shall require contractors, as a condition of

- Maintain all construction equipment in proper working condition according to manufacturer's specifications and train equipment operations in proper use of equipment. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.
- Use the proper size of equipment for the job.

contract, implement the following measures.

- Perform on-site material hauling with trucks equipped with on-road engines, as feasible.
- Ensuring alternatively fueled (e.g., biodiesel, electric, ARB approved low carbon fuel, such as renewable diesel) construction vehicles/equipment make up at least 15 percent of the fleet.
- Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes.
- Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75% by weight).
- Use locally sourced or recycled materials for construction materials (goal of at least 20% based on costs for building materials, and based on volume for roadway, parking lot, sidewalk and curb materials). Use wood products certified through a sustainable forestry program, as feasible.
- Minimize the amount of concrete for paved surfaces or utilize a low carbon concrete option.
- Use SmartWay certified trucks for deliveries where the haul distance exceeds 100 miles and a heavy-duty class 7 or class 8 semi-truck or 53-foot or longer box type trailer is used for hauling. SmartWay certified trucks are outfitted at point of sale or retrofitted with equipment that significantly reduces fuel use and emissions.

	Incorporation into Central El Dorado		Implementing	Monitoring		cation of pletion
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Party		Date	Initial
Mitigation Measure AQ-2c: Implement EDCAQMD fugitive dust control measures and submit a Fugitive Dust Control Plan  The project applicant shall comply with EDCAQMD Rule 223-1 and incorporate all feasible and practicable fugitive dust control measures. Emission reduction measures will include, at a minimum (as applicable), the EDCAQMD Rule 223-1 BMPs identified in Draft EIR Appendix D, such as application of soil stabilizers, pre-watering soil prior to cut-and-fill activities, and covering haul vehicles. Additional measures may be identified by the EDCAQMD or contractor as appropriate. All measures shall be incorporated into a Fugitive Dust Control Plan, which will be submitted to and approved by EDCAQMD. The County will not issue a grading permit for any phase of construction until it has received the approved Fugitive Dust Control Plan. Compliance with the approved plan will be documented, at the applicant's expense, through periodic monitoring and annual reporting to the County.	Inclusion in Appendix D	During project construction	Project Applicant/ Contractor	Reviewing Party County of El Dorado-Planning and Building Department and County of El Dorado Air Quality Management District Monitoring Action County to verify incorporation of measure in permit documentation and plans prior approval of construction plans.		
Mitigation Measure AQ-2d: Promote green consumer products  For all projects developed within the CEDHSP, developer(s) will provide education for residential and commercial tenants concerning green consumer products. Prior to receipt of any certificate of final occupancy, the project sponsors will work with the County to develop electronic correspondence to be distributed by email to new residential and commercial tenants that encourages the purchase of consumer products that generate lower than typical VOC emissions. Examples of green products may include low-VOC architectural coatings, cleaning supplies, and consumer products, as well as alternatively fueled landscaping equipment.	Inclusion in Appendix D	Prior to occupancy	Project Applicant/ Contractor	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County to verify that new tenants receive information on green consumer products		
Mitigation Measure AQ-2e: Require advanced off-road engines and newer onsite on-road trucks  Beginning in 2028 following the sunsetting of the NOx performance standard of Mitigation Measure AQ-2b, the project applicant will require that off-road equipment utilize EPA-certified Tier 4 Final or more advanced engines. A copy of each unit's certified tier specification, emissions rating, and any required ARB or air pollution control district operating permit will be made available to EDCAQMD at the time of mobilization of each piece of equipment.  The project applicant will also require contractors to use onsite diesel on-road trucks (e.g., water trucks) that have model year engines manufactured or retrofitted ideally within the past 5 years of when the vehicles are brought to the construction site, but no more than 8 years from overall project groundbreaking. The project applicant will consider use of electric or hybrid-electric vehicles over diesel counterparts to the extent that they become commercially available and earn a track-record for reliability in real-world construction conditions and become cost effective.	Inclusion in Appendix D	Prior to and during project construction	Project Applicant/ Contractor	Reviewing Party County of El Dorado-Planning and Building Department and County of El Dorado Air Quality Management District Monitoring Action County to verify the use of off-road equipment utilize EPA-certified Tier 4 Final or more advanced engines		
Mitigation Measure AQ-2f: Offset concurrent construction- and operations-generated ozone precursors  The project applicant will offset concurrent construction- and operations-generated ozone precursors (ROG/NOX) that EDCAQMD's threshold to quantities below 82 pounds per day (year 4 and year 15 of construction). The preferred means of undertaking such offsite mitigation will be through a partnership with EDCAQMD, or with the approval of EDCAQMD, an alternative air quality management district that manages incentive programs in the project area (e.g., SMAQMD).  • The project applicant, or its designee, will pay a mitigation fee and an administrative fee in accordance with the provisions of an established mitigation fee program in the EDCAQMD or similar program managed by another air quality management district that is acceptable to EDCAQMD to reduce the project impacts from concurrent construction and operational ozone precursors (ROG/NOX) to a less-than-significant level (i.e., below 82 pounds per day).  • The project applicant, or its designee, will pay the mitigation and administrative fees in full prior to each of the development phases or construction activities, as determined by EDCAQMD, in full prior to grading permit issuance, recordation of each small lot final map, approval of first building permit when a small lot map is not required, or by other permitting mechanisms agreed upon by EDCAQMD, the project applicant, and the lead agency that would allow activity that would exceed EDCAQMD thresholds.  • An alternative payment plan may be negotiated by the project applicant, or its designee, based on the timing of construction activities or other development phases that are expected to exceed EDCAQMD's threshold of	Inclusion in Appendix D	During project construction	Project Applicant/ Contractor	Reviewing Party County of El Dorado-Planning and Building Department and County of El Dorado Air Quality Management District Monitoring Action County to verify that the applicant will offset concurrent construction- and operations-generated ozone precursors to quantities below 82 pounds per day by a partnership with EDCAQMD, or with the approval of EDCAQMD, an alternative air quality management district that manages incentive programs in the project area		

	Incorporation into Central El Dorado		Implementing			cation of oletion		
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Party	Monitoring	Date	Initial		
prior to issuance of a grading permit, or by other permitting mechanisms agreed upon by EDCAQMD, the project applicant, and the lead agency.								
• In coordination with EDCAQMD, the project applicant, or its designee, may reanalyze concurrent construction and operational ozone precursors (ROG/NOX) from the project prior to starting construction to update the required mitigation and administrative fees.								
<ul> <li>The analysis must be conducted using air district approved emissions model(s) and the fee rates published at the time of reanalysis.</li> </ul>								
<ul> <li>The analysis must use the latest available engineering data for the project. Consistent with the methodology used in this EIR, emission factors may account for enacted regulations that will influence future year emissions intensities (e.g., fuel efficiency standards for onroad vehicles).</li> </ul>								
The analysis must include all required mitigation measures as specified in this EIR. The analysis may include additional measures to reduce construction emissions if deemed feasible and equally effective or superior by the lead agency and project applicant. All onsite measures assumed in the analysis must be included in the construction contracts and be enforceable by the lead agency.								
Mitigation Measure AQ-4: Submit and implement an Asbestos Dust Mitigation Plan in accordance with EDCAQMD Rule 223-2	Inclusion in Appendix D	Prior to and during	Project Applicant/	Reviewing Party				
If in a NOA area and required by EDCAQMD, the project applicant shall prepare and submit an Asbestos Dust Mitigation Plan to EDCAQMD prior to the start of any construction activity, consistent EDCAQMD Rule 223-2. All earthwork activities will be periodically observed by a geologist experienced in the visual assessment for NOA or for conditions likely to contain NOA. Additional NOA evaluation will be performed by a certified engineering	Аррепаіх <i>D</i>	construction (	Contractor/ Geologist	Department and County of El Dorado Air Quality Management District  Monitoring Action				
geologist during grading to allow for the determination of possible capping requirements.							County shall verify incorporation of measure in permit documentation and plans, review and approve Asbestos Mitigation Plan provided by Applicant prior to issuance of grading permits	
				County shall review and approve monitoring logs and evaluation report provided by Applicant				
Biological Resources								
Mitigation Measure BIO-1a: Install construction barriers around the construction area to protect sensitive biological resources to be avoided  The project construction contractor will install orange construction barriers or other similar methods as discussed in the Biological Resources Study and IHMP to protect environmentally sensitive areas as one of the first orders of work. These sensitive areas will be protected by a barrier to avoid disturbance during construction. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans. The barrier will be installed before construction activities are initiated, maintained throughout the construction period, and removed when construction is completed. Sensitive biological resources that occur adjacent to the construction area include special-status wildlife habitats, oak woodland and riparian woodland to be retained as open space, and wetlands and other waters of the United States to be retained. The barrier will be removed within 72 hours of completion of work.	Inclusion in Appendix D.	Prior to and during project construction- related activities	Project Applicant/ Contractor	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County shall verify incorporation of measure in permit documentation and plans and verify periodically during and after construction activities that barriers are properly installed and maintained				
Mitigation Measure BIO-1b: Conduct environmental awareness training for construction employees  Prior to beginning construction activities, the project applicant will employ a qualified biologist to develop and conduct environmental awareness training for construction employees on the importance of onsite biological resources, including oak woodland, riparian woodland, and mature trees to be retained; special-status wildlife habitats; potential nests of special-status birds; and roosting habitat for special-status bats. In addition, construction employees will be educated about invasive plant identification and the importance of controlling and preventing the spread of invasive plant infestations. The biologist will also explain the importance of other responsibilities related to the protection of wildlife during construction such as inspecting open trenches and looking under vehicles and machinery prior to moving them to ensure there are no lizards, snakes, small	Inclusion in Appendix D.	Prior to and during project construction- related activities	Project Applicant/ Contractor/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County shall verify incorporation of measure in permit documentation and plans. Sign-in sheets to be provided by Applicant shall be approved, filed and				

