DIAMOND SPRINGS COMMUNITY PARK

Draft Environmental Impact Report

SCH# 2023050469
September 2023

PREPARED FOR:

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Executive Summary

El Dorado County has prepared this Draft Environmental Impact Report (EIR) to inform the community, responsible agencies, trustee agencies, and other interested agencies and organizations, of the potential significant environmental effects resulting from implementation of the proposed Diamond Springs Community Park Project. This Executive Summary lists the potentially significant environmental impacts and feasible mitigation measures or project alternatives that would avoid or substantially reduce those impacts. This Draft EIR was prepared in compliance with the California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000-21189.3) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.).

ES.1 Summary of Impacts

Table ES-1 presents a summary of the potential environmental impacts that could result from the project, their level of significance, proposed mitigation measures, and the level of significance of the impact after the implementation of the mitigation measures.

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
Aesthetics – No Significant Impacts			
AES-1. The project would not substantially degrade the existing visual character or quality of the site and its surroundings (in a nonurbanized area).	LTS	N/A	LTS
AES-2. The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	LTS	N/A	LTS
Air Quality			
AIR-1. Construction and operation of the project would not conflict with the EDCAQMD's AQMP.	LTS	N/A	LTS
AIR-2. Construction of the project would result in emissions of dust that could violate any air quality standard or contribute substantially to an existing or projected air quality violation. Regarding other criteria air pollutants, construction and operation of the project would result in emissions that would not exceed adopted thresholds of significance, violate any air quality standard or contribute substantially to an existing or projected air quality violation.	PS	**MM-AIR-1: Fugitive Dust Control Measures:** A. During construction, implement SCAQMD's Best Available Fugitive Dust Control Measures as adopted by the EDCAQMD and required by EDCAQMD Rule 223-1 (Table 1), as follows. **Earth-moving (except construction cutting and filling areas)** 1a. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the EDCAQMD; two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR 1a-1. For any earthmoving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.	LTS

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		Earth-moving – construction fill areas 1b. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the District; for areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM method 1557 or other equivalent method approved by the EDCAQMD, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content; two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations. **Earth-moving – construction cut areas** 1c. Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors. **Disturbed surface areas (except completed grading areas)** 2a/b. Apply dust suppression in a sufficient quantity and frequency to maintain a stabilized surface; any areas which cannot be stabilized, as evidenced by wind driven dust, must have an application of water at least twice per day to at least 80 percent of the unstabilized area. **Disturbed surface areas completed grading areas**	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		2c. Apply chemical stabilizers within 5 working days or grading completion; OR 2d. Take action 3a or 3c specified for inactive disturbed surface areas. Inactive disturbed surface areas 3a. Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible due to excessive slope or other safety conditions; OR 3b. Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR 3c. Establish a vegetative ground cover within 21 days after active operations have ceased; ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR 3d. Utilize any combination of control actions 3a, 3b and 3c such that, in total, they apply to all inactive disturbed surface areas. Unpaved Roads 4a. Water all roads used for any vehicular traffic at least once per every two hours of active operations; OR 4b. Water all roads used for any vehicular traffic once daily and restrict vehicle speed to 15 mph; OR	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		4c. Apply chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface. **Open storage piles** 5a. Apply chemical stabilizers; OR 5b. Apply water to at least 80 percent of the surface areas of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR 5c. Install a three-sided enclosure with walls with no more than 50 percent porosity that extend, at a minimum, to the top of the pile. **Track-out control** 6a. Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and width of at least 20 feet; OR 6b. Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device. **All Categories** 7a. Any other control measures approved by the EDCAQMD.	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		A. During high wind conditions during construction with gusts exceeding 25 miles per hour, implement SCAQMD's Best Available Fugitive Dust Control Measures for High Wind Conditions required by SCAQMD Rule 403, as adopted by the EDCAQMD and presented below. **Earth-moving** 1A. Cease all active operations; or 2A. Apply water to soil not more than 15 minutes prior to moving such soil. **Disturbed surface areas** 0B. On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR 1B. Apply chemical stabilizers prior to a wind event; OR 2B. Apply water to all unstabilized disturbed areas 3 times per day; if there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR 3B. Establish a vegetative ground cover within 21 days after active operations have ceased; ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		4B. Utilize any combination of control actions specified in Table 1, Items 1B, 2B and 3B, such that, in total, they apply to all disturbed surfaced areas. **Unpaved Roads** 1C. Apply chemical stabilizers prior to a wind event; OR 2C. Apply water twice per hour during active operation; OR 3C. Stop all vehicular traffic. **Open storage piles** 1D. Apply water twice per hour; OR 2D. Install temporary coverings. **Paved road track-out** 1E. Cover all haul vehicles; OR 2E. Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for operation on both public and private roads. **All Categories** 1F. Any other control measures approved by the EDCAQMD.	
AIR-3. The project may expose sensitive receptors to substantial pollutant concentrations.	PS	**MM-AIR-2: Construction Equipment Exhaust Reductions.** All diesel-fueled off-road construction equipment greater than 75 horsepower shall be equipped with California Air Resources Board (CARB) Tier 4 Final compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal	LTS

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		Regulations) by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. An exemption from these requirements may be granted by El Dorado County in the event that the contractor documents that equipment with the required tier is not reasonably available and corresponding reductions in diesel particulate matter are achieved from other construction equipment (for example, another piece of equipment can be replaced with a zero-emission equipment to offset the emissions associated with using a piece of equipment that does not meet Tier 4 Final standards). Documentation shall be furnished to El Dorado County demonstrating that estimated project-generated construction emissions would not exceed the applicable EDCAQMD cancer risk threshold with the alternate construction methods. (This shall be demonstrated using industry-standard emission estimation methodologies.) If the documentation successfully demonstrates that project-generated construction emissions will remain below the applicable EDCAQMD cancer risk threshold, then the El Dorado County Planning Director may approve the alternate construction methods, at the Director's discretion.	
AIR-4. The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	LTS	N/A	LTS
Biological Resources			
BIO-1. The proposed project could have a substantial adverse effect on special-status plant and wildlife species during construction.	PS	**MM-BIO-1: Special-Status Amphibian and Reptile Species Survey and Monitoring.** A pre-construction survey for Foothill yellow-legged frog and western pond turtle shall be conducted within 48 hours prior	LTS

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		to the initiation of ground disturbance in suitable habitat for these species (i.e., damp upland areas near/adjacent to Deadman Creek). The survey area shall include all suitable habitat within the work areas, plus a 50-foot buffer. Following the survey, the contractor, under the direction of a qualified biologist, shall install wildlife exclusion fencing along the boundary of the work area containing suitable habitat to prevent special-status amphibians and reptiles from entering the work area. The wildlife exclusion fencing must be trenched into the soil at least 4 inches in depth, with the soil compacted against both sides of the fence for its entire length and must have intermittent exit points. Turnarounds shall be installed at access points to direct amphibians and reptiles away from gaps in the fencing **MM-BIO-2: Worker Environmental Awareness Program.** All workers shall receive worker environmental awareness program (WEAP) training conducted by a qualified biologist or their designated representative prior to any project construction activities. WEAP may also be conducted through a video created by a qualified biologist specifically for this project. WEAP shall instruct workers to recognize all special-status species potentially present in the project area, identify suitable habitat for these species, identify sensitive or protected habitats within the project area, and understand the nature and purpose of protective measures including best management practices (BMPs) and buffers to protect these biological resources. Additional items included in the training shall cover requirements for spill kits	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		and the prevention of spills, and the contact information for the qualified biologist. **MM-BIO-3: Preconstruction Nesting Bird Survey**. Vegetation removal activities shall be conducted outside the bird nesting season (February 1 through August 31) as much as possible to avoid direct impacts to nesting birds. For construction and vegetation removal activities occurring during the nesting season, an avian nesting survey of the work areas and contiguous habitat within 300 feet of all impact areas must be conducted for protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 14 days prior to the start of vegetation removal or construction activities. Once construction has started, if there is a break in activities that exceeds 14 days, then another avian nesting survey shall be conducted. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans along with an appropriate no disturbance buffer, which will be determined by the biologist based on the species' sensitivity to disturbance. The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The no disturbance buffer shall be demarcated in the field with flagging and stakes or construction fencing as determined appropriate by the biologist. **MM-BIO-4: Rare Plant Survey.** Prior to any construction-related activities, a rare plant survey shall be conducted to determine if there are any special-status plants within the project area and which may potentially be disturbed. Surveys shall be timed according to the blooming period for the target	

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		species, and known reference populations will be visited prior to surveys to confirm the species is evident and identifiable at the time of the survey. If special-status species are identified, avoidance zones may be established around plant populations to clearly demarcate areas for avoidance. Avoidance measures and buffer distances may vary between species, and the specific avoidance zone distance will be determined in coordination with the appropriate resource agencies. No construction activity or grading would be permitted within the avoidance zone. Where avoidance is infeasible, and the plant(s) are subject to removal or potential damage from construction, the project applicant shall develop and implement a mitigation plan pursuant to State and Federal regulation. The mitigation plan shall provide for no net loss of habitat and shall include, but is not limited to, relocation of the affected plants, replanting, and monitoring of relocated and planted specimens.	
BIO-2. The proposed project could have a substantial adverse effect on riparian habitat or sensitive natural communities.	PS	**MM-BIO-5: Oak Tree Mitigation.** The County of El Dorado Oak Resources Management Plan provides for oak woodland and individual oak tree mitigation. In general, removal of oak trees shall be replaced at a ratio of 1:1 (1 inch of new planting for each inch of tree removed). For oak woodland, the ratio is 1:1 (for up to 50% removal of oak woodland), 1.5:1 (for up to 75% removal), or 2:1 (for more than 75% removal). The proposed landscaping plan for the park includes plantings of native oak trees, which will contribute towards mitigation. If full on-site mitigation is not feasible, off-site mitigation in approved conservation areas, or payment of in-lieu fees at the current County rate schedule may be used. The current in-lieu fee	LTS

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		rate for oak woodlands are $8,285 per acre, individual trees are $153 per inch, and heritage trees are $459 per inch (El Dorado County 2017). Included in the fee are acquisition, initial management and monitoring, long term management and monitoring, and administration costs (El Dorado County 2017). MM-BIO-6: Aquatic Resources Mitigation. Prior to impacts occurring to U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) (collectively, the Resource Agencies) jurisdictional aquatic resources, the County of El Dorado or its designee shall obtain the following permits: ACOE 404 permit or authorization under a Nationwide Permit, RWQCB 401 Water Quality Certification, and California Fish and Game Code 1602 Streambed Alteration Agreement. To mitigate for impacts to jurisdictional waters, the project Proponent may purchase mitigation bank credits, including establishment, re-establishment, enhancement, or rehabilitation. Alternatively, a suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process. Either of these mitigation options would result in no net loss of jurisdictional aquatic resources. The precise mitigation ratio shall be no less than 1:1 and shall depend on the functions and values of the mitigation site and any restoration activities that may be conducted to further increase the functions and values of the mitigation site. If mitigation is proposed to occur within the project Site or within the offsite mitigation area, then a Wetlands Mitigation and Monitoring Plan shall be	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		prepared. Prior to issuance of land development permits, including clearing, grubbing, and grading permits for activities that would impact jurisdictional aquatic resources, the project proponent shall prepare a Wetlands Mitigation and Monitoring Plan to the minimum standards of the Resource Agencies. The Conceptual Wetlands Mitigation and Monitoring Plan shall, at a minimum, prescribe site preparation, planting, irrigation, and a 5-year maintenance and monitoring program with qualitative and quantitative evaluation of the revegetation effort and specific performance criteria to determine successful revegetation.	
BIO-3. The proposed project could have a substantial adverse effect on state or federally protected wetlands or waters.	PS	**MM-BIO-6: Aquatic Resources Mitigation**	LTS
BIO-4. The proposed project could impede the use of native wildlife nursery sites by removing or causing abandonment of active native bird nests.	PS	**MM-BIO-3: Preconstruction Nesting Bird Survey**.	LTS
BIO-5. The proposed project could conflict with local policies or ordinances protecting oak trees.	LTS	**MM-BIO-5: Oak Tree Mitigation**	LTS
BIO-6. The proposed project would not substantially reduce fish or wildlife species habitat.	LTS	N/A	LTS
Cultural and Tribal Cultural Resources			
CUL-1. The project would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.	NI	N/A	NI
CUL-2. The project may cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.	PS	**MM-CUL-1: Avoidance of Sensitive Archeological Resources.** Resource P-09-001882 should be avoided by a minimum of 50 feet. If the resource cannot be avoided by this distance additional archaeological efforts will be required, including subsurface	LTS

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		exploratory testing to assess the presence/absence and general distribution of the resource, and/or evaluation for NRHP/CRHR listing. **MM-CUL-2: Archeological and Native American Monitoring.** Archaeological monitors shall be present during all initial ground-disturbing activities within 300 feet of the prehistoric component of P-09-001882 and within 100 feet of Deadman Creek, where there is increased potential to encounter cultural resources. An archaeological monitoring and discovery plan shall be developed under the oversight of a qualified archaeological principal investigator meeting Secretary of the Interior's Professional Qualification Standards prior to construction.	
CUL-3. The project may disturb any human remains, including those interred outside of dedicated cemeteries.	LTS	**MM-CUL-3: Monitoring and Inadvertent Discovery Plan.** Prior to, a Secretary of the Interior-qualified archaeologist shall prepare a plan for cultural resources monitoring and inadvertent discovery. The plan shall include (but not be limited to) the following components: ▪ Training program for all construction and field workers involved in site disturbance; on-site personnel shall attend a mandatory pre-project training led by a Secretary of the Interior-qualified archaeologist. The training will outline the general archaeological sensitivity of the area (without providing site specifics) and the procedures to follow in the event an archaeological resource and/or human remains are inadvertently discovered.	LTS

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ Person(s) responsible for conducting monitoring activities, including a request to Native American representatives for a Native American monitor; ▪ Person(s) responsible for overseeing and directing the monitors; ▪ How the monitoring shall be conducted and the required format and content of monitoring reports, including schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports; ▪ Clear delineation and fencing of sensitive cultural resource areas requiring monitoring; ▪ Physical monitoring boundaries consistent with MM 3.4-2; ▪ Protocol for notifications in case of encountering cultural resources, as well as methods of dealing with the encountered resources (e.g., collection, identification, curation); ▪ Methods to ensure security of cultural resources sites, including protocol for notifying local authorities (i.e. sheriff, police) should site looting and other illegal activities occur during construction. ▪ During the course of the monitoring, the archaeologist may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources. ▪ *Inadvertent Discovery of Cultural Resources*. If prehistoric or historic-era archaeological resources are encountered, all construction activities within 100 feet will halt. The	

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Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		archaeological monitor will immediately notify the County of El Dorado of the encountered archaeological resource. Any culturally affiliate tribes would assess the significance of the find and make recommendations for further evaluation and treatment if necessary. ▪ *Inadvertent Discovery of Human Remains*. In the event of discovery of any human remains during construction activities, such activities within 100 feet of the find shall cease until the El Dorado County Coroner has been contacted to determine that no investigation of the cause of death is required. The Native American Heritage Commission will be contacted within 24 hours if it is determined that the remains are Native American. The Commission will then identify the person or persons it believes to be the most likely descendant (MLD) from the deceased Native American, who in turn would make recommendations to the County of El Dorado for the appropriate means of treating the human remains and any grave goods. After review of the find and consultation with the MLD, the authority to proceed may be accompanied by the addition of development requirements which provide for protection and preservation of the site and/or additional measures necessary to address the sensitive and unique nature of the site. All treatment recommendations made by the affiliated tribe(s) and other cultural resources specialists will be documented in the confidential portion of the project record. Work in the area(s) of the cultural find may	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		only proceed after authorization from the lead agency in coordination with the Tribe.	
CUL-4. The project may cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074.	PS	**MM-CUL-1: Avoidance of Sensitive Archeological Resources** **MM-CUL-2: Archeological and Native American Monitoring** **MM-CUL-3: Monitoring and Inadvertent Discovery Plan**	LTS
Energy			
ENE-1. The project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.	LTS	N/A	LTS
ENE-2. The project would not result in conflicts with or otherwise obstruct a state or local plan for renewable energy or energy efficiency.	LTS	N/A	LTS
Geology and Soils			
GEO-1. The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, or Seismic-related ground failure, including liquefaction, or landslides.	LTS	N/A	LTS
GEO-2. The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	LTS	N/A	LTS
GEO-3. The project would not be located on expansive soil, as defined in the 2022 California Building Code, creating substantial direct or indirect risks to life or property.	LTS	N/A	LTS
Greenhouse Gas Emissions			

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
GHG-1. The project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, and the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	LTS	N/A	LTS
Hazards and Hazardous Materials			
HAZ-1. The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LTS	N/A	LTS
HAZ-2. The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	LTS	N/A	LTS
HAZ-3. The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment.	LTS	N/A	LTS
HAZ-4. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LTS	N/A	LTS
HAZ-5. The project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires.	LTS	N/A	LTS
Hydrology and Water Quality			
HYD-1. The project would not violate any water quality standards or waste discharge requirements or otherwise degrade surface or ground water quality.	LTS	N/A	LTS
HYD-2. The project would not substantially decrease groundwater supplies or interfere substantially with	LTS	N/A	LTS

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
groundwater recharge such that the project may impede sustainable groundwater management of the basin.			
HYD-3. The project would not substantially alter the existing drainage pattern of the Master Plan area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			
i. result in substantial erosion or siltation on or off site;	LTS	N/A	LTS
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	LTS	N/A	LTS
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	LTS	N/A	LTS
iv. impede or redirect flood flows.	LTS	N/A	LTS
HYD-4. The project would not risk release of pollutants due to project inundation in a flood hazard, tsunami, or seiche zone.	LTS	N/A	LTS
HYD-5. The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	LTS	N/A	LTS
Noise			
3.10-1. The proposed project could result in generation of a temporary or permanent increase in ambient noise levels in the vicinity of the project substantially above levels without the project or in excess of standards established in the County's general plan or noise ordinance, or applicable standards of other agencies.	PS	**MM-NOI-1: Operation Noise.** Operation of the proposed project shall be limited to daytime (7:00 a.m. to 7:00 p.m.) and evening hours (7:00 p.m. to 10:00 p.m.). Respecting the measurable pre-existing outdoor ambient sound environment at nearest occupied offsite homes and other noise-sensitive land uses may be comparable to or quieter than the County's hourly Leq fixed thresholds of 55 dBA and 50	LTS

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Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		dBA for daytime and evening, respectively, the following shall be implemented: ▪ Restrict testing of the project emergency generator to daytime hours, and position the operating generator during such times so that the direct sound path between it and the nearest noise-sensitive land use is occluded by the proposed Indoor Gym building or an alternate solid barrier (either a fixed sound-blocking project feature; or a temporary/portable shell, shroud, or acoustical curtain that can be taken out of storage an installed as part of the emergency generator testing procedure). ▪ Consistent with project design information, and to satisfy County Code Section 130.37.020.A, no speech amplification or other sound reinforcement systems shall be installed and operating, excluding for purposes of public address or emergency response as the County may require. ▪ Clear and conspicuous informational signage shall be located at spectator seating and other assembly areas to enforce applicable County noise nuisance regulations and policies with respect to operation of visitor portable sound systems, musical instruments, and other noise makers. ▪ The project grading and layout of fields and facilities shall include, to the extent practical, features that are advantageous for occluding direct sound paths between areas of expected noise-producing activities (e.g., active sports play	