	Incorporation into Central El Dorado		Implementing		Verification of Completion	
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Party	Monitoring	Date	Initial
mammals, or other wildlife that could become trapped, injured, or killed in construction areas or under equipment. The environmental awareness program will be provided to all construction personnel to brief them on the life history of special-status species in or adjacent to the project area, the need to avoid impacts on sensitive biological resources, any terms and conditions required by state and federal agencies, and the penalties for not complying with biological mitigation requirements. If new construction personnel are added to the project, the contractor's superintendent will ensure that the personnel receive the mandatory training before starting work. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions will be provided to each person.				maintained by the County		
Mitigation Measure BIO-1c: Conduct periodic site visits during construction  The project applicant will employ a qualified biologist to conduct periodic site visits during construction as necessary in and adjacent to all sensitive biological resources in the construction area. The frequency of site visits will range from weekly to monthly, depending on the biological resource, and may be done concurrently with other monitoring that may be occurring onsite (e.g., California red-legged frog, SWPPP compliance). The biological monitor will assist the construction crew as needed to comply with all project implementation restrictions and guidelines. The biological monitor also will be responsible for ensuring that the contractor maintains the staked and flagged perimeters of the construction area and staging areas adjacent to sensitive biological resources and will inspect the barriers to ensure that the barriers are intact. The monitor will assess any adverse effects on sensitive biological resources resulting from violations of the barrier mitigation requirements and, if adversely affected, will notify the County and the regulatory agency with jurisdiction over the affected sensitive resource. Work will stop until the barriers are reestablished. The monitor will provide the County with a monitoring log for each site visit, which will be provided to interested agencies upon request.	Inclusion in Appendix D	During project construction- related activities	Project Applicant/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife, US Fish and Wildlife Service Monitoring Action County shall verify incorporation of measure in permit documentation and plans. County shall review and approve monitoring logs provided by biologist/Applicant		
Mitigation Measure BIO-1d: Avoid and minimize potential disturbance of oak woodland habitat  If the ORMP is not in effect at the time the development entitlement applications are submitted, the project applicant will implement the following measures and the tree preservation measures in the IHMP, and will adhere to CEDHSP Policy 5.16, during construction of each project phase to protect and minimize effects on preserved trees that are adjacent to construction activities.  • The potential for long-term loss of woody vegetation will be minimized by trimming vegetation rather than		During project construction- related activities	Project Applicant/ Contractor/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County shall verify incorporation of measure in permit documentation and		
removing entire trees or shrubs in areas where complete removal is not required. Any trees or shrubs that need to be trimmed will be cut at least 1 foot above ground level to leave the root systems intact and allow for more rapid regeneration. Cutting will be limited to the minimum area necessary within the construction zone. To protect nesting birds, no pruning or removal of woody vegetation will be performed between February 1 and August 31 without preconstruction bird surveys consistent with Mitigation Measure 9b.					plans. Verify that trimming, operations and run off comply with requirements	
<ul> <li>Operation or parking of vehicles, digging, trenching, slope cuts, soil compaction, grading, paving, or placement of fill will be prohibited within at least 1 foot outside the driplines of preserved trees.</li> </ul>						
<ul> <li>Runoff from the Pedregal planning area will be directed off site to prevent drainage into the open space area.</li> <li>Retaining walls will be installed at the edge of development areas where fill is placed to avoid ponding of water around adjacent retained oak trees.</li> </ul>						
If the ORMP is in effect at the time the development entitlement applications are submitted, in-lieu fees will be paid at the time of approval of the CEDHSP, and any deed restrictions or conservation easements will occur at the time applications for permits that would result in tree removal are submitted. The project applicant will implement the following measures and will adhere to CEDHSP Policy 5.16 during construction of each project phase to protect and minimize effects on preserved trees that are adjacent to construction activities.						
<ul><li>Mitigation for oak woodlands can be accomplished using one or more of the following options.</li><li>Offsite deed restriction or conservation easement acquisition and/or acquisition in fee title by a land conservation organization for purposes of offsite oak woodland conservation.</li></ul>						
<ol> <li>In-lieu fee payment.</li> <li>Replacement planting onsite within an area subject to deed restriction or conservation easement.</li> <li>Replacement planting off-site within an area subject to a conservation easement.</li> </ol>						

	Incorporation into Central El Dorado		Implementing			ltion of letion
Proposed Mitigation Measure(s)		Timing	Party	Monitoring	Date	Initial

#### 5. A combination of options 1 through 4, above.

In accordance with requirements of the PRC 21083.4, replacement planting shall not account for more than 50% of the oak woodland mitigation requirement. Therefore, up to half of the project's oak woodland impact mitigation requirement may consist of replacement planting on site. The replacement planting area must be suitable for tree planting, will not conflict with current or planned land uses, and will be large enough to accommodate replacement plantings at a density equal to the density of oak woodlands affected, up to a maximum density of 200 trees per acre. The remaining portion of the project's oak woodland impact mitigation requirement would be implemented in the form of an in-lieu fee payment to the County. Assuming the project will mitigate 50% of the affected 28.8 acres with replanting, under the in-lieu fee for the remaining mitigation requirement would equate to \$119,304 for 14.4 acres of woodland impact (50% of 28.8 acres) at \$8,285 per acre.

Mitigation for removal of individual native oak trees is based on an inch-for-inch replacement standard. Mitigation for Heritage Trees is based on a replacement standard of 3:1 (inches) ratio. This equates to the requirement of replanting 1,355 inches of oak trees. Replacement trees are required to be monitored and maintained for a period of 7 years, calculated from the day of planting.

Impact mitigation requirements for individual native oak trees and Heritage Tree include the following options.

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

The total replacement trees must have a combined diameter equal to that of the removed non-Heritage Trees, and a combined diameter equal to 3:1 of the removed Heritage Trees. Replacement tree species must be in the same proportion as those removed. Replacement plantings must be inspected, maintained and documented consistent with requirements for Mitigation Maintenance, Monitoring, and Reporting per the ORMP. Currently, the in-lieu fee program requires a payment of \$153 per inch of impact for individual oak trees and \$459 per inch for Heritage Trees. Using the per-inch mitigation fee option would result in a fee of \$126,531 for individual oaks and \$80,784 for Heritage Trees. The total fee would be \$207,315.

Because adoption of the ORMP was pending when the analysis was conducted, impacts were calculated using the 20-inch DBH standard. Because the DBH standard of Heritage Tree was changed to 36 inches, impacts and costs would be less. Regardless of which standard is adopted, all oak resource impacts associated with the CEDHSP project will be quantified and mitigated consistent with the requirements of the ORMP.

#### Mitigation Measure BIO-2: Compensate for permanent loss of riparian woodland

The project applicant will compensate for the loss of up to 2.40 acres of riparian woodland that cannot be avoided to ensure no net loss of habitat functions and values. Compensation will be at a minimum of 1:1 (i.e., 1 acre restored/created/enhanced or credits purchased for every 1 acre removed). Final compensation ratios will be based on site-specific information and determined through coordination with the appropriate state and federal agencies during the permitting process. Compensation may be a combination of mitigation bank credits and/or onsite habitat restoration and will be implemented as determined by the appropriate state and federal agencies during the permitting process. Permanent loss of riparian woodland will be compensated for by implementing one or a combination of the following options.

- The project applicant will purchase offsite mitigation bank credits for riparian woodland to allow for economy of scale and higher quality habitat due to large patch size and will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits.
- The project applicant will employ a qualified restoration biologist to prepare a riparian restoration and monitoring plan that involves restoring or enhancing onsite riparian woodland, potentially along the perennial creek adjacent to the proposed bike trail. The project applicant and the County will ensure implementation of the riparian restoration and monitoring plan. Similar to the oak woodland mitigation plan in the CEDHSP, the restoration plan will include a species list and number of each species, planting locations, and maintenance requirements. Plantings will consist of cuttings taken from local plants, or plants grown from local seed. Planted

Inclusion in Purchase prior to Appendix D project construction affecting riparian woodland; restoration after project construction is complete

Project
Applicant/
Qualified
Restoration
Biologist

**Reviewing Party** 

County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife, US Army Corp of Engineers

#### **Monitoring Action**

County shall verify incorporation of measure in permit documentation and plans and shall review and approve proof of purchase or Riparian Restoration and Monitoring Plan and Monitoring report, as appropriate

17 ·C· ··

	Incorporation into Central El Dorado		Implementing Party	Monitoring		ation of letion	
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing			Date	Initial	
species will be based on those removed from the project area and will include Fremont's cottonwood, red willow, sandbar willow, live oak, and/or valley oak. Native understory species, such as sedge species, mugwort, California wild rose, California wild grape, or other suitable species, will be planted. Plantings will be monitored annually for 10 years or as required in the project permits. For each monitoring period, the riparian restoration and monitoring plan will include a minimum percentage of planting survival to be considered successful. This percentage will be established in conjunction with the regulatory agencies, but will be in the range of 75–90%. If the survival criterion is not met in any monitoring year or at the end of the monitoring period, planting will be repeated after mortality causes have been identified and remedial measures have been implemented, and the monitoring period will be extended. The project applicant will implement the restoration plan, maintain plantings for 5 years (including weed removal, irrigation, and herbivory protection) during which annual success criteria monitoring will occur. As feasible, existing native vegetation from the affected sites should be harvested and maintained for replanting after construction.							
Mitigation Measure BIO-3a: Avoid and minimize disturbance of waters of the United States, including wetlands  To the extent feasible, the project applicant will avoid and minimize impacts on waters of the United States, including wetlands, by implementing the following measures. These measures will be incorporated into contract specifications and implemented by the construction contractor.	Inclusion in Appendix D	Prior to, during, and following project construction- related activities	Project Applicant/ Contractor/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife, US Army Corp of Engineers Monitoring Action			
• The project will be designed, to the extent feasible, to avoid direct and indirect impacts on waters of the United States, including wetlands.				County shall verify incorporation of measure in permit documentation and plans			
<ul> <li>A SWPPP will be prepared and implemented during construction to identify appropriate BMPs for reducing construction impacts on waters of the United States.</li> </ul>				and shall review and approve contract specifications provided by applicant prior to project construction  County shall verify periodically during and after project activities that avoidance and minimization measures are properly implemented			
<ul> <li>Within waters of the United States, including wetlands, that will be preserved as part of the proposed project, construction activities will be avoided in saturated or ponded natural wetlands and drainages during the wet season (spring and winter) to the maximum extent feasible. Where such activities are unavoidable, protective practices such as use of padding or vehicles with balloon tires will be employed.</li> </ul>							
<ul> <li>Exposed drainage banks and levees above drainages will be stabilized immediately following completion of construction activities. Other waters of the United States will be restored in a manner that encourages vegetation to reestablish to its pre-project condition and reduces the effects of erosion on the drainage system.</li> </ul>							
• Any trees, shrubs, debris, or soils that are inadvertently deposited below the ordinary high water mark (OHWM) of streams will be removed in a manner that minimizes disturbance of the drainage bed and bank.							
• To the extent feasible, in-stream construction within the OHWM of natural drainages will be restricted to the low-flow period (generally April through October).							
• All activities will be completed promptly to minimize their duration and resultant impacts.							
Mitigation Measure BIO-3b: Compensate for loss of jurisdictional wetlands	Inclusion in	Prior to and	Project	Reviewing Party			
The project applicant will compensate for the loss of up to 0.072 acre of seasonal wetland, 0.130 acre of seasonal swale, and 0.126 acre of seep habitat to ensure no net loss of habitat functions and values. The compensation will be provided at a minimum ratio of 1:1, or as permitted by the USACE (1 acre restored or created for every 1 acre filled), but final compensation ratios will be based on site-specific information and determined through coordination with state and federal agencies as part of the permitting process for the project. Compensation may be a combination of mitigation bank credits and restoration/creation of habitat and will be implemented before or immediately after completion of each phase of project construction. Permanent loss of wetland habitat will be compensated for by implementing one or a combination of the following options.	Appendix D	pendix D during project activities	Applicant/ Qualified Restoration Biologist	County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife, US Army Corp of Engineers, US Fish and Wildlife Service  Monitoring Action  County shall verify incorporation of measure in permit documentation and plans			
<ul> <li>The project applicant will purchase offsite mitigation bank credits for the affected wetland type (seasonal wetland, seasonal swale, and seep) at a locally approved mitigation bank to allow for economy of scale and higher quality habitat due to large patch size. The project applicant will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits.</li> </ul>	:				and shall review and approve compensation plan and/or proof of purchase, as applicable prior to issuance of a grading/building permit  County shall review and approve annual		
• The project applicant will employ a qualified restoration biologist to develop a wetland restoration plan that involves creating or enhancing the affected wetland type (seasonal wetland, seasonal swale, and seep) on the project site. The project applicant and the County will coordinate with the USACE and Regional Water Board for				County shall review and approve annual monitoring reports provided by Applicant			