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		and engaged spectators) and nearest offsite noise-sensitive land uses such as residences. ▪ The project shall include a community complaint management plan that will provide the County or its delegate a means to respond to received community noise complaints, investigate their validity and likely cause, and document any implementation of onsite noise-reducing means or the resolution of the complaint.	
3.10-2. The proposed project would not result in the generation of excessive groundborne vibration or groundborne noise levels during construction.	LTS	N/A	LTS
Public Services and Recreation			
SER-1. The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, police protection, schools, parks, or other public facilities:			
Fire protection	LTS	N/A	LTS
Law Enforcement	LTS	N/A	LTS
Schools	LTS	N/A	LTS
Parks	LTS	N/A	LTS
Transportation			
TRA-1. The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	LTS	N/A	LTS
TRA-2. The project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).	LTS	N/A	LTS
TRA-3. The project would not substantially increase hazards due to a geometric design feature (e.g., sharp	LTS	N/A	LTS

Table ES-1. Summary of Project Impacts

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curves or dangerous intersections) or incompatible uses (e.g., farm equipment).			
TRA-4. The project would not result in inadequate emergency access.	LTS	N/A	LTS
Utilities and Service Systems			
UTL-1. The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	LTS	N/A	LTS
UTL-2. The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.	LTS	N/A	LTS
UTL-3. The project would result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	LTS	N/A	LTS
UTL-4. The project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of federal, state, and local management and reduction statutes or solid waste reduction goals.	LTS	N/A	LTS
Wildfire			
WF-1. The project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	LTS	N/A	LTS

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
WF-2. The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildfire.	LTS	N/A	LTS
WF-3. The project would not, due to slope, prevailing winds, and other factors exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	LTS	N/A	LTS
WF-4. The project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	LTS	N/A	LTS
WF-5. The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	LTS	N/A	LTS

Notes: LTS = Less than Significant, N/A = Not Applicable, NI = No Impact, PS = Potentially Significant, SU = Significant and Unavoidable

ES.2 Analysis of Alternatives

Alternatives Considered

Alternatives to the proposed project are discussed in Chapter 4. This discussion includes alternatives that were identified but dismissed from further consideration. Three feasible alternatives were identified that would avoid or substantially lessen one or more project impacts.

- No Project Alternative
- Roadway Connector Alternative
- Alternative Site Plan/Lower Density Use Park

No Project Alternative

As required by the CEQA Guidelines, an EIR's alternatives analysis must include consideration of the No Project Alternative. The "No Project" analysis discusses the existing conditions as well as what would reasonably be expected to occur in the foreseeable future if the Project was not approved (CEQA Guidelines Section 15126.6 (e)(2) and (3)(A)). For this analysis, the No Project assumes no construction.

Roadway Connector Alternative

This alternative involves implementing the circulation guideline as presented in the Diamond Springs-El Dorado Circulation Map and would include a roadway through the project site that would connect to new roadways built concurrently with future development in the currently undeveloped adjacent parcels.

Alternative Site Plan/ Lower Density Use Park

This alternative would construct a lower density use park with few ballfields and more unprogrammed spaces in the northern half of the site.

ES.3 Areas of Controversy

The CEQA Guidelines, Section 15123 (b)(2), require the executive summary of an EIR to disclose areas of controversy known to the lead agency that have been raised by the agencies and the public. The County circulated a Notice of Preparation (NOP) to solicit agency and public comments on the scope and environmental analysis to be included in the EIR. Comments expressed concern with traffic congestion and safety, road circulation, and emergency access. Specifically, concerns were raised over the consistency of the plan with the Diamond Springs - EL Dorado Circulation Map. The proposed project does not include the connector between Oak Dell Road and Patterson Drive (at Argonaut Drive), shown on that map to serve future subdivisions. Note that the map was incorporated into the Diamond Springs and El Dorado Area Mobility and Livable Community Plan. That Plan was reviewed by the Board of Supervisors but not adopted. Therefore it is not an applicable land use plan under CEQA. Traffic congestion is not considered to be an environmental effect, as further described in Section 3.12, Transportation. Circulation and emergency access is addressed in Section 3.12 of the EIR.

ES.4 Issues to be Resolved by the Lead Agency

The CEQA Guidelines, Section 15123(b)(3), require that an EIR contain a discussion of issues to be resolved. Various community members have expressed interest in certain recreational facilities at the proposed park (for example, more or fewer dedicated ball fields). The Board will act on the proposed conceptual plan, which identifies the future facilities at the site.

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Table of Contents

SECTION **PAGE NO.**

FIGURES

TABLES

APPENDICES

1 Introduction

1.1 Purpose and Intended Use of this EIR

The County of El Dorado (County) as the lead agency has prepared this Draft Environmental Impact Report (Draft EIR) to inform the general public, the local community, responsible agencies, trustee agencies, and other interested public agencies, including local Native American tribes, and the County's decision-making body (Board of Supervisors) regarding the potential significant environmental effects resulting from implementation of the Diamond Springs Community Park Project (proposed project), as well as feasible measures to mitigate those significant effects and alternatives to the proposed project. This Draft EIR was prepared in compliance with the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC], Section 21000 et seq.), and the CEQA Guidelines (14 CCR 15000 et seq.).

As described in CEQA Guidelines Section 15121(a), an EIR is an informational document that assesses potential environmental impacts of a proposed project, as well as identifies feasible mitigation measures and alternatives to a proposed project that could reduce or avoid adverse environmental impacts. As the CEQA lead agency for this project, the County is required to consider the information in the EIR along with any other available information in deciding whether to approve the requested project entitlements. The basic requirements for an EIR include providing information that establishes the environmental setting (or project baseline), and identifying environmental impacts, mitigation measures, project alternatives, growth inducing impacts, and cumulative impacts. In a practical sense, an EIR functions as a method of fact-finding, allowing an applicant, the public, other public agencies, and agency staff an opportunity to collectively review and evaluate baseline conditions and project impacts through a process of full disclosure. Additionally, this EIR provides the primary source of environmental information for the lead agency to consider when exercising any permitting or approval authority directly related to implementation of this project. It is not the intent of an EIR to recommend either approval or denial of a project.

1.2 Project Background and Overview

The project site is located south of Highway 50 and southeast to State Route 49 (SR 49) in the community of Diamond Springs, El Dorado County, California. The project site has direct access to State Route 49 via Oak Dell Road and is located approximately 3.8 miles southwest of the City of Placerville.

The project application proposes to construct and operate an approximate 40-acre community park with accessory facilities including a variety of ballfields, basketball courts, tennis courts, play areas, an indoor gym, pedestrian trails, as well as restrooms, concessions, open turf, and parking areas. The project site is located on two parcels, each of which would contain proposed development. The northern parcel (9.7-acres) is connected to Oak Dell Road and would include two soccer fields, a parking area, and a retaining wall. The southern parcel is much larger (29.8-acres), and would include play areas, tennis courts, an indoor gym, picnic areas, softball and baseball fields, a basketball court, a sand volleyball court, pedestrian access paths, restrooms, and a parking area. The project design would also accommodate emergency operations in the event of a natural disaster or other emergency.

Road improvements are proposed to occur on Snoopy Road and the intersection of Oak Dell Road and Highway 49, just northwest of the project site. Road improvements would include repaving and traffic calming measures such as the widening of Oak Dell Road for the construction of additional turn lanes leading onto SR 49.

1.3 EIR Process

Notice of Preparation

CEQA Guidelines Section 15123(b)(1), states that an EIR must include a summary of the impacts, mitigation measures, and significant impacts after mitigation for a proposed project. Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, of this EIR presents this information within its various subsections. Table 1-1 below also presents a summary of the potential environmental impacts that could result from the project, their level of significance, proposed mitigation measures, and the level of significance of the impact after the implementation of the mitigation measures. The proposed project would result in no/the following significant and unavoidable impacts:

In accordance with CEQA Guidelines Section 15082, a Notice of Preparation (NOP) was circulated for public and agency review from May 18 through June 16, 2023 (included as Appendix A). The purpose of the NOP is to provide notification that an EIR for the proposed project is being prepared and to solicit guidance on the scope and content of the document. The County also prepared an Initial Study (IS) for the project that was appended to the NOP identifying those issue areas where impacts would be less than significant.

Nine (9) comment letters were received during the scoping period. In addition, a scoping meeting was held on June 7, 2023, to receive verbal input on the scope and content of the EIR. Comments received on environmental issues are noted in the introduction of each technical section in Chapter 3. A copy of the NOP and the comment letters are included as Appendix A to this EIR.

Draft EIR and Public Review

This Draft EIR is being circulated for public review and comment for a period of 45 days. The beginning and end dates of the comment period are identified in the Notice of Availability (NOA) of the Draft EIR. Written comments may be sent by mail or e-mail to:

Vickie Sanders, Parks Manager
El Dorado County
330 Fair Lane, Bldg. A
Placerville, California 95667
Email: Vickie.Sanders@edcgov.us

The public can review the Draft EIR and supporting documents at the following address during normal business hours or on the County's website at: https://www.edcgov.us/Government/Parks/diamond-springs-community-park

County of El Dorado
Chief Administrative Office, Parks Division
330 Fair Lane, Bldg. A
Placerville, California 95667

Final EIR and EIR Certification

Upon completion of the Draft EIR public review period, a Final EIR will be prepared that will include written comments on the Draft EIR received during the public review period and the County's responses to those comments. The Final EIR will also include the Mitigation Monitoring and Reporting Program (MMRP) prepared in accordance with Section

21081.6 of the Public Resource Code. The Final EIR will address any revisions to the Draft EIR made in response to agency or public comments. The Draft EIR and Final EIR together will comprise the EIR for the proposed project. Before the County Board of Supervisors (Board) can approve the project, it must first certify that the EIR has been completed in compliance with CEQA, that the Board has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the County. The Board is also required to adopt Findings of Fact for each potentially significant impact, and, if necessary, a Statement of Overriding Considerations for any significant and unavoidable impacts explaining the decision to balance the benefits of the project against unavoidable environmental impacts if it approves the proposed project (see also Public Resources Code Section 21081).

Type of EIR and EIR Adequacy

This EIR is a "Project EIR," pursuant to CEQA Guidelines Section 15161. A Project EIR examines the environmental impacts of a specific project. This type of EIR focuses on the changes in the environment that would result from implementation of the project, including construction and operation.

The level of detail contained throughout this EIR is consistent with Section 15151 of the CEQA Guidelines, which states the following:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

1.4 Scope of the Draft EIR

Based on the scope of the proposed project as described in the NOP and IS and comments received from the public and public agencies (see Appendix A), the following issues were determined to be potentially significant and are therefore addressed in Chapter 3, Environmental Impacts and Mitigation Measures, of this document.

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Tribal Cultural Resources
- Energy
- Geology/Soils
- Hydrology/Water Quality
- Hazards/Hazardous Materials
- Transportation/Traffic
- Noise
- Utilities/Service Systems
- Public Services and Recreation
- Wildfire

The topics of agricultural resources and forest land, mineral resources, and population and housing were evaluated in the IS Checklist (included in Appendix A) and dismissed during the scoping process. These issued found less than significant are also summarized in Chapter 5 of this EIR.

This EIR addresses both the direct and cumulative environmental effects of the project. The cumulative impact analysis considers the incremental effects of the project in combination with other related past, present, and reasonably foreseeable future projects in the area. The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone (CEQA Guidelines Section 15130).

In compliance with CEQA Guidelines Section 15126.6, this EIR also describes and evaluates the comparative merits of a reasonable range of alternatives to the proposed project, including the required No Project Alternative, and also identifies the environmentally superior alternative. This EIR also describes alternatives that were considered but rejected by the lead agency as infeasible and explains the reasons why.

1.5 Organization of the Draft EIR

Executive Summary — Summarizes the elements of the project and the environmental impacts that could result from implementation of the proposed project and provides a table which lists impacts, describes proposed mitigation measures, and indicates the level of significance of impacts both before and after mitigation.

Chapter 1, Introduction — Provides an introduction and overview of the EIR process and describes the intended use of the EIR and the review process.

Chapter 2, Project Description — Provides a detailed description of the proposed project, including its location, background information, project history, project objectives, and technical characteristics.

Chapter 3, Environmental Impacts and Mitigation Measures — Describes the baseline environmental setting and provides an assessment of potential project impacts for each technical issue area presented. Each section is divided into four sub-sections: Introduction, Environmental Setting, Regulatory Background, and Impacts and Mitigation Measures (project-specific and cumulative).

Chapter 4, Project Alternatives — Describes and compares the proposed project alternatives to the proposed project.

Chapter 5, Other CEQA Considerations — Provides information required by CEQA regarding impacts that would result from the proposed project, including a summary of cumulative impacts, secondary impacts including potential impacts resulting from growth inducement, and significant irreversible changes to the environment.

Chapter 6, Preparers and Persons Consulted — Lists report authors who provided technical assistance in the preparation and review of the EIR.

Appendices — Includes various documents and data that support the analysis presented in the EIR.

1.6 References

California Environmental Quality Act. Public Resources Code Section 21000-21189. As amended 2022.

Guidelines for the Implementation of the California Environmental Quality Act. California Code of Regulations Title 14. Sections 15000-15387. As amended December 28, 2018.

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2 Project Description

This chapter provides a detailed description of the Diamond Springs Community Park Project (project) and includes information about project location, project background, project purpose and objectives, and project characteristics.

2.1 Project Location

The proposed project would be constructed and located within Diamond Springs, a census-designated place in an unincorporated portion of the County (see Figure 2-1, Project Location Map). The project site is directly accessible to Highway 49 via Oak Dell Road, is approximately 1.9 miles south of Highway 50, and approximately 3.8 miles southwest of the City of Placerville. As of 2020, the community of Diamond Springs had a population of 11,345 (US Census 2020).

The project site is located in the western portion of Diamond Springs at 3447 Clemenger Drive, which consists of two largely undeveloped, contiguous parcels (Accessor Parcel Numbers [APNs]: 331-301-019 [north parcel] which is 9.7 acres, and 331-400-002 [south parcel]) which is 29.8 acres, for a site total of 39.5 acres. The project site and surrounding areas (see Figure 2-2, Project Area Map) are gently sloping and include oak woodlands and wetland habitat. The topography of the project site ranges in elevation, with an average elevation of 1,679 feet above mean sea level (amsl). An El Dorado Irrigation District (EID) lift station and access road is located on the southern end of the subject property, and Deadman Creek, a perennial stream, transects diagonally through the southeastern portion of the project site.

The project site is bounded by the Lake Oaks Senior Mobile Home Park to the northeast, beyond which is Patterson Lake (an artificial lake and reservoir). To the north are residential properties located off of Farnsworth Lane and Snowline Hospice. The former Charles F. Brown Elementary School, which is now home to several educational institutions including Charles Brown Accelerated Learning Academy, Charter University Prep, Charter Connections Academy, Charter Home Study Academy, and Charter Head Start Preschool Academy (all of which are hereafter referred to as the former Charles F. Brown Elementary School) and residential properties are located along the western boundary of the project site (along Snoopy Road), while Union Mine High School and Pacific Crest Academy adjoin the project site to the south and southwest. Other areas adjacent to project site to the southeast and east consist of vacant and undeveloped property with similarly variable topography and vegetation.

2.2 Project Background

To address the increasing need for local parks, passive open space, and ballfields within Diamond Springs and beyond, the County has identified the project site for potential development of a recreational facility that would serve the local community, nearby schools, and sports leagues.

The 2004 El Dorado County General Plan designates the project site as High Density Residential. Use of the project site for a community park is consistent with several General Plan goals, objectives, and policies, described in the Land Use and Parks and Recreation elements. This includes, but is not limited to Policy 2.2.5.9, 9.1.1.3, 9.1.1.10, and 9.2.2.3 (El Dorado County 2004).

2.2.1 Parcel 331-301-019

This northern parcel is largely undeveloped and consists of 9.7 acres of land. Two soccer fields, a retaining wall, and a parking lot are proposed to be constructed within this parcel connected to Oak Dell Road.

2.2.2 Parcel 331-400-002

This southern parcel is also largely undeveloped and consists of 29.8 acres of land. Play areas, tennis courts, an indoor gym, picnic areas, another parking lot, softball fields, sand volleyball court, basketball court, retaining wall, stairs, pedestrian access paths, restrooms, and a concession stand will be constructed in this parcel. The existing EID station and Deadman Creek are also located within this parcel. The existing dirt access road in this parcel (Snoopy Road) will also be improved to become an aggregate base road for easy emergency vehicle access.

2.2.3 El Dorado Irrigation Lift Station

An El Dorado Irrigation District (EID) sewer lift station, the Charles Brown Lift Station, is located centrally in the southern parcel. The lift station receives wastewater from a gravity line that enters the site from the east, crossing under Deadman Creek, and into the lift station. The lift station then feeds a sewer force main that travels west, then turning north at the west edge of the property and continuing within the Oak Dell Road right of way. The lift station would not be altered by project, and the project design provides for continued access to the facilities by EID.

2.3 Project Purpose and Objectives

2.3.1 El Dorado County General Plan

To address the increasing need for local parks, passive open space, and ballfield within Diamond Springs and beyond, the County has identified the project site for development of a recreational facility that would serve the local community, nearby schools, and sports leagues.

The 2004 El Dorado County General Plan designates the project site as High Density Residential. Use of the project site for a community park is consistent with relevant General Plan goals, objectives, and policies, described in the Land Use and Parks and Recreation elements. This includes, but is not limited to Policy 2.2.5.9, 9.1.1.3, 9.1.1.10, and 9.2.2.3 (El Dorado County 2004).

Policy 2.2.5.9. recognizes the need for certain family-supportive and institutional uses, such as recreational facilities, within areas designated for residential use, including the High-Density Residential land use classification.

Policy 9.1.1.3. describes community parks and recreational facilities, which are generally 10 to 44 acres in size (and therefore the proposed project would fall into this category).

Policy 9.1.1.10. identifies the planning and development of existing County owned park sites as a priority.

Policy 9.2.2.3. states that the County shall cooperate with cities and independently funded districts to help acquire land and develop facilities for neighborhood and community parks as funding allows.

2.3.2 Project Objectives

The project objectives, listed pursuant to CEQA Guidelines Section 15124(b), are as follows:

1. Provide recreational facilities for use by the community in the Diamond Springs area.
2. Provide a variety of recreation amenities including multi-purpose fields, ballfields, playgrounds, picnic areas, and tennis courts.
3. Provide a community gathering point.
4. Provide a potential community center for emergency purposes.
5. Protect environmental resources, including cultural and biological resources.

2.4 Project Characteristics

2.4.1 Project Overview

The project site (see Figure 2-3, Diamond Springs Community Park Conceptual Site Plan) consists of two (2) largely undeveloped and contiguous parcels.

The proposed park design includes the following:

- Ballfields (soccer fields and softball fields that also function as baseball fields)
- Basketball courts;
- Tennis/pickleball/sports courts;
- Play areas (ages 2-5/5-12);
- Recreational/indoor gym;
- Pedestrian trails;
- Designated parking areas, restrooms/concessions, and open turf and,
- Future emergency operations and evacuation location.