	Incorporation into Central El Dorado		Implementing		Verifica Comp								
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Party	Monitoring	Date	Initia							
plan approval and will ensure implementation of the wetland restoration plan. Potential restoration sites will be evaluated to determine whether this is a feasible option. If it is determined that onsite restoration is feasible, a restoration plan will be developed that describes where and when restoration will occur and who will be responsible for developing, implementing, and monitoring the restoration plan. The wetland restoration plan will also include a species list and number of each species, planting locations, and maintenance requirements. Plantings will be similar to those removed from the project area and will consist of inoculum taken from the affected wetlands, or plants grown from local material obtained within the project watershed. The vegetative cover of wetland plantings will be monitored annually for 3 years or as required in the project permits, and compared to nearby undisturbed reference wetlands. If vegetative cover of wetland plants is equivalent to reference sites at the end of the monitoring period, the revegetation will be considered successful. If the survival criterion is not met in any monitoring year or at the end of the monitoring period, planting and monitoring will be repeated after mortality causes have been identified and remedial measures have been implemented, and the monitoring period will be extended to account for the required number of monitoring years for all plantings. Mitigation sites will be protected in perpetuity in a conservation easement.													
Mitigation Measure BIO-4: Compensate for loss of other waters of the United States	Appendix D	Prior to and	Project Applicant	Reviewing Party									
The project applicant will compensate for the loss of up to 0.039 acre of perennial creek, 0.236 acre of intermittent drainage, 0.077 acre of drainage ditch/roadside ditch, and 2.261 acres of pond to ensure no net loss of habitat functions and values. The compensation will be provided at a minimum ratio of 1:1 (1 acre restored or created for every 1 acre permanently affected), but final compensation ratios will be based on site-specific information and determined through coordination with state and federal agencies as part of the permitting process for the project. Compensation may be a combination of mitigation bank credits and restoration/creation of habitat and will be implemented before or immediately after completion of each phase of project construction. In most, if not all, cases, other waters of the United States will be compensated out-of-kind by restoring riparian habitat adjacent to open water habitat. Restoration of riparian habitat will improve open water habitat quality by increasing the amount of cover adjacent to the aquatic habitat for birds and terrestrial species, and the amount of shaded riverine area in the aquatic habitat for fish and other aquatic species.			Appendix D	Appendix D	Appendix D	Appendix D			during project activities		County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife, US Army Corp of Engineers  Monitoring Action  County shall verify incorporation of measure in permit documentation and plans and shall verify compensation plan has been approved by the Corps and all other responsible agencies prior to issuance of a grading/building permit		
Permanent loss of other waters of the United States will be compensated for by implementing one or a combination of the following options.							County shall review and approve annual monitoring reports provided by Applicant						
<ul> <li>Purchase credits for created riparian stream channel at a locally approved mitigation bank. Out-of-kind compensation could also be used based on the vegetation type in the creek, i.e., seasonal wetland. Written evidence will be provided to the resource agencies that compensation has been established through the purchase of mitigation credits.</li> </ul>													
• Compensate out-of-kind for loss of drainages, ditches, and ponds by implementing other on-site wetland mitigation or compensatory mitigation for riparian woodland impacts described in Mitigation Measure BIO-2. The acreage required for compensation for loss of other waters of the United States will be added to the acreage for loss of riparian habitat.													
Mitigation Measure BIO-5a: Conduct floristic surveys for special-status plants during appropriate identification periods  If required, the project applicant will employ a qualified botanist to conduct floristic surveys of the 85-acre	Inclusion in Appendix D	After final design and prior to construction	Project Applicant/ Qualified	Reviewing Party  County of El Dorado-Planning and Building Department, California Department of Fish									
addendum area and resurvey parts of the project area that will not be constructed for several years after project approval. These surveys will be conducted after final design of the area is complete and prior to all construction activities in order to document the presence of any special-status plants before project implementation. The botanist will consult with the appropriate resource agency regarding special-status species survey methods during drought periods, if needed, but will primarily follow the CDFW botanical survey guidelines (California Department of Fish and Game 2009). All plant species observed will be identified to the level necessary to determine whether they qualify as special-status plants or are plant species with unusual or significant range extensions. The guidelines also require that field surveys be conducted when special-status plants that could occur in the area are evident and identifiable, generally during the reported blooming period. The guidelines additionally recommend visiting reference populations of special-status species that may occur in the study area. Therefore, as feasible, the surveys will include site visits of reference populations of special-status plant species with potential to occur in the project area in order to ensure that they are identifiable during the survey period. This is particularly important			Biologist	and Wildlife, US Fish and Wildlife Service  Monitoring Action  County shall verify incorporation of measure in permit documentation and plans and shall review and approve technical studies prior to issuance of grading or building permits									

	Incorporation into Central El Dorado		Implementing		Verifica Comp	ation of letion
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Party	Monitoring	Date	Initial
for any annual plant species that has a long-lived seedbank and is known to not germinate when conditions are not conducive, e.g., during a drought. To account for different special status–plant identification periods, one or more series of field surveys may be required in spring and summer.  If any special-status plants are identified during the surveys, the botanist will photograph and map locations of the plants, document the location and extent of the special-status plant population. Requirements for compensatory mitigation will be based on the results of these surveys and are discussed in Mitigation Measure BIO-5b.						
Mitigation Measure BIO-5b: Avoid or compensate for substantial effects on special- status plants	Inclusion in	Prior to and	Project	Reviewing Party		
If one or more special-status plants are identified in the project area during preconstruction surveys conducted as part of Mitigation Measure BIO-5a, the project applicant will redesign or modify proposed project components of the project to avoid direct and indirect effects on special-status plants wherever feasible. If special-status plants can be avoided by redesigning projects, implementation of Mitigation Measures BIO-1a (barriers), BIO-1b (awareness training), and BIO-1c (biological monitor) would avoid significant impacts on special-status plants.	Appendix D	during project construction- related activities if required pursuant to MM BIO-5a	Applicant/ Qualified Biologist	County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife, US Fish and Wildlife Service  Monitoring Action  County shall verify incorporation of		
If complete avoidance of special-status plants is not feasible, then, if required by the concerned public resource agency (as determined by the legal status of the plant in question), the project applicant will prepare a mitigation plan in consultation with the resource agency. The project applicant will compensate for the effects of the project on special-status plants by transplanting or seeding replacements within appropriate habitats remaining in onsite Open Space areas. The conservation area will be preserved and managed by the County or by a conservation organization for the life of the project. Detailed information will be provided to the agencies on the location and quality of the preservation area, the feasibility of protecting and managing the area in perpetuity, and the responsible parties. Other pertinent information also will be provided, to be determined through future coordination with the resource agencies.					measure in permit documentation and plans and shall review and approve avoidance plan or mitigation plan, as appropriate annual monitoring reports prior to issuance of grading permits	
Mitigation Measure BIO-7a: Assume presence of California red-legged frog or conduct protocol-level surveys and implement avoidance and minimization measures, as applicable  Based on the presence of suitable California red-legged frog aquatic and upland habitat within CEDHSP project area, and because protocol-level surveys have not been previously conducted onsite, the project applicant will either assume presence of California red-legged frog in the project area or employ a qualified biologist to conduct protocol-level surveys for the species, unless USFWS determines a finding of no effect. If conducting surveys is the preferred approach, the surveys will follow protocols identified in the USFWS 2005 Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog, which includes a survey area encompassing the entire project area and all suitable habitat within up to 1 mile from the project area (limits of survey area determined during coordination with USFWS). If protocol surveys determine absence of California red-legged frog adults, tadpoles, or egg masses from the project area and from aquatic habitats up to 1 mile from project area, and if USFWS confirms the results, then the proposed project would have no impacts on California red-legged frog and no further mitigation is required. If presence of California red legged frog is inferred by the project applicant or confirmed during surveys, the project applicant will implement Mitigation Measure BIO-6b to avoid and minimize impacts on California red-legged frog is either inferred or confirmed, ESA consultation with USFWS will be required to address effects on this species before any ground-disturbing activities can occur.	Inclusion in Appendix D	Prior to project construction- related activities	Project Applicant/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department, US Fish and Wildlife Service Monitoring Action County shall verify incorporation of measure in permit documentation and plans and shall review and approve study prior to issuance of grading permits		
<ul> <li>Mitigation Measure BIO-7b: Avoid and minimize impacts on California red-legged frog</li> <li>If California red-legged frogs are found during protocol-level surveys or are assumed to be present onsite, the project applicant will implement the following measures prior to and during ground-disturbing activities associated with construction to avoid and minimize potential effects on California red-legged frog.</li> <li>Before construction begins, a qualified biologist will locate appropriate relocation areas and prepare a relocation plan for California red-legged frogs that may need to be moved prior to or during construction. The project applicant will submit this plan to USFWS for approval a minimum of 30 days prior to the start of construction.</li> <li>Prior to disturbance or filling of suitable aquatic breeding habitat for California red-legged frog, visual and dipnet surveys (non-protocol) will be conducted, under the discretion of USFWS, to determine if California red-legged frog adults, tadpoles, or egg masses are present. If any of these life stages are identified, they will be relocated to a USFWS-approved offsite location according to the relocation plan (described above). Relocation</li> </ul>	Inclusion in Appendix D	Prior to and during project construction- related activities	Project Applicant/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department, US Fish and Wildlife Service Monitoring Action County shall verify incorporation of measure in permit documentation and plans and shall review and ensure compensation plan has been approved by the public resource agency and all other responsible agencies prior to issuance of a grading/building permit		

Incorporation into

Central El Dorado
Proposed Mitigation Measure(s)

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activities would constitute take under the ESA and must be authorized by USFWS under a Biological Opinion.