Primary access to the project site is from Oak Dell Road, which connects the site to State Route (SR) 49. The proposed project includes road improvements at SR 49 and Oak Dell Road. SR 49 will be widened as necessary at Oak Dell Road and restriped to provide for a dedicated left turn lane on westbound SR 49. Oak Dell Road will have right and left turn lanes at SR 49.

Emergency vehicle access is provided by Snoopy Road, a dirt road that connects Oak Dell Road to Union Mine High School and provide access to existing residences west of the project site. Snoopy Road will be resurfaced with aggregate base, and slightly reconfigured where the road passes through the southern end of the park. If necessary, “No Parking” signs will be installed to maintain adequate access to the project site, residences, and the high school. Access to the high school will be controlled with a gate.

2.4.2 Description of Project Components

Ballfields (Soccer, Softball, Basketball, Pickleball)

These fields and courts will be spread out across the two contiguous parcels and provide multiple spaces for recreational sports. The current proposed project's site plan suggests four softball fields/baseball fields, a sand volleyball court, basketball court, two tennis courts, and two soccer fields (see Figure 2-3 Site Plan).

Play Areas

Play areas would be established in between the indoor gym and the tennis courts. The intended age range for the play area is 2 to 12 years old. Directly below the play area would be the picnic area with shade, giving parents a space to watch their children play.

Gymnasium

The indoor gym, as previously mentioned, would be nearby the children's play area and tennis courts. It would also be alongside the eastern end of the parking lot located in the northern parcel and the parking area on the western side of the southern parcel.

Amenities

There are two shaded group picnic areas located within the southern parcel. One is near the indoor gym and tennis courts, and one is near the central softball/baseball field and eastern softball/baseball field. The picnic area located at the central softball field, would also house restroom buildings. The proposed project would also include a small concession stand and shade areas.

Pedestrian Trails

There would be pedestrian access near Deadman Creek and the southwest corner of the project site near the softball fields.

Lighting

Lighting elements would include pole-mounted lighting in the parking lots and sports lighting for the ballfields. The lighting will be angled downward and shut off by 10pm to avoid disturbing nearby residents.

Infrastructure and Utilities

The project site is vacant and unimproved (except for the EID facilities described in Section 2.2.3). Utility providers which serve the site include Pacific Gas and Electric (electricity) and El Dorado Irrigation District (EID) (water and wastewater).

The El Dorado Irrigation District (EID) is the largest of five water purveyors in El Dorado County (County) and provides water services to the project area. EID does not utilize groundwater as a water source for public use. It is anticipated that EID would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

Wastewater generated by the proposed project would be conveyed through the EID wastewater collection system and eventually treated at the Deer Creek Wastewater Treatment Plant (DCWWTP), which includes an approximate 24-square-mile service area.

There are no existing solid waste services provided. It is anticipated that El Dorado Disposal, Inc. would provide comprehensive solid waste and recycling services (construction, demolition, and debris recycling).

An emergency generator will be installed at the project site for potential power loss during events and to assist in emergency operations.

Parking

Parking would be constructed as shown on Figure 2-3, to accommodate park visitors. 286 standard stalls would be constructed, and 13 accessible (ADA) stalls.

Landscaping

Existing trees and vegetation on eastern side of the project would remain throughout construction and operation and would continue to serve as a buffer (see Figure 2-3, Diamond Springs Community Park Conceptual Site Plan). New landscaping elements would consist of native and drought-tolerant species. The proposed trees for the project site are shade trees for the parking lot, native shade trees for the other paved areas, accent trees, shrubs and groundcover, native grasses, and turf.

Offsite Roadway Improvements

The project includes improvements to SR 49 and Oak Dell Road. These improvements are shown as a conceptual design in Figure 3.12-2. The improvements would include widening of SR 49 to allow for a dedicated left turn pocket southbound onto Dell Road. Oak Dell Road would have a dedicated right turn lane onto SR 49. All road widening would occur within existing right-of-way, as shown on Figure 3.12-2. As part of the intersection improvements, sight distances shall be confirmed and any necessary trimming of trees or shrubs will be performed. provide the clear 480-foot sight distance required for right-turns, and the 650-feet sight distance required for left-turns.

Snoopy Road, between Woodstock Lane and Union Mine High School, would be resurfaced with aggregate base.

Emergency Operations Center

To maximize the centralized location and multi-use and community nature of the project site, the project has been designed (in coordination with the Sheriff's Office of Emergency Services [OES], the Diamond Springs – El Dorado Fire Protection District, and El Dorado County's Emergency Preparedness and Response) to improve County resiliency and reduce vulnerability in the event of an emergency/natural disaster (e.g., wildfire, flooding, etc.). The power outlets and back-up power (generator) can serve emergency operations. The parking areas can accommodate emergency response vehicles and operations trailers. The multi-use building (gymnasium) can provide services and shelter for displaced persons. The play fields can also provide an overflow area for temporary shelter.

2.4.3 Park Operations

Normal park hours of operation are from dawn to dusk, 7-days a week. The lighted fields may be used until 10:00 PM when programmed activities are scheduled (with safety lighting operating for an additional 15 minute grace period for visitors to safely exit the park). Note that the lighted fields would not include a public address system.

The County may enter into a joint use agreement with the El Dorado Union High School District to provide mutual access and to host joint events with Union Mine High School. Fields and parking facilities could be shared to accommodate youth sports tournaments and similar events.

2.4.4 Project Construction

Construction Scheduling

Construction of the project is anticipated to occur in phases and over a period of several years. This would begin with site preparation activities (e.g., grading [cut and fill], installation of utilities, retaining walls, etc.) from 2025 to 2026 (12 – 16 months). Project buildout is dependent on funding and County programming; it is anticipated the park would be constructed over a 10-15 year period (complete by 2041).

The following equipment is anticipated to be used during construction of the project:

- rubber-tired or track dozer
- tractors/loaders/backhoe
- excavators
- off-highway trucks
- concrete trucks
- concrete pump trucks
- roller/compactor
- generator set

Where feasible and available, diesel construction equipment would be powered by Tier 3 or Tier 4 engines as designated by the California Air Resources Board (CARB) and U.S. Environmental Protection Agency (USEPA). In addition, if available for on-site delivery, diesel construction equipment would be powered with renewable diesel fuel that is compliant with California's Low Carbon Fuel Standards and certified as renewable by the CARB executive officer.

Typical construction hours would be between 7:00 a.m. and 7:00 p.m. Monday through Friday, and between 8:00 a.m. and 5:00 p.m. on Saturday and Sunday. Section 130.37.020 of the County Zoning Ordinance allows construction (e.g., construction, alteration or repair activities) during daylight hours provided that all construction equipment shall be fitted with factory installed muffling devices and maintained in good working order. Indoor construction activities that may occur within built structures (i.e., in the gym), such as installing wiring, drywall, and carpet, which would occur after walls and windows are in place, would be permitted during nighttime hours.

Access and Staging

Before construction activities begin, temporary fencing would be installed around the construction area and other security measures such as lighting would be installed to prevent unauthorized access and to promote site safety. Construction staging would occur on the project site. In accordance with Section 5.408 of the CALGreen Code, the project would implement a Construction Waste Management Plan for recycling and/or salvaging for reuse of a minimum of 65 percent of nonhazardous construction/demolition debris.

There are no solid waste disposal sites in the County (El Dorado County 2003a). As such, solid waste generated by the project is anticipated to be off hauled by El Dorado Disposal, Inc. to the Material Recovery Facility/transfer station within Diamond Springs. From the transfer station, solid waste would be transported to the Lockwood Landfill in Nevada for disposal.

2.5 Project Permits and Approvals

The County is the CEQA lead agency for this project and has sole authority to consider and approve the project, certify the EIR, and adopt the Mitigation Monitoring and Reporting, Program, Findings of Fact, and Statement of Overriding Considerations, if necessary. Table 2-1 lists agencies that may be required to issue permits or approve certain aspects of the project. The County has invited the MLUSD and the EDUHSD to serve as CEQA Responsible Agencies. Should MLUSD and/or EDUHSD agree to be Responsible Agencies, the EIR is expected to be used to satisfy their CEQA requirements as they pertain to the project.

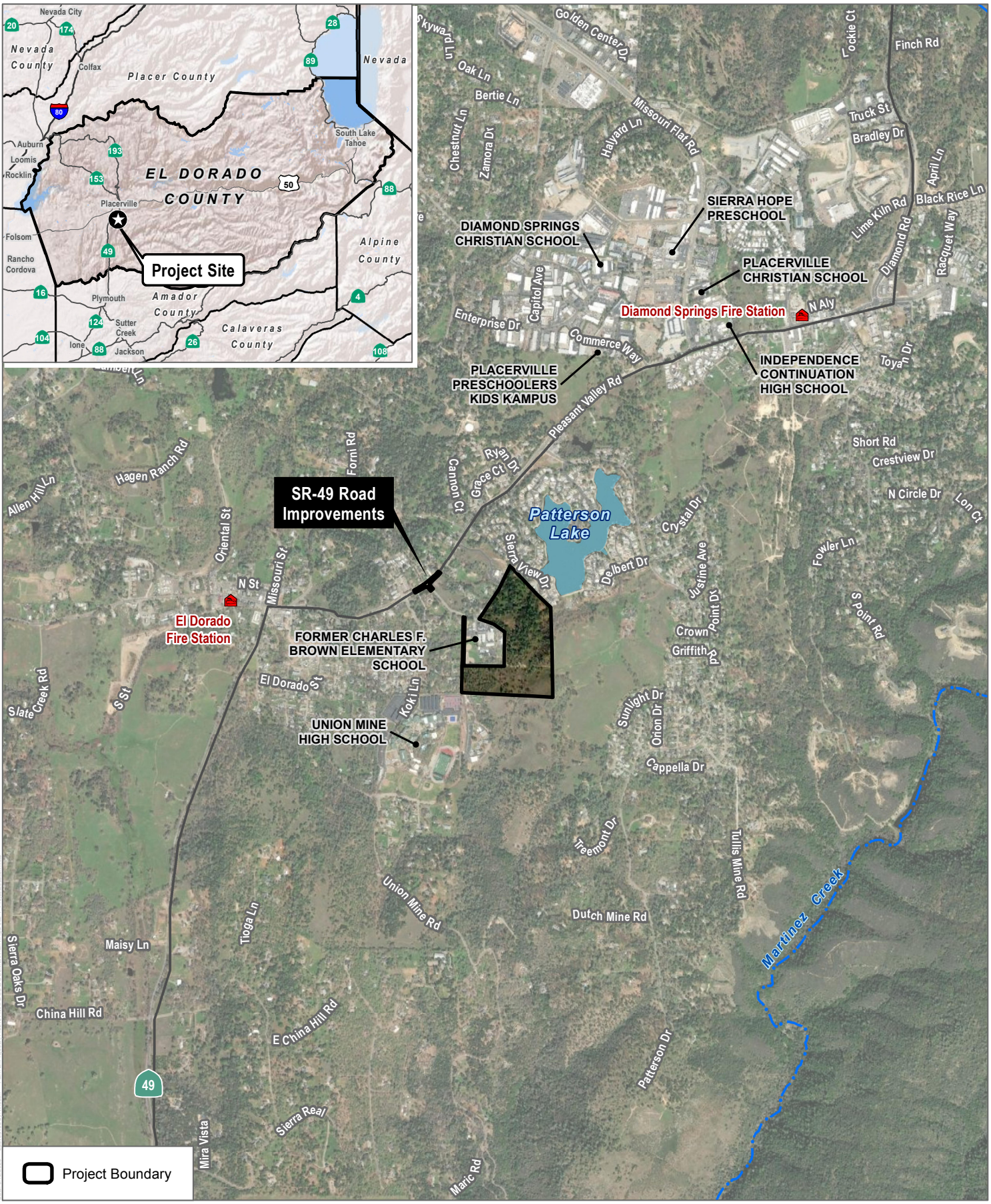
Table 2-1. Responsible Agencies and Anticipated Permits and Approvals

Agency	Permit/Approval
El Dorado County (County)	▪ Project approval
	▪ Approval of conceptual plans, ▪ Grading permits, building permits, certificates of occupancy, and other development related approvals ▪ The Diamond Springs Community Park is exempt from the requirements of the County's Zoning Ordinance.
Mother Lode Union School District (MLUSD)	▪ Project approval ▪ Long term lease of northern parcel (APN #: 331-301-019)
El Dorado Union High School District (EDUHSD)	▪ Project approval ▪ Plan review and approval as it relates to vehicular/pedestrian access at the southwest end of the project site
Department of Transportation (Caltrans), District 3	▪ Plan review and approval as it relates to vehicular/pedestrian access at the intersection of Oak Dell Road and Highway 49
El Dorado Air Quality Management District (AQMD)	▪ Review of project
El Dorado County Transportation Commission (EDCTC)	▪ Review of the project
El Dorado Fire District and Diamond Springs El Dorado Fire Protection District	▪ Review of project and project plans (with consideration for impacts to firefighting and emergency services)
El Dorado Irrigation District (EID)	▪ Review of project plans, coordination related to EID Lift Station
Central Valley Regional Water Quality Control Board (RWQCB)	▪ National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges associated with construction ▪ Clean Water Act (CWA) Section 401 Water Quality Certification and Notice of Intent for construction activities ▪ Stormwater Pollution Prevention Plan (SWPPP) for on-site storm water management and pollution prevention
California Department of Fish and Wildlife (CDFW)	▪ Section 1602 Streambed Alteration Agreement (SAA), review and comment on specific sensitive species
United States Army Corps of Engineers (USACE)	▪ Approval of Section 404 Permit under the Federal Clean Water Act for project impacts to jurisdictional waters of the United States

Table 2-1. Responsible Agencies and Anticipated Permits and Approvals

Agency	Permit/Approval
Other Utility/Community Service Providers (i.e., Sheriff's Department)	▪ Review of the project as it relates to facilities and services

Source: Compiled by Dudek in 2023.



SOURCE: ESRI Imagery 2023, Open Street Map 2019

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0 1,000 2,000 Feet

FIGURE 2-1

Project Location

Diamond Springs Community Park Project

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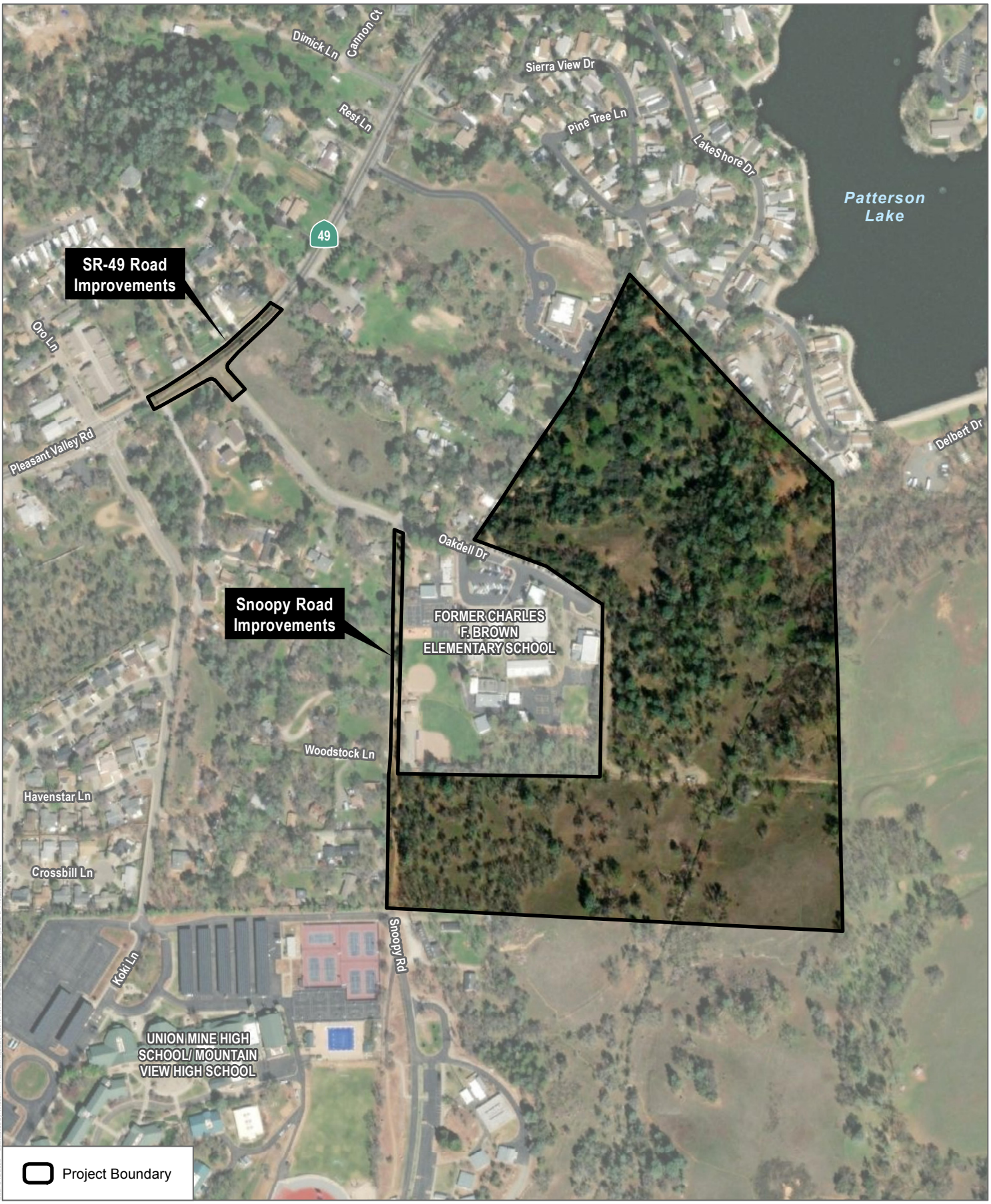