- Immediately prior to construction, a USFWS-approved biologist will conduct a preconstruction survey for California red-legged frog within areas proposed for ground disturbance. The biologist will carefully search all obvious potential hiding spots for California red-legged frogs, such as large downed woody debris, the perimeter of pond or wetland habitat, and the riparian corridor associated with streams and drainages. Preliminary results of the preconstruction survey will be provided to the County and USFWS within 48 hours of completion.
- A USFWS-approved biologist will train all project staff regarding habitat sensitivity, identification of specialstatus species, and required practices before the start of ground disturbing activities. The training will include the general measures that are being implemented to conserve this species as they relate to the project, the penalties for noncompliance, and the boundaries of the approved work area. Upon completion of training, employees will sign a form stating that they attended the training and understand all the conservation and protection measures.
- A USFWS-approved biologist will monitor initial ground-disturbing activities (i.e., grading, vegetation removal).
   The USFWS-approved biologist will complete a daily log summarizing activities and environmental compliance.
   Resumes of all biologists that will survey or monitor for California red-legged frog will be submitted to USFWS for approval prior to the start of construction.
- If a California red-legged frog is encountered during preconstruction surveys or during construction, activities will cease and USFWS will be contacted immediately for direction on how to proceed. If the individual(s) cannot or do not move offsite on their own, USFWS or a USFWS-permitted biologist will trap and move the individuals in accordance with the relocation plan (described above).
- The USFWS-approved biologist will have the authority to halt construction activities if any of the project requirements or agency conditions are not being fulfilled. If the biologist has requested a stop work due to take of California red-legged frog, USFWS will be notified within 1 working day via email or telephone.
- Construction disturbances and other types of project-related disturbance to California red-legged frog will be minimized to the maximum extent practicable and confined to the designated project site.
- Potential habitat outside the construction area but within the project area (i.e., open space) will be delineated with high visibility flagging or fencing to prevent encroachment of construction personnel and equipment into these areas during project work activities. At no time will equipment or personnel be allowed to adversely affect areas outside the project site without authorization from USFWS.
- Because dusk and dawn are often the times when California red-legged frogs are most actively foraging and dispersing, all construction activities adjacent to potentially occupied habitat should cease 0.5 hour before sunset and should not begin prior to 0.5 hour before sunrise.
- To prevent inadvertent entrapment of California red-legged frogs during construction, all excavated, steep-walled holes or trenches more than 6 inches deep will be provided with one or more escape ramps constructed of earth fill or wooden planks and will be inspected by a qualified biologist prior to being filled.
- Work crews or an onsite biological monitor will inspect open trenches, pits, and under construction equipment and material left onsite in the morning and evening to look for amphibians that may have become trapped or are seeking refuge.
- No canine or feline pets or firearms (except for federal, state, or local law enforcement officers and security
  personnel) will be permitted at the project site to avoid harassment or killing or injuring of California red-legged
  frog.
- No monofilament plastic mesh or line will be used for erosion control.
- All vehicle parking will be restricted to previously determined areas or existing roads within the designated work area.
- All workers will ensure their food scraps, paper wrappers, food containers, cans, bottles, and other trash from the project area are deposited in covered or closed trash containers to avoid attracting predators. The trash containers will be secured and covered in the project area at the end of each working day.

	Incorporation into Central El Dorado	Timing	Implementing Party	Monitoring		cation of pletion
Proposed Mitigation Measure(s)	Hills Specific Plan				Date	Initial
Mitigation Measure BIO-8: Conduct preconstruction surveys for western pond turtle and exclude turtles from the work area  The project applicant will implement the following measures to avoid and minimize impacts on western pond turtles.  • The project applicant will retain a qualified wildlife biologist to conduct a preconstruction survey 2 weeks before and within 48 hours of disturbance in aquatic and riparian habitats. The survey objectives are to determine presence or absence of pond turtles in the construction work area and if necessary to allow time for successful trapping and relocation.  • If feasible, the surveys will be timed to coincide with the time of day and year when turtles are most likely to be active and visible (during the cooler part of the day 8:00 a.m12:00 p.m. during spring, summer, and late summer). Prior to conducting presence/absence surveys, the biologist will locate the microhabitats for turtle basking (logs, rocks, brush thickets) and determine a location to quietly observe turtles.  • Each survey will include a 30-minute wait time after arriving onsite to allow startled turtles to return to open basking areas. The survey will consist of a minimum 15-minute observation time per area where turtles could be observed.  • If turtles are observed during a survey and they cannot be avoided (i.e., pond will be filled), they will be either hand-captured or trapped and relocated outside the construction area to a CDFW-approved site. The relocation site will support suitable aquatic habitat and the biologist(s) performing the relocation will have a valid memorandum of understanding or scientific collecting permit from CDFW. Possible relocation sites include perennial ponds within the open space portion of the project area or Carson Creek downstream of the project area where pond turtles have been previously documented.  • Following relocation of pond turtles from the project area, the occupied habitat will be dewatered within 48 hours of relocation to minimize the potential for pond turtles	Inclusion in Appendix D	Prior to and during construction	Project Applicant/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife Monitoring Action County shall verify incorporation of measure in permit documentation and plans and shall review and approve survey report provided by applicant prior to construction. The County shall ensure compliance with treatment of turtles through coordination with CDFW.		
Mitigation Measure BIO-9: Include measures in the open space management plan identifying homeowner responsibilities to help reduce potential for domestic animal predation on wildlife  The County shall ensure the OSMP includes requirements to help reduce the potential for domestic pet predation on wildlife species. Specific actions should be developed by a qualified wildlife biologist. Such requirements could include, but would not be limited to, keeping pets on leash in open space and woodland areas, ensuring human and pet food and trash sources are not accessible to wildlife, and others as recommended by the wildlife biologist.	Inclusion in Specific Plan Policy 5.31 and Section 9 (Implementation and Administration)	Prior to First Final Map	Project Applicant	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County to verify incorporation of measure in draft OSMP		
Mitigation Measure BIO-10a: Conduct vegetation removal activities outside the breeding season for birds and raptors  To the maximum extent feasible, the project applicant will conduct all necessary vegetation (trees, shrubs, grasses) removal/trimming during the nonbreeding season for most birds and raptors (generally September 1–January 31). If vegetation removal cannot be removed in accordance with this timeframe, there is a high potential that birds and/or raptors will nest in the project area and require no-disturbance buffers. If vegetation removal or trimming will be conducted during the nesting season (February 1–August 31), preconstruction nesting bird surveys will be required and additional protective measures will be implemented (see Mitigation Measure BIO-10b).	Inclusion in Appendix D	Prior to and during construction	Project Applicant/ Contractor	Reviewing Party County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife Monitoring Action County shall verify incorporation of measure in permit documentation and plans and shall verify periodically during and after project activities that avoidance and minimization measures are properly implemented		
Mitigation Measure BIO-10b: Conduct nesting surveys for special-status and non-special-status birds and implement protective measures during construction  The project applicant will retain a qualified wildlife biologist(s) to conduct preconstruction nesting bird surveys prior to the start of construction occurring between February 1 and August 31. The biologist(s) conducting the surveys will have knowledge of the relevant species to be surveyed. A minimum of three separate surveys will be conducted between February 1 and June 1 to account for different species that have different survey times. In	Inclusion in Appendix D	Prior to and during construction	Project Applicant/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife Monitoring Action County shall verify incorporation of		

	Incorporation into Central El Dorado		Implementing Party	Monitoring		cation of oletion
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing			Date	Initial
addition, one survey will be conducted no more than 48 hours prior to initiating ground-disturbing activities. Surveys will include a search of all suitable nesting habitat (e.g., trees, shrubs, annual grassland, and emergent wetland vegetation) in the construction area. In addition, a 500-foot area around the project area will be surveyed for nesting raptors, and a 50-foot buffer area will be surveyed for other nesting birds. If no active nests are detected during these surveys, no additional measures are required. Surveys should be repeated if there is a lapse in construction of more than 10 days or if construction begins in a new area where suitable nesting habitat is present and has not been surveyed within the previous 10 days.  If active nests are found in the survey area, a minimum no-disturbance buffer for songbirds and raptors will be established around the nest sites to avoid disturbance or destruction of the active nest until the end of the breeding season (approximately September 1) or until a qualified wildlife biologist determines that the young have fledged and moved out of the project area (date of fledging varies by species). The extent of the buffers will be determined by the biologists in coordination with USFWS and/or CDFW and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species. If construction activities must encroach upon established buffers, additional protection measures (developed in coordination with USFWS and/or CDFW) may be necessary to avoid take and could include periodic nest monitoring, installation of visual screens, and restrictions on construction timing to allow birds to resume normal activities during certain portions of the day.				measure in permit documentation and plans and shall Ensure studies are contracted prior to issuance of grading permits.  Review and approve technical study provided by Applicant		
Mitigation Measure BIO-11: Identify suitable roosting sites for bats and implement avoidance and minimization measures  Prior to tree removal or trimming activities associated with construction, the project applicant will retain a qualified biologist to examine trees to be removed or trimmed for suitable bat roosting sites. High-quality habitat features (large tree cavities, basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch, etc.) will be identified, and the area around these features will be searched for bats and bat sign (guano, culled insect parts, staining, etc.). Riparian and oak woodlands should be considered potential habitat for solitary foliage-roosting bat species. Specific survey methods for the site will be developed in coordination with CDFW.  If potential bat roosting sites are identified within or adjacent to construction areas, including tree removal/trimming, the project applicant will coordinate with CDFW to identify protective measures to avoid and minimize impacts on roosting bats based on the type of roost and timing of activities. These measures would include but are not limited to the following.  If feasible, all tree removal will be conducted between September 15 and October 30, which corresponds to a time period when bats have not yet entered torpor or would be caring for nonvolant young. Potential roost trees will be removed in pieces rather than felled all at once.  Active maternity roosts, whether solitary or colonial, will remain undisturbed until September 15 or only after a qualified biologist has determined the roost is no longer active.  If a non-maternity roost tree is located within the construction area and tree removal or trimming must occur between October 30 and September 15, a qualified biologist (familiar with bats) will be present during tree trimming/removal activities. To minimize impacts on the bats, tree trimming/removal should occur in the late afternoon or evening when it is closer to the time that bats would normally arouse. Tree r	Inclusion in Appendix D	Prior to and during construction	Project Applicant/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife Monitoring Action County shall verify incorporation of measure in permit documentation and plans and shall require studies are contracted prior to issuance of grading permits. The County shall review and approve technical study provided by Applicant		
Mitigation Measure BIO-14: Avoid the introduction and minimize spread of noxious plants  Noxious weed species are those listed on the California Noxious Weed List by the California Department of Agriculture Section 4500 of the CCR.  To avoid the introduction of new invasive noxious plants and minimize the spread of invasive plants previously documented in the study area, the project applicant will implement the following measures during construction.  • Educate construction supervisors and managers on weed identification and the importance of controlling and	Inclusion in Appendix D	During construction	Project Applicant/ Contractor	Reviewing Party County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife Monitoring Action County shall verify incorporation of		

	Incorporation into Central El Dorado	Timing	Implementing Party	Monitoring	Verification of Completion	
Proposed Mitigation Measure(s)	Hills Specific Plan				Date	Initia
<ul> <li>preventing the spread of noxious weed infestations.</li> <li>Small, isolated infestations will be treated with approved eradication methods at an appropriate time to prevent and/or destroy viable plant parts or seed.</li> <li>Mulch with certified weed-free mulch. Rice straw may be used to mulch upland areas.</li> <li>Use native, non-noxiousinvasive species or nonpersistent hybrids in erosion control plantings to stabilize site conditions and prevent invasive species from colonizing.</li> <li>Minimize surface disturbance to the greatest extent feasible.</li> <li>Equipment that is regularly kept on -site be initially cleaned of soil and plant debris.</li> <li>Perform monitoring of noxious weed infestations for one year post-construction in order to eradicate any new infestations (e.g., from rotating temporary equipment).</li> </ul>				measure in permit documentation and plans and shall verify periodically during and after project activities that avoidance and minimization measures are properly implemented		
Mitigation Measure BIO-15: Compensate for loss of oak woodland in offsite infrastructure improvement areas  Per the requirements of County General Plan Policy 7.4.4.4 (Option A) and its Interim Interpretive Guideline, replacement of removed oak tree canopy will be mitigated at a density of 200 trees per acre lost. Based on the maximum potential oak impact area of up to 1.275 acres, up to 258 oak trees will be planted as mitigation within the designated oak planting areas for the CEDHSP project. Prior to construction, the actual oak canopy impacts will be quantified, based on the design details and proposed limits of construction, and a final number of oak trees for mitigation will be determined. The planting, maintenance, and monitoring details of this mitigation will follow those set forth in the IHMP for the oak woodland impacts within the project area.  Should the ORMP be in effect at the time development entitlement applications are submitted, the applicant would be required to implement at least one of the following options for oak woodlands: offsite deed restriction or conservation easement acquisition and/or acquisition in fee title by a land conservation organization for purposes of offsite oak woodland conservation; in-lieu fee payment; replacement planting onsite within an area subject to deed restriction or conservation easement.	Inclusion in Appendix D	During project construction-related activities	Project Applicant/ Contractor/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County shall verify incorporation of measure in permit documentation and plans for offsite infrastructure improvements		
Mitigation Measure BIO-17a: Conduct floristic surveys in the offsite infrastructure improvement areas for special-status plants during appropriate identification periods  The project applicant will employ a qualified botanist to survey the offsite infrastructure improvement areas, after final design of the areas is complete and prior to all construction activities, to document the presence of special-status plants before project implementation. The botanists will consult with the appropriate resource agency regarding special-status species survey methods during drought periods, if needed, but will primarily follow the CDFW botanical survey guidelines (California Department of Fish and Game 2009). All plant species observed will be identified to the level necessary to determine whether they qualify as special-status plants or are plant species with unusual or significant range extensions. The guidelines also require that field surveys be conducted when special-status plants that could occur in the area are evident and identifiable, generally during the reported blooming period. The guidelines additionally recommend visiting reference populations of special-status species that may occur in the study area. Therefore, as feasible, the surveys will include site visits of reference populations of special-status plant species with potential to occur in the project area in order to ensure that they are identifiable during the survey period. This is particularly important for any annual plant species that has a long-lived seedbank and is known to not germinate when conditions are not conducive (e.g., during a drought). To account for different special status—plant identification periods, one or more series of field surveys may be required in spring and summer.  If any special-status plants are identified during the surveys, the botanist will photograph and map locations of the plants, document the location and extent of the special-status plant population. Requirements for compensatory mitigation will be based on the re	Inclusion in Appendix D	After final design and prior to construction	Project Applicant/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife Monitoring Action County shall verify incorporation of measure in permit documentation and plans and review and approve technical studies prior to issuance of grading or building permits for offsite infrastructure improvements		

	Incorporation into Central El Dorado		Implementing Party	Monitoring		cation of pletion
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing			Date	Initial
Mitigation Measure BIO-17b: Avoid or compensate for substantial effects on special- status plants  If one or more special-status plants are identified in the offsite infrastructure improvement areas during preconstruction surveys conducted as part of Mitigation Measure BIO-15a, the project applicant will redesign or modify proposed project components of the project to avoid direct and indirect effects on special-status plants wherever feasible. If special-status plants can be avoided by redesigning projects, implementation of Mitigation Measures BIO-1a (barriers), BIO-1b (awareness training), and BIO-1c (biological monitor) would avoid significant impacts on special-status plants.  If complete avoidance of special-status plants is not feasible, then, if required by the concerned public resource agency (as determined by the legal status of the plant in question), the project applicant will prepare a mitigation plan in consultation with the resource agency. The project applicant will compensate for the effects of the project on special-status plants by transplanting or seeding replacements within appropriate habitats remaining in onsite Open Space areas. The conservation area will be preserved and managed by the County or by a conservation organization for the life of the project. Detailed information will be provided to the agencies on the location and quality of the preservation area, the feasibility of protecting and managing the area in perpetuity, and the responsible parties. Other pertinent information also will be provided, to be determined through future coordination with the resource agencies.	Inclusion in Appendix D	Prior to and during project construction- related activities if required pursuant to MM BIO-17a	Project Applicant/ Qualified Biologist	Reviewing Party  County of El Dorado-Planning and Building Department, California Department of Fish and Wildlife, US Fish and Wildlife Service  Monitoring Action  County shall verify incorporation of measure in permit documentation and plans and review and approve avoidance plan or mitigation plan, as appropriate annual monitoring reports prior to issuance of grading permits for offsite infrastructure improvements		
Mitigation Measure BIO-19a: Conduct a habitat assessment in the offsite infrastructure improvement areas for federally listed branchiopods  The project applicant will employ a qualified biologist to conduct a habitat assessment for federally listed branchiopods within the offsite infrastructure improvement areas after the limits of proposed disturbance have been identified. All seasonal pools, wetlands, and swales will be mapped within 250 feet of proposed construction areas identified for infrastructure improvements, including staging areas and access routes. Suitable habitat will be mapped and described sufficient to determine if these habitats could support vernal pool fairy shrimp and vernal pool tadpole shrimp.  If suitable habitat for vernal pool fairy shrimp and/or vernal pool tadpole shrimp is identified within 250 feet of proposed infrastructure improvements, the project applicant will implement Mitigation Measure Bio-19b.	Inclusion in Appendix D	Prior to and during project construction- related activities	Project Applicant/ Qualified Biologist	Reviewing Party County of El Dorado-Planning and Building Department, US Fish and Wildlife Service Monitoring Action County shall verify incorporation of measure in permit documentation and plans and require studies are contracted prior to issuance of grading permits for offsite infrastructure improvements. Review and approve technical study provided by Applicant		
Mitigation Measure BIO-19b: Avoid or compensate for effects on vernal pool fairy shrimp and vernal pool tadpole shrimp and their habitat  If suitable habitat for vernal pool fairy shrimp and/or vernal pool tadpole shrimp is identified within proposed construction areas for infrastructure improvements or within 250 feet of proposed construction, the project applicant will redesign or modify proposed project components to avoid this habitat to the maximum extent feasible. If avoidance of direct and indirect impacts on this habitat is not feasible, the project applicant will either retain a USFWS-permitted biologist to conduct protocol-level branchiopod surveys to determine presence/absence of vernal pool fairy shrimp and vernal pool tadpole shrimp or they will assume presence of these species.  If the presence of vernal pool fairy shrimp and/or vernal pool tadpole shrimp is confirmed or inferred for the proposed project, the project applicant will compensate for direct and indirect effects on occupied or presumed occupied habitat for federally listed branchiopods by purchasing the appropriate mitigation credits from a USFWS-approved conservation area/mitigation bank. Minimum mitigation ratios will be 2:1 preservation and 1:1 creation for direct effects and 1:1 preservation for indirect effects (within 250-foot of ground disturbance), or as determined by USFWS during ESA Section 7 consultation.  If presence of vernal pool fairy shrimp or vernal pool tadpole shrimp is either inferred or confirmed, ESA consultation with USFWS will be required to address impacts on this species before any ground-disturbing activities can occur.	Inclusion in Appendix D	Prior to and during project construction-related activities if required pursuant to MM BIO-19a	Project Applicant/ Qualified Biologist	Reviewing Party  County of El Dorado-Planning and Building Department, US Fish and Wildlife Service  Monitoring Action  County shall verify incorporation of measure in permit documentation and plans and review and approve avoidance plan or mitigation plan, as appropriate annual monitoring reports prior to issuance of grading permits for offsite infrastructure improvements		