SOURCE: ESRI Imagery 2023, Open Street Map 2019

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0 200 400 Feet

FIGURE 2-2

Project Area

Diamond Springs Community Park Project

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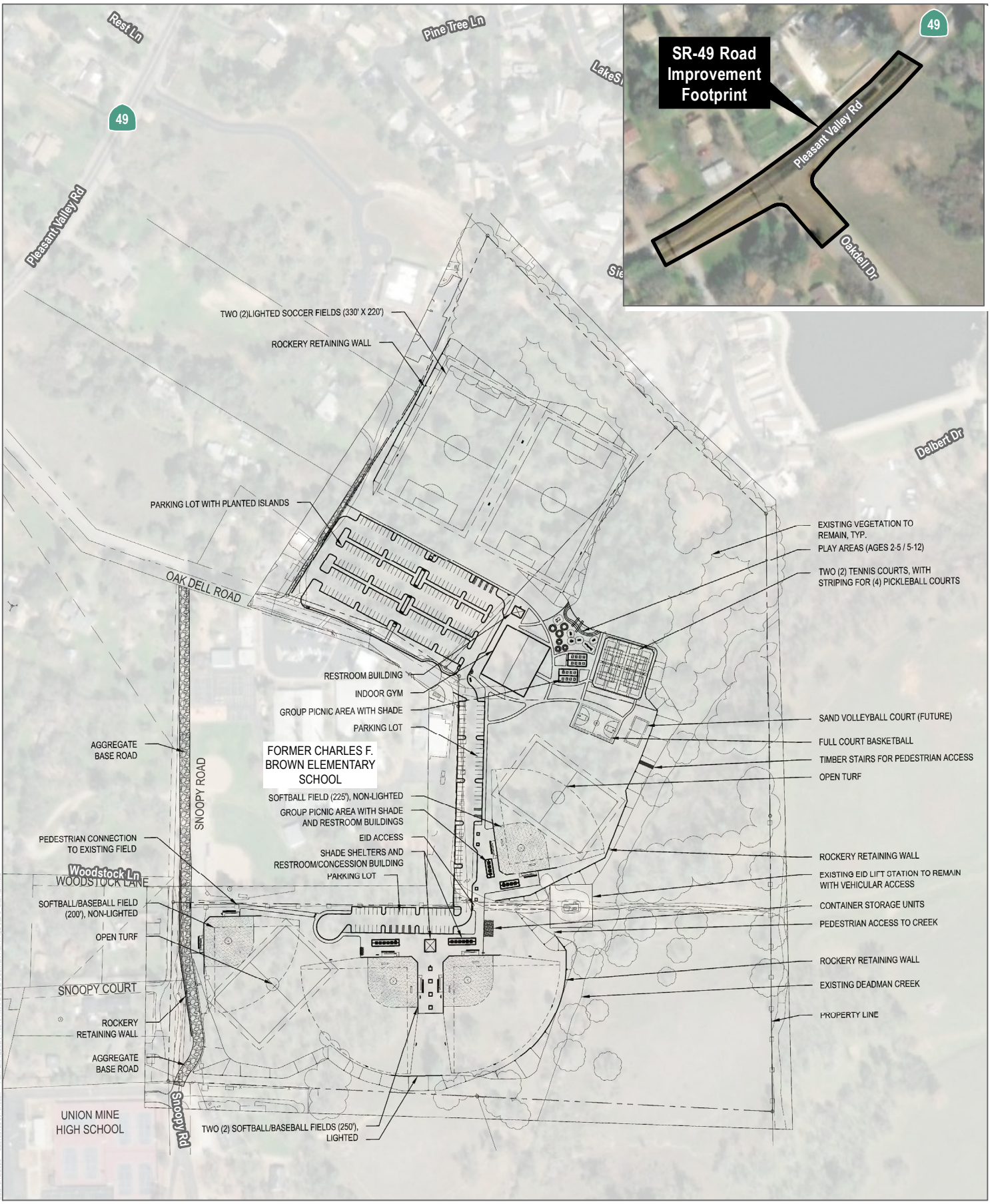

SOURCE: Roach and Campbell 2023

FIGURE 2-3

Diamond Springs Community Park Conceptual Site Plan

Diamond Springs Community Park Project

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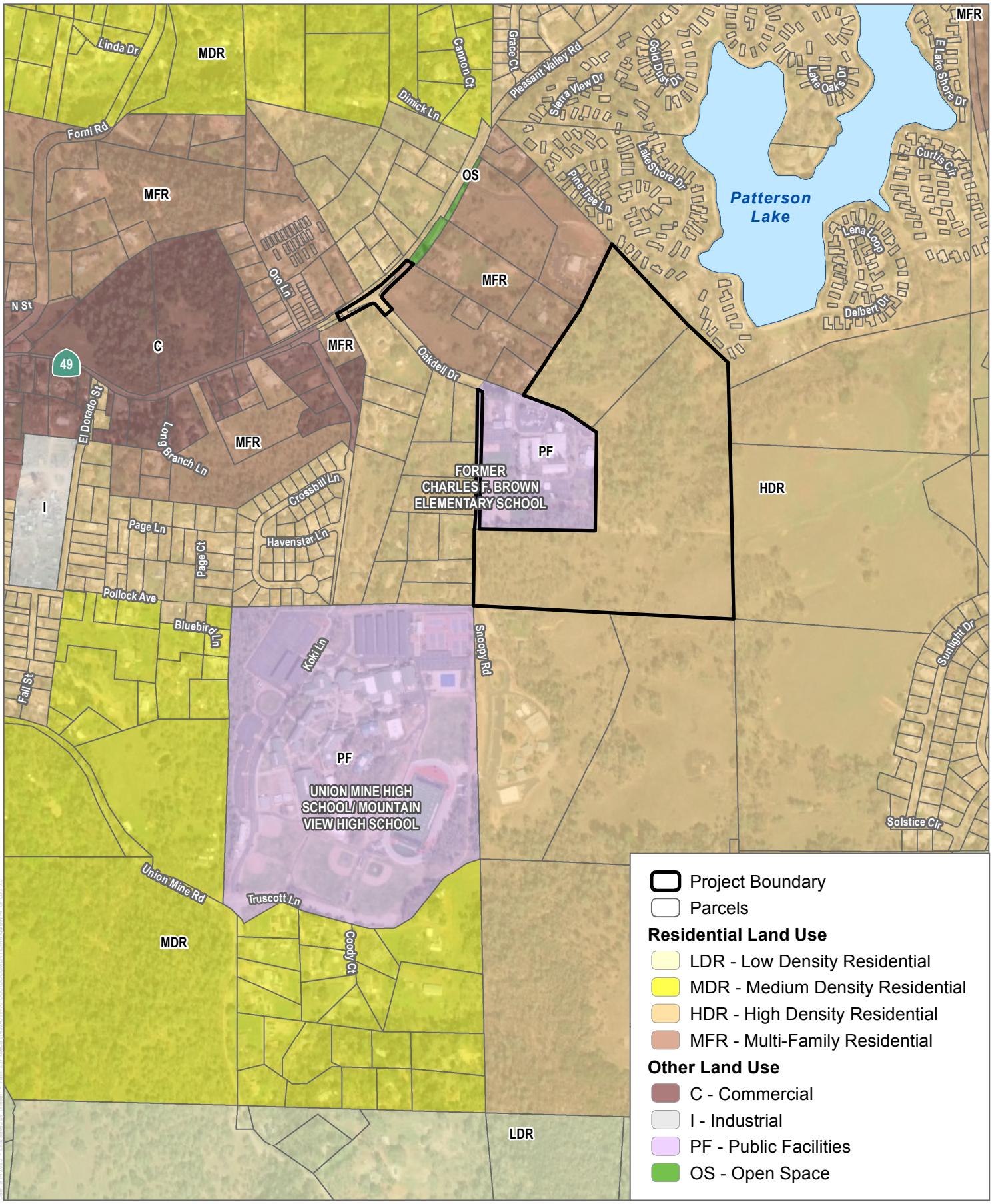

SOURCE: ESRI Imagery 2023, Open Street Map 2019, El Dorado County 2022

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0 355 710 Feet

FIGURE 2-4

General Plan Land Use

Diamond Springs Community Park Project

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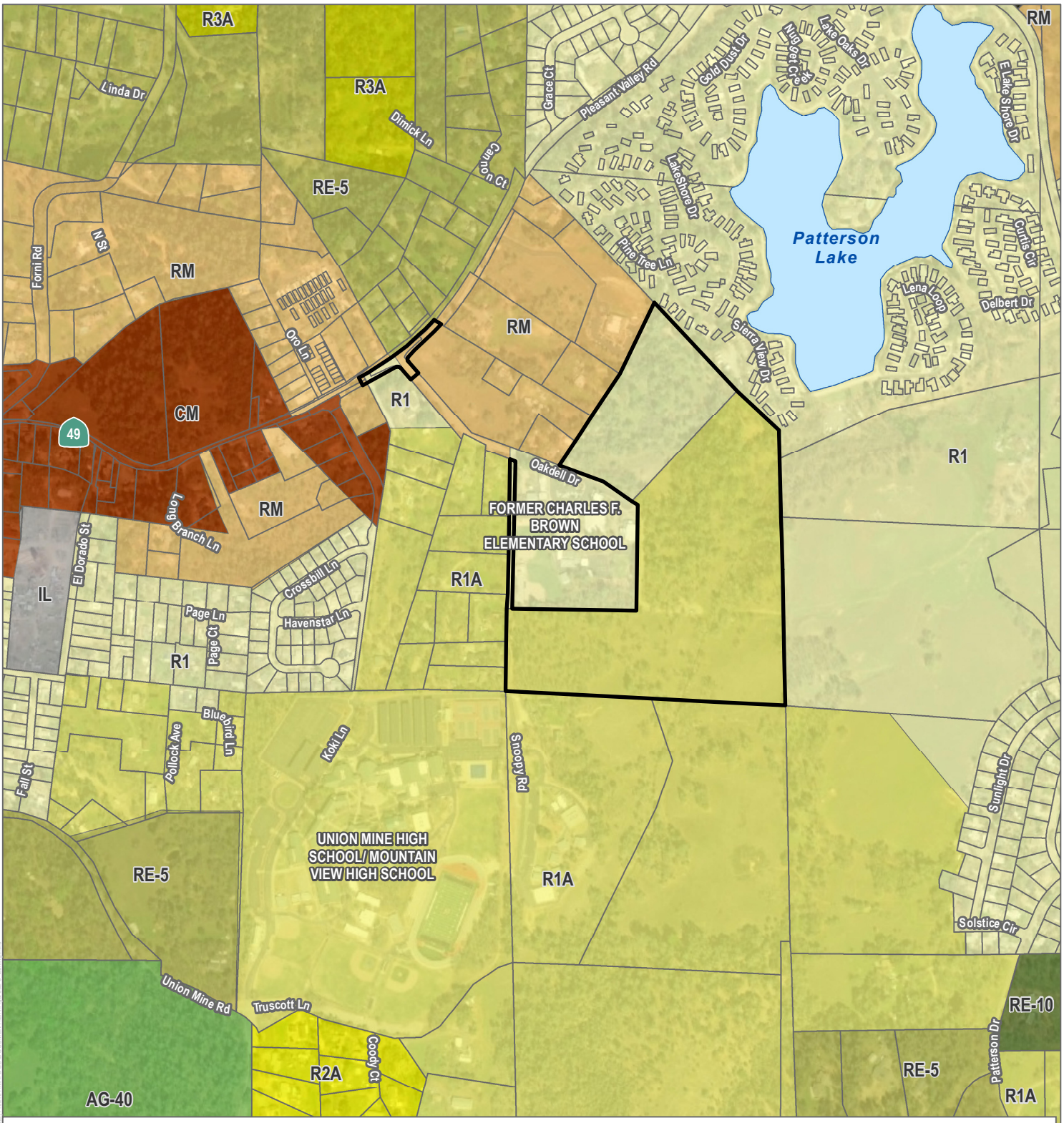