	Incorporation into Central El Dorado		Implementing			ation of oletion
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Party	Monitoring	Date	Initial
Cultural Resources						
<ul> <li>Mitigation Measure CUL-1a: Develop and implement a site-specific Historic Properties Treatment Plan for the Pedregal Archaeological District</li> <li>In order to mitigate for potential impacts on the PAD, the project applicant will retain a qualified archaeologist to develop a site-specific HPTP that meets the requirements of Section 106 of the NHPA. The HPTP will stipulate specifications for treatment of adversely affected resources, and at a minimum will include the following.</li> <li>An oral history regarding the resource will be conducted.</li> <li>Specific protocols will be developed for the management of unanticipated discoveries of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony.</li> <li>Protocols for fencing, signage, and other avoidance measures, both during construction and after project completion.</li> <li>Protocols for the reburial of any artifacts gathered during excavation onsite in accordance with the requests of the Native American community.</li> <li>This HPTP will be reviewed by the County to ensure the standards above are included and approved by SHPO prior to issuance of the first grading permit for development in the PAD. The County shall ensure all construction and landscape plans include a requirement to comply with the HPTP. Implementation will vary by task.</li> </ul>	Inclusion in Policy 5.31	Prior to construction	Project Applicant/ Qualified Archaeologist	Reviewing Party County of El Dorado-Planning and Building Department /State Historic Preservation Office (SHPO)/ US Army Corp of Engineer Monitoring Action County shall verify incorporation of measure in permit documentation and plans and review and approved treatment plan prior to issuance of grading permit		
Mitigation Measure CUL-1b: Perform archaeological construction monitoring during ground-disturbing activities within 100 feet of known cultural resource sites  The project applicant will retain a qualified archaeologist to conduct construction monitoring during ground-disturbing construction activities within 100 feet of a significant cultural resource sites intended for preservation within the plan area or a known cultural resource site within the offsite improvement areas. The archaeologist will observe the ground-disturbing activities to ensure that no cultural material is present or disturbed during those activities. If potential cultural material is observed, all work within 100 feet of the find will cease and the archaeologist, and if the site is prehistoric or ethnographic in origin, a Native American representative, will assess the significance of the find. If the find is determined to be associated with the PAD, it will be treated in accordance with the HPTP. If the find is not associated with the PAD, Mitigation Measure CUL-1d will be implemented to address potential effects.  Upon completion of the monitoring in sensitive areas, the archaeologist shall prepare a report that describes the results of the monitoring and/or testing, including any measures that may have been implemented for mitigation of impacts on significant archaeological deposits identified during monitoring. The report shall be submitted to the El Dorado County Planning Division and the NCIC		During construction	Project Applicant/ Qualified Archaeologist	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County shall verify incorporation of measure in permit documentation and plans and review and approve mitigation monitoring report, prior to Final Map recordation		
Mitigation Measure CUL-1c: Protect P-09-1667 from future impacts  The project applicant will place a conservation easement over P-09-1667 to preserve the site from further development. Portions of this area are already in a biological conservation area. The operations and management plan for the conservation easement will allow for capping, fencing, and other avoidance measures, should they be necessary. Proof of recordation of the easement shall be submitted to the County.	Inclusion in Policy 5.22 and 5.31	Prior to construction	Project Applicant	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County shall verify incorporation of measure in permit documentation and plans. The County shall require evidence from the developer that the easement has been recorded, prior to Final Map recordation.		
Mitigation Measure CUL-1d: Stop work in the event of discovery of previously unknown cultural resources. If at any point during construction cultural resources, artifacts, midden, or any concentration of chipped or ground stone are encountered, construction will stop within 100 feet of the find until the find is assessed by a qualified archaeologist. The archaeologist will determine if the resource is associated with the PAD, in which case the HPTP described in Mitigation Measure CUL-1a will apply. If the resource is not associated with the PAD, it shall be evaluated for listing in the CRHR or NRHP or to determine whether it qualifies as a "unique archaeological"	Inclusion in Appendix D	During project construction	Project Applicant/ Contractor	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County shall verify incorporation of measure in permit documentation and plans		

	Incorporation into Central El Dorado		Implementing		Verification of Completion	
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Party	Monitoring	Date	Initial
resource" under CEQA. If the deposits are neither a historical nor unique archaeological resource, avoidance and mitigation is not necessary. If the find is determined to be significant and cannot be avoided by project design, mitigation measures will be developed in consultation with the SHPO, the County and other appropriate agencies. Mitigation can include, but is not necessarily limited to, excavation of the deposit in accordance with a data recovery plan (see CEQA Guidelines Section 15126.4[b][3][C]) and standard archaeological field and laboratory methods and procedures and curation standards.  Upon completion of project construction, the archaeologist shall prepare a report that documents discoveries and their disposition. The report shall include any measures that may have been implemented for mitigation of impacts on significant archaeological deposits identified during project construction. The report shall be submitted to the El Dorado County Planning Division and the NCIC.			•	and shall review and approve mitigation monitoring report		
Mitigation Measure CUL-3: Perform construction monitoring during ground-disturbing activities and stop work if human remains are encountered  The project applicant will retain a qualified archaeologist to conduct construction monitoring during ground-disturbing construction activities within 100 feet of known prehistoric archaeological sites. The archaeologist will observe the ground-disturbing activities to ensure that no human remains are present or disturbed during those activities. During any project excavation, regardless of the presence of an archaeological monitor, if human remains (or remains that are suspected to be human) are discovered all work shall cease in the vicinity of the find (a minimum of 100 feet) and the El Dorado County coroner will be notified immediately. If the coroner determines the remains to be Native American in origin, the coroner will be responsible for notifying the NAHC, which will appoint a MLD (PRC Section 5097.99). The archaeological consultant, project applicant, County, and MLD will make all reasonable efforts to develop an agreement for the dignified treatment of human remains and associated or unassociated funerary objects (CCR Title 14 Section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recording, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. The MLD will have 24 hours after notification by the NAHC to make their recommendation (PRC Section 5097.98). If the MLD does not agree to the reburial method, the project shall follow PRC Section 5097.98(b), which states, "the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance."	Inclusion in Appendix D	During project construction	Project Applicant/ Qualified Archaeologist	Reviewing Party County of El Dorado-Planning and Building Department, NAHC (if Native American artifacts are found).  Monitoring Action County shall verify incorporation of measure in permit documentation and plans and shall review measure with construction crew before ground-disturbing activities		
Mitigation Measure CUL-4: Perform cultural resources surveys of the offsite areas and mitigate eligible resources in accordance with State CEQA Guidelines Section 15126.4  When the exact locations and specific design of offsite improvements are identified (e.g., depth for underground utility lines and the Silva Valley Parkway connection alignment), the project applicant will retain a qualified cultural resources management provider to conduct studies to determine whether resources are located within the area that would be affected by the construction and operation of the improvements. These studies will include, as appropriate, a records search, archival research, contacting NAHC and interested parties, and pedestrian inventories. Recommendations made for avoidance and minimization will be considered by the County and implemented as required. These measures could include monitoring and presence/absence testing in sensitive areas, or training for construction personnel. Any resources that are located will be evaluated for eligibility for listing in the CRHR or NRHP. If resources found eligible cannot be avoided through project design, mitigation measures will be designed in consultation with the County, SHPO, and other appropriate agencies or parties. Mitigation can include, but is not necessarily limited to, excavation of the deposit in accordance with a data recovery plan (see CEQA Guidelines Section 15126.4[b][3][C]) and standard archaeological field and laboratory methods and procedures, and curation standards.  Upon completion of cultural resources studies, the archaeologist shall prepare a report that describes the methods and results of the studies. The report shall be submitted to the El Dorado County Planning Division and the NCIC.	Inclusion in Appendix D	Prior to construction of offsite improvements	Project Applicant/ Qualified Archaeologist	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County shall verify incorporation of measure in permit documentation and plans and review and approve technical study prior to issuance of grading permits for offsite infrastructure improvements		

Incorporation into Central El Dorado		Implementing			
Hills Specific Plan	Timing	Party	Monitoring	Date	Initia
Inclusion in Appendix D	Prior to project construction and during design phase	Project Applicant/ Qualified Engineer	Reviewing Party  County of El Dorado-Planning and Building Department (registered geotechnical engineer or third-party registered engineer retained to review the geotechnical report)		
			Monitoring Action Required Preliminary Geotechnical Report submitted to County at Tentative Map shall address the requirements of this measure Final Geotechnical report shall be reviewed and approved as part of construction and building permit plans		
Inclusion in Appendix D	Immediately prior to project construction	Project Applicant/ Qualified Paleontologist	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County shall verify incorporation of measure in permit documentation and plans. A record of the training and attendees shall be provided to the County		
Inclusion in Appendix D	During project construction	Project Applicant/ Qualified Paleontologist	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County shall verify incorporation of measure in permit documentation and plans and review technical report		
Revision of existing policies in Section 8, Sustainability	During project design and construction	Project Applicant	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action The County shall verify the revisions and incorporation of measure in permit documentation and plans		
	Inclusion in Appendix D  Inclusion in Appendix D  Inclusion in Appendix D  Inclusion in Appendix D  Inclusion in Appendix D	Central El Dorado Hills Specific Plan  Inclusion in Appendix D  During project construction  Revision of existing policies in Section 8, design and	Central El Dorado Hills Specific Plan  Timing  Inclusion in Appendix D  During project construction  During project Applicant/ Qualified Paleontologist  Revision of existing policies in Section 8,  Revision of existing policies in Section 8,	Inclusion in Appendix D	Impelenting

	Incorporation into Central El Dorado		Implementing		Verification of Completion		
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Party	Monitoring	Date	Initial	
Plan Area.  4. Electrical Vehicle Charging: CEDHSP Policy 8.4 will be revised as follows: Off-street parking in all Civic–Limited Commercial, Community Park, and High Density Residential designations shall provide some dedicated parking for plug-in electric vehicles (PEVs) and install minimum Level 2 PEV charging stations in each dedicated PEV parking space, in accordance with CALGreen Nonresidential Tier 1 Voluntary Measures. Installation of 220/240 volt garage circuits to support PEVs will be required in all Village Residential-Low and Village Residential Medium-Low designations.							
Mitigation Measure GHG-2: Encourage use of electric-powered landscaping equipment  For all projects developed within the CEDHSP, the building permit applicant shall provide education for residential and commercial tenants concerning electric-powered landscaping equipment. Prior to receipt of any certificate of final occupancy, the building permit applicant shall work with EDCAQMD to develop electronic correspondence to be distributed by email to new residential and commercial tenants that encourages the purchase of electric-powered equipment to reduce GHG and criteria pollutant emissions.	Inclusion in Appendix D	Prior to occupancy	Building permit Applicant	Reviewing Party County of El Dorado-Planning and Building Department, County of El Dorado Air Quality Management District  Monitoring Action The County shall verify correspondence prepared to reduce GHG and criteria pollutant emissions			
Mitigation Measure GHG-3: Use electric heating and all-electric buildings  As a condition of County approval of future small-lot tentative maps, parcel maps, and/or Planned Development (PD) permits, buildings constructed under the specific plan shall be all-electric. All water heaters in new residential developments will be either solar or electrically powered. The building permit applicant will ensure all residential and non-residential development meet the State's Zero Net Energy standards, if and when adopted. Concurrently with submittal of the building permit application, the building permit applicant will submit documentation to the County demonstrating compliance with this mitigation measure. The County shall ensure compliance prior to issuance of certificate of occupancy.	Inclusion in Appendix D	Prior to construction	Building permit Applicant	Reviewing Party County of El Dorado-Planning and Building Department  Monitoring Action The County shall verify that all new development meet the State's Zero Net Energy standards, if and when adopted			
Mitigation Measure GHG-4: Achieve LEED certification  The building permit applicant will use commercially reasonable standards to achieve LEED Silver certification or higher through specific committed measures in use of recycled and sustainable materials in construction, water efficiency, and efficiency of energy use. The United States Green Building Council is a private 501(c)3, non-profit organization which promotes sustainability in building design, construction, and operation. The United States Green Building Council developed the LEED program which provides a rating system that awards points for new construction based on energy use, materials, water efficiency, and other sustainability criteria. LEED has certification systems for both commercial and residential use. Mitigation Measures GHG-2 and GHG-3 may be included as part of achieving LEED Silver certification. Concurrently with submittal of the building permit application, the applicant will submit to the County a copy of the LEED project registration for participating residential sites. Final LEED certification from Green Business Certification, Inc. shall be provided to the County. The County shall ensure compliance prior to issuance of certificate of occupancy. If LEED Silver certification was not achieved, the building permit applicant must explain the circumstances that prevented certification.	Inclusion in Appendix D	Prior to construction	Building permit Applicant	Reviewing Party County of El Dorado-Planning and Building Department  Monitoring Action The County shall verify LEED project registration for participating residential sites			
Mitigation Measure GHG-5: Use natural refrigerants  The building permit applicant will use commercially reasonable standards to achieve use of natural alternatives to HFCs for building air conditioning equipment. Natural refrigerants include ammonia, CO2, or hydrocarbons. The County will require all development to meet ARB regulations restricting HFCs, if and when adopted. Concurrently with submittal of the building permit application, the applicant will submit documentation to the County demonstrating compliance with this mitigation measure. The County shall ensure compliance prior to issuance of certificate of occupancy.	Inclusion in Appendix D	Concurrent with submittal of building permit application	Building permit Applicant	Reviewing Party County of El Dorado-Planning and Building Department  Monitoring Action The County shall verify compliance prior to issuance of certificate of occupancy			
<b>Mitigation Measure GHG-6:</b> Offset construction greenhouse gas emissions and operational area source emissions through the purchase of greenhouse gas credits	Inclusion in Appendix D	Prior to approval of parcel map/tentative	Building permit Applicant	Reviewing Party County of El Dorado-Planning and Building			

Verification of Incorporation into Completion Central El Dorado **Implementing** Proposed Mitigation Measure(s) Hills Specific Plan Party Monitoring Date Initial Timing map/PD permit Department

Measure Performance Standards

Prior to County approval of a small-lot tentative map, parcel map, and/or Planned Development (PD) permit, the building permit applicant will either:

Purchase GHG credits to offset total GHG emissions from construction (inclusive of land use change) and operational GHG emissions from project area sources over a 30-year analysis period; or

Submit a plan for County approval for purchasing GHG credits on an ongoing basis to offset total GHG emissions from construction (inclusive of land use change) and operational GHG emissions from project area sources over a 30-year analysis period.

Emissions from these sources over the 15-year construction period and from operations over a 30-year analysis period have been quantified as part of this EIR and total 40,249 metric tons CO<sub>2</sub>e. This yields a reduction commitment of up to 40,249 metric tons CO<sub>2</sub>e needed to achieve a no net increase in project-related GHG emissions from these sources. This performance standard may be achieved based on this conservative estimate through (1) a one-time GHG credit purchase or (2) on an ongoing basis based on updated emission calculations The reduction commitment may therefore change over time.

Under (1), the building permit applicant must offset emissions prior to County approval of the tentative map, parcel map, or planned development permit based on the emissions estimate presented in this EIR (40,249 metric tons CO<sub>2</sub>e). Although this inventory could be used exclusively to inform the required GHG credit commitment, the methods used to quantify emissions in the EIR were conservative. They also do not fully account for reductions that may be achieved by other required GHG mitigation. Accordingly, this EIR likely overestimates actual GHG emissions that would be generated by the project. The building permit applicant may therefore reanalyze GHG emissions and the GHG credit commitment.

Under (2), the building permit applicant may offset GHG emissions on a continual basis based on the development phasing plan. or construction activities. Prior to County approval of the tentative map, parcel map, or Planned Development permit, the building permit applicant shall quantify construction GHG emissions for each development phase, as well as operational project area source emissions over a 30-year analysis period. A phased approach provides implementation and management flexibility. It also enhances plan quality and accuracy as each subsequent emissions inventory can better account for the latest regulations and reduction technologies. If the building permit applicant elects to use a phased approach, the first phase of the plan must identify the expected future phases, schedule for purchasing GHG credits, and the quantity of CHG credits remaining after each phase needed to attain the performance standard of this measure. GHG credits for each phase must be purchased in advance of groundbreaking activities for that phase.

Under either (1) or (2), any updated emissions analysis conducted for the project must be performed using emissions models and quantification methods available at the time of the reanalysis and approved by EDCAQMD, ARB, or the EPA. The analysis must use the latest available engineering data for the project, inclusive of any required mitigation measures identified in this EIR that will reduce GHG emissions. This may include criteria pollutant reduction projects funded by the building permit applicant pursuant to Mitigation Measure AQ-2f. Any GHG reductions achieved by building permit applicant funded criteria pollutant reduction projects may be credited to the project as an offsite GHG reduction strategy, and thereby subtracted from the GHG credit commitment total. Consistent with the methodology used in this EIR, emission factors may account for enacted regulations that will influence future year emissions intensities (e.g., fuel efficiency standards for onroad vehicles). The building permit applicant shall retain a qualified professional firm where the supervising staff has at least 10 years of experience performing air quality and GHG analysis to conduct any revised emissions modeling. The building permit applicant shall submit updates to the project emissions inventory and/or GHG credit commitment to the County for review and approval, which shall include third-party review by a qualified consultant of the County's selection and subject to building permit applicant reimbursement of consultant costs.

Accounting Protocols and Accredited Registration

All GHG credits must be created through an ARB-approved registry. These registries are currently the American Carbon Registry (ACR), Climate Action Reserve (CAR), and Verra, although additional registries may be accredited by ARB in the future. These registries use robust accounting protocols for all GHG credits created for their

#### **Monitoring Action**

The County shall verify verification for all GHG credits purchased pursuant to this measure

Incorporation into Central El Dorado		Implementin	o a		ation of letion
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Hills Specific Plan	Timing	Party	Monitoring	Date	Initial

### Proposed Mitigation Measure(s)

exchange, including the six currently approved ARB protocols. This mitigation measure specifically requires GHG credits created for the project originate from a CARB-approved protocol or a protocol that is equal to or more rigorous than ARB requirements under 17 CCF 95972. The selected protocol must demonstrate that the reduction of GHG emissions are real, permanent, quantifiable, verifiable, enforceable, and additional. Definitions of these terms from 17 CCR 95802(a) are provided below (the original text used the term offset, which has been replaced in the text below with the generic term "GHG credit" as this measure allows for use of both offsets and Forecasted Mitigation Units [FMUs]):

**Real**: GHG reductions or GHG enhancements result from a demonstrable action or set of actions, and are quantified using appropriate, accurate, and conservative methodologies that account for all GHG emissions sources, GHG sinks, and GHG reservoirs within the [GHG credit] project boundary and account for uncertainty and the potential for activity-shifting leakage and market-shifting leakage).

**Additional**: GHG reductions or removals that exceed any GHG reduction or removals otherwise required by law, regulation or legally binding mandate, and that exceed any GHG reductions or removals that would otherwise occur in a conservative business-as-usual scenario.

**Permanent**: GHG reductions and GHG removal enhancements are not reversible, or when GHG reductions and GHG removal enhancements may be reversible, that mechanisms are in place to replace any reversed GHG emission reductions and GHG removal enhancements to ensure that all credited reductions endure for at least 100 years.

**Quantifiable**: The ability to accurately measure and calculate GHG reductions or GHG removal enhancements relative to a project baseline in a reliable and replicable manner for all GHG emission sources, GHG sinks, or GHG reservoirs included within the [GHG credit] project boundary, while accounting for uncertainty and activity-shifting leakage and market-shifting leakage.

**Verifiable**: A [GHG credit] project report assertion is well documented and transparent such that it lends itself to an objective review by an accredited verification body.

**Enforceable:** The authority for ARB to hold a particular party liable and to take appropriate action if any of the provisions of this article are violated.

Note that this definition of enforceability is specific to the Cap-and-Trade regulation, where CARB holds enforcement authority, but this measure will employ GHG credits from the voluntary market, where ARB has no enforcement authority. Applying the definition to this mitigation measure means that GHG reductions must be owned by a single entity and be backed by a legal instrument or contract that defines exclusive ownership.

#### Geographic Prioritization

GHG credits from reduction projects in El Dorado County shall be prioritized before projects in larger geographies (i.e., northern California, California, United States, internationally). The building permit applicant shall inform brokers of the required geographic prioritization for the procurement of GHG credits. GHG credits from reduction projects identified in El Dorado County that are of equal or lesser cost compared to the settlement price of the latest Cap-and-Trade auction must be included in the transaction. GHG credits from reduction projects outside of the county may be purchased if adequate credits cannot be found in El Dorado County or they exceed the price maximum identified above. The economic and geographic analysis undertaken to inform the selection of GHG credits must be provided by the building permit applicant to the County as part of the required documentation discussed below under *Implementation and Reporting*.

#### Types of GHG Credits

GHG credits may be in the form of GHG offsets for prior reductions of GHG emissions verified through protocols or FMUs for future committed GHG emissions meeting protocols. Because emissions reductions from GHG offsets have already occurred, their benefits are immediate and can be used to compensate for an equivalent quantity of project-generated emissions at any time. GHG credits from FMUs must be funded and implemented within 5 years of project GHG emissions to qualify as a GHG credit under this measure (i.e., there can only be a maximum of 5 years' lag between project emissions and their real-world reductions through funding a FMU in advance and implementing the FMU on the ground). Any use of FMUs that result in a time lag between project emissions and their reduction by GHG credits from FMUs must be compensated through a pro-rated surcharge of additional FMUs proportional to the effect of the delay. Because emissions of  $CO_2$  in the atmosphere reach their peak

	Incorporation into	Incorporation into Central El Dorado				Verifica Comp	ntion of letion
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Implementing Party	Monitoring		Date	Initial

radiative forcing within 10 years, a surcharge of 10% for every year of lag between project emissions and their reduction through a FMU shall be added to the GHG credit requirement (i.e., 1.10 FMUs would be required to mitigate 1 metric ton of project GHG emissions generated in the year prior to funding and implementation of the FMU).

#### Verification and Independent Review

All GHG credits shall be verified by an independent verifier accredited by the ANSI National Accreditation Board (ANAB) or ARB, or an expert with equivalent qualifications to the extent necessary to assist with the verification. Following the standards and requirements established by the accreditation board (ANAB or ARB), the verifier shall certify the following.

- GHG credits conform to an ARB-approved protocol or a protocol that is equal to or more rigorous than ARB requirements under 17 CCR 95972. Verification of the latter requires certification that the credits meet or exceed the standards in 17 CCR 95972.
- GHG credits are real, permanent, quantifiable, verifiable, enforceable, and additional, as defined in this measure under *Accounting Protocols and Accredited Registration*.
- GHG credits were purchased according to the geographic prioritization standard defined in this measure under *Geographic Prioritization*.

Verification of GHG offsets must occur as part of the certification process for compliance with the accounting protocol. Because FMUs are GHG credits that will result from future projects, additional verification must occur beyond initial certification is required. Verification for FMUs must include initial certification and independent verification every 5 years over the duration of the FMU generating the GHG credits. The verification will examine both the GHG credit realization on the ground and its progress toward delivering future GHG credits. The building permit applicant will retain an independent verifier meeting the qualifications described above to certify reductions achieved by FMUs are achieved following completion of the future reduction project.

### Implementation and Reporting

The building permit applicant shall purchase all GHG credits required to meet the GHG credit commitment (1) or submit a phased GHG credit plan (2) prior to County approval of the tentative map, parcel map, or planned development permit. Under the phased GHG credit plan (2), GHG credits for each phase must be purchased in advance of groundbreaking activities for that phase. The building permit applicant shall retain the independent verifier to certify all GHG credits meet the standard of this measure, as discussed under *Verification and Independent Review*. Once certified, the building permit applicant shall provide to the County copies of the retirement verification for all GHG credits purchased pursuant to this measure.

	Incorporation into Central El Dorado		Implementing		Verification of Completion	
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Party	Monitoring	Date	Initial
Noise and Vibration						
Mitigation Measure NOI-1a: Employ noise-reducing construction practices  The construction contractor shall employ noise-reducing construction practices so that construction noise does not exceed construction noise standards specified in County General Plan Table 6-3 (Table 3.10-7) to the extent feasible.  Measures that can be used to limit noise include, but are not limited to, those listed below.  Prohibiting noise-generating construction activity between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and 5:00 p.m. to 8:00 a.m. on weekends and federally recognized holidays.  Locating equipment as far as feasible from noise sensitive uses.  Requiring that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.  Not idling inactive construction equipment for prolonged periods (i.e., more than 2 minutes).  Prohibiting gasoline or diesel engines from having unmuffled exhaust.  Scheduling construction activities and material hauling that may affect traffic flow to off-peak hours and using routes that would affect the fewest number of people.  Using noise-reducing enclosures around noise-generating equipment (minimum 15 dB insertion loss).  Constructing temporary barriers between noise sources and noise-sensitive land uses or taking advantage of	Inclusion in Appendix D	During project construction	Applicant/ Contractor	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action County shall verify incorporation of measure in permit documentation and plans Inspect construction site to verify that noise enclosures are being used for the appropriate equipment Inspect construction equipment to ensure mitigation measures are implemented prior to approval Inspect construction site to verify that equipment is located as far as practical from adjacent residences and other sensitive land uses		
Mitigation Measure NOI-1b: Prepare and implement an operational noise control plan to reduce noise at sensitive land uses  The applicant shall prepare a design-level operational noise control plan that identifies all project features and treatments that will be implemented to be in compliance with County noise standards listed in County General Plan Tables 6-1 and 6-2 (Tables 3.10-8 and 3.10-9 in this Draft EIR). The plan shall be developed by an acoustical design professional. The design features and treatments will ensure that exterior and interior noise levels at new proposed uses are in compliance with the noise standards. The report shall be submitted to the County for review and approval as part of the tentative map/planning development permit processing stage for the project.  Depending on the noise exposure for a particular site, such treatments may include, but are not limited to those listed below, as recommended by the acoustical design professional. This measure is applicable to new and existing sensitive land uses that would experience noise that exceeds the County's compatibility standard or are otherwise affected by project-generated noise.  • Construction of solid noise barriers and/or landscaped earthen berms between noise sources and receivers. The specific locations and heights of barriers shall be determined by a qualified acoustical consultant when the locations of residences and noise sources are finalized and prior to tentative map approval. Figure 3.10-2 shows potential locations for noise barriers required to mitigate roadway noise. The barriers shall be of sufficient height and composition to reduce noise levels at the closest sensitive receptor to levels required by County standards (General Plan Table 6-1).  • Installation of enclosures around noise-generating mechanical equipment at the civic-limited commercial land use sufficient to reduce noise levels to meet County standards for stationary noise sources.  • Provide maximum setbacks or barriers on lots facing the Community Park to	Inclusion as a new section (B.7 – Noise Barriers) in Appendix B	Prior to project construction	Applicant to hire noise specialist	Reviewing Party County of El Dorado-Planning and Building Department, Project Applicant Monitoring Action Request verification from Applicant that the project is implementing the recommended measures from the noise specialist Utilize the noise specialist to monitor noise levels in the project area to verify that the recommended measures are effective. As applicable, the County shall verify incorporation of measure in permit documentation and plans		

	Incorporation into Central El Dorado		Implementing			cation of oletion
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Party	Monitoring	Date	Initial
<ul> <li>Sound-rated roof ceiling constructions.</li> <li>Adequate mechanical ventilation so that windows and doors may be kept closed at the discretion of the building occupants to control environmental noise intrusion.</li> <li>In conjunction with Mitigation Measure NOI-1c, the County shall ensure the site plan submitted by the El Dorado Hills CSD for the Community Park locates all playground features at the Community Park outside the 70 Ldn noise contour of US 50.</li> </ul>						
Mitigation Measure NOI-1c: Implement a noise control plan for the Community Park  Prior to issuing a Planned Development permit to the El Dorado Hills CSD to construct and operate the proposed Community Park, the County shall require the CSD's proposed site plan for the park places the loudest outdoor activity noise sources as far as practical from residential uses in the Serrano Westside planning area, and that all playground features at the Community Park are located outside the 70 Ldn noise contour of US 50. The plan shall be accompanied by a noise study prepared by a qualified acoustical consultant that identifies physical and administrative measures that will be used to reduce noise levels. The County shall condition the park project to implement EIR Mitigation Measure NOI-1a to reduce construction noise and to adhere to County Code of Ordinances Chapter 9.16, Noise, which prohibits the production of loud and raucous noise that unreasonably interferes with the peace and quiet of private property. The County may also condition the park project, if deemed necessary, to include other restrictions such as limiting the use of amplified sound systems to certain hours.	Inclusion in Section 9 (Implementation and Administration) and Policy 6.23	Prior to construction	EDHCSD	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action Review Planned Development Permit application to ensure incorporation of measure		
Mitigation Measure NOI-2: Employ measures to reduce airblast and vibration from blasting Contractors shall retain a qualified blasting specialist to develop a site-specific blasting program report to assess, control, and monitor airblast and ground vibration from blasting. The report shall be reviewed and approved by the County prior to issuance of a blasting permit. The report shall include, at minimum, the following measures.  • The contractor shall use current state-of-the-art technology to keep blast-related vibration at offsite residential, other occupied structures and well sites as low as possible, consistent with blasting safety. In no instance shall blast vibration, measured on the ground adjacent to a residential or other occupied structure or well site be allowed to exceed the frequency-dependent limits specified in the Alternative Blasting Level Criteria contained in USBM Report of Investigations 8507.  • The project contractor shall use current state-of-the-art technology to keep airblast at offsite residential and other occupied structure, as low as possible. In no instance shall airblast, measured at a residence or other occupied structure, be allowed to exceed the 0.013-psi (133-dB) limit recommended in USBM Report of Investigations 8485.  • The project contractor shall monitor and record airblast and vibration for blasts within 1,000 feet of residences and other occupied structures to verify that measured levels are within the recommended limits at those locations. The contractor shall use blasting seismographs containing three channels that record in three mutually perpendicular axes and which have a fourth channel for recording airblast. The frequency response of the instrumentation shall be from 2 to 250 Hz, with a minimum sampling rate of 1,000 samples per second per channel. The recorded data must be such that the frequency of the vibrations can be determined readily. If blasting is found to exceed specified levels, blasting shall cease, and alternative blasting or excavation methods shall	Inclusion in Appendix D	Prior to and during construction	Contractor	Reviewing Party El Dorado County Sheriff; County of El Dorado-Planning and Building Department Monitoring Action Review and approve blasting program report prior to issuing blasting permit. County shall verify incorporation of measure in permit documentation and plans		

Central El Dorado Hills Specific Plan Inclusion in	Timing	Implementing			letion
Inclusion in	•	Party	Monitoring	Date	Initial
Appendix D	Prior to approval of subdivision tentative map	Project Applicant	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action A copy of a master Conditions, Covenants and Restrictions (CCR's) incorporating the measure for disclosure purposes, shall be submitted as part of the first small lot residential final map application		
Inclusion in Section 4.8 as a new policy	Project design and construction	Project Applicant	Reviewing Party County of El Dorado-Planning and Building Department Monitoring Action This measure shall be verified as part the Tentative Map application review on the Pedregal Planning Area		
Section 4.8 as a new policy	Prior to construction of 500 <sup>th</sup> residential unit	Project Applicant	Reviewing Party County of El Dorado-Planning and Building Department, El Dorado Transit Monitoring Action Verification of this measure shall occur during the required annual review of the Development Agreement		
Inclusion in Appendix D	Prior to and during	Project Applicant	Reviewing Party County of El Dorado-Planning and Building		
:	construction		Department  Monitoring Action  County shall verify incorporation of measure in permit documentation and plans		
d					
t g	Inclusion in Section 4.8 as a new policy  Section 4.8 as a new policy  d-  Inclusion in Appendix D  to g	Inclusion in Section 4.8 as a new policy  Section 4.8 as a new policy  Prior to construction of 500th residential unit  Inclusion in Appendix D  Inclusion in Appendix D  Appendix D  Appendix D  Appendix D	Inclusion in Section 4.8 as a new policy  Section 4.8 as a new policy  Project design and construction  Project Applicant construction  Project Applicant construction of 500th residential unit  Inclusion in Appendix D  Prior to and during construction  Project Applicant during construction	Inclusion in Section 4.8 as a new policy  Section 4.8 as a new policy  Inclusion in Section Inclusion in Prior to and during construction Inclusion in Appendix D Inclusion in	Inclusion in Section   4.8 as a new policy   Project design and construction   Project Applicant   Proje

	Incorporation into Central El Dorado		Implementing		Verification of Completion		
Proposed Mitigation Measure(s)	Hills Specific Plan	Timing	Implementing Party	Monitoring		Date	Initial

authorities.

- Alternate access routes via detours to maintain continual circulation for local travelers in and around construction zones, including bicyclists and pedestrians where applicable.
- Description of construction staging areas, material delivery routes, and specification of construction vehicle travel hour limits.
- Designation of areas where nighttime construction will occur.
- Plans to relocate school bus drop-off and pick-up locations if they will be affected during construction.
- Scheduling for oversized material deliveries to the work site and haul routes.
- Provisions that direct haulers are to pull over in the event of an emergency. If an emergency vehicle is approaching on a narrow two-way roadway, specify measures to ensure that appropriate maneuvers will be conducted by the construction vehicles to allow continual access for the emergency vehicles at the time of an emergency.
- Control for any temporary road closure, detour, or other disruption to traffic circulation.
- Designated offsite vehicle staging and parking areas.
- Posted information for contact in case of emergency or complaint.
- Coordination with El Dorado County Transit Authority to develop, where feasible, daily construction time windows during which transit operations would not be either detoured or significantly slowed.
- Other actions to be identified and developed as may be needed by the construction manager/resident engineer to ensure that temporary impacts on transportation facilities are minimized.