- Project Boundary
- Parcels

Zoning - Residential

- Residential Single Unit (R1)
- Residential, 1 acre (R1A)
- Residential, 2 acres (R2A)
- Residential, 3 acres (R3A)
- Residential Estate, 5 acres (RE-5)
- Residential Estate, 10 acres (RE-10)
- Residential Multi-Unit (RM)

Zoning - Other

- Agriculture Grazing 40-acres (AG-40)
- Commercial Mainstreet (CM)
- Industrial Low (IL)

SOURCE: ESRI Imagery 2023, Open Street Map 2019, El Dorado County 2022

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0 355 710 Feet

FIGURE 2-5

Zoning

Diamond Springs Community Park Project

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3. Environmental Setting, Impacts, and Mitigation Measures

3.0 Introduction to Analyses

This chapter provides a project-level analysis of the physical environmental effects of implementing the Diamond Springs Community Park Project (project). The following sections in this chapter evaluate the environmental impacts of the proposed project:

- 3.1 — Aesthetics
- 3.2 — Air Quality
- 3.3 — Biological Resources
- 3.4 — Cultural Resources and Tribal Cultural Resources
- 3.5 — Energy
- 3.6 — Geology and Soils
- 3.7 — Greenhouse Gas Emissions
- 3.8 — Hazards and Hazardous Materials
- 3.9 — Hydrology and Water Quality
- 3.10 — Noise and Vibration
- 3.11 — Public Services and Recreation
- 3.12 — Transportation
- 3.13 — Utilities and Service Systems
- 3.14 — Wildfire

Section Organization

Each environmental resource section listed above generally has a similar format as described below.

- **Existing Conditions.** This section provides a general overview of the existing physical environmental conditions related to the topic being addressed, based on the conditions present at the time that the Notice of Preparation (NOP) for the EIR was released (2023).
- **Regulatory Framework.** This section describes applicable federal, state, and local, laws and regulations relevant to the environmental resource topic and the proposed project.
- **Impacts and Mitigation Measures.** This section identifies thresholds of significance used to evaluate whether an impact is considered significant, based on standards derived from Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

This section first presents a discussion of the standards of significance for which no impacts have been identified, if any. The section then evaluates and analyzes project impacts, states the level of significance prior to mitigation, and proposes mitigation measures for significant impacts that would reduce such impacts to the furthest extent

feasible, if feasible. A statement regarding the level of significance of each impact after mitigation precedes the mitigation measures for that impact.

Cumulative impacts are discussed in each environmental resource section following the description of the project-specific impacts. The cumulative impact analysis considers the effects of the proposed project together with, and against the backdrop of, other past, present, or reasonably foreseeable future projects proposed in the project vicinity and region. The cumulative impact analysis is based on the same setting, regulatory framework, and significance thresholds presented for each respective resource topic. Additional mitigation measures may be identified if the analysis determines that the proposed project's incremental contribution to a significant cumulative impact would be cumulatively considerable and, therefore, significant in and of itself. Cumulative Impacts Overview, below describes the assumptions and methodology for assessing cumulative impacts.

Significance Determinations

In accordance with CEQA, specifically Public Resources Code Section 21068, a "significant effect on the environment" means a substantial or potentially substantial adverse change in the environment. The significance thresholds used for each environmental resource topic are presented in each section of this chapter immediately before the discussion of impacts. For each impact described, one of the following significance determinations is made:

- ***No Impact.*** This determination is made if there is no potential that the proposed project could affect the resource at issue.
- ***Less than Significant.*** This determination applies if there is a potential for some limited impact on a resource, but the impact is not significant in accordance with the significance standard.
- ***Less than Significant with Mitigation.*** This determination applies if there is the potential for a substantial adverse effect in accordance with the significance standard, but mitigation is available to reduce the impact to a less-than-significant level.
- ***Significant and Unavoidable.*** This determination applies to impacts that are significant, and for which there appears to be no feasible mitigation available to substantially reduce the impact.

Cumulative Impacts Overview

The section below presents the CEQA requirements pertaining to the cumulative analysis and the cumulative projects that have been considered in the cumulative impact analysis presented for each environmental resource topic.

CEQA Guidelines Requirements

CEQA Guidelines Section 15130(a) requires that an environmental impact report (EIR) discuss cumulative impacts of a project "when the project's incremental effect is cumulatively considerable." As defined in CEQA Guidelines Section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. Pursuant to CEQA Guidelines Section 15065(a)(3), "cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider the effect significant.

CEQA requires an evaluation of cumulative impacts when they are significant. When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR

shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR. Furthermore, according to CEQA Guidelines Section 15130 (a)(1), there is no need to evaluate cumulative impacts to which the project does not contribute.

An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus not significant when, for example, a project funds its fair share of a mitigation measure designed to alleviate the cumulative impact. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide detail as great as that provided for the impacts that are attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness and should focus on the cumulative impact to which the identified project contributes.

Cumulative Projects and Scope of Analysis

The analysis of cumulative impacts may consider either (1) a list of past, present, and probable future projects producing cumulative impacts or (2) a summary of growth projections contained either in an adopted plan that evaluates conditions contributing to cumulative impacts or in a certified environmental document for such a plan. Examples of plans that can be used for such purposes include a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. Projects that are relevant to the cumulative analysis include projects that could:

- Contribute incremental environmental effects on the same resources as, and would have similar impacts to, those discussed in this EIR applicable to the proposed project.
- Be located within the defined geographic scope for the cumulative effect. The defined geographic scope is dependent on the environmental resource affected.
- Contribute impacts that coincide with proposed project impacts during either construction (short-term) or operation (long-term).

This EIR uses a list-based approach for the development of the cumulative projects. All recently approved and pending projects in the Diamond Springs Planning area were reviewed. The following projects were identified:

1. Diamond Springs Parkway Project
2. Dorado Oaks Tentative Subdivision Map Project
3. Mercy El Dorado Haven Apartments

Project 1 is part of the Transportation and Circulation Element of the County General Plan consisting of a future four-lane divided roadway connecting Missouri Flat Road to State Route 49 (SR-49). The project includes realignment and widening of SR-49, between Pleasant Valley Road and Bradley Drive, approximately 1.3 miles northeast of the Diamond Springs Community Park project Site. Phase 1A of the project was completed in 2022 and Phase 1B construction is anticipated to begin in 2024.

Project 2 is a 142.5 acre, 382-lot residential subdivision located approximately .6-mile east, along the west side of Faith Lane, just south of SR 49. The project includes off-site improvements including the State Route 49 Intersection

and the Optional Fowler Lane Improvement Area. A provision of a 3.1-acre public park would also be included as a project component. A notice of completion was filed for the proposed project.

Project 3 is a 4.66-acre, 65-unit apartment complex located just north of the Diamond Springs Community Park project site (approximately 335 feet). The project is located on the east side of Pleasant Valley Road and State Route 49, approximately 700 feet east of the intersection with Oak Dell Road. In addition to the construction of 65 apartment units, the project includes 316 off-street parking spaces, a children's play area, landscaping, signage, and open space areas. The project plans have been approved by El Dorado County.

3.1 Aesthetics

This section describes the existing aesthetic conditions of the proposed project site and vicinity, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant impacts related to implementation of the proposed Diamond Springs Community Park Project (project).

Scoping comments related to aesthetics included removal of oak trees, lighting, and the design of perimeter fencing. Scoping letters are provided in Appendix A of this EIR.

3.1.1 Existing Conditions

3.1.1.1 Visual Character

Project Vicinity and Surrounding Area

The proposed project is located within Diamond Springs, a census-designated place within unincorporated El Dorado County. The county has a broad range of landscapes that change with the gradual increase in elevation. Elevations range from 200 feet in the western rolling foothills, adjacent to Sacramento County, to more than 10,000 feet along the Sierra Nevada crest on the edge of the Lake Tahoe Basin. The diverse environments of the region are represented by distinct natural communities and landforms that display different development patterns and historical features. Rolling hills dotted with mature oaks and oak woodlands, agricultural land, orchards and vineyards, evergreen forests and snow-capped mountains, scenic rivers, alpine lakes, and historic structures all contribute to the visual character of the county (El Dorado County 2003).

The visual character of the project area includes undeveloped/open space, educational/school uses, as well as residential uses. Structures surrounding the project site generally consists of a single level story. Other built features include roads, fencing, and power lines.

Project Site

The community of Diamond Springs is situated about 1.5 miles south of Placerville and Interstate 50 (I-50). The project site is located in the western portion of Diamond Springs at 3447 Clemenger Drive, which consists of two undeveloped, contiguous parcels, totaling 39.59-acres The project site, which is accessible via Highway 49 (Hwy 49) and Oak Dell Road, features grassland, various oaks, and wetlands.

The project site is bounded by the Lake Oaks Senior Mobile Home Park to the north, which surrounds Patterson Lake, a clinical office, Snowline Hospice, to the northeast, along with two residential properties located off Farnsworth Lane. The former Charles F. Brown Elementary School as well as several residential properties are located west of the site, while Union Mine High School and Virtual Academy High School adjoin the project site to the southwest. A single residence is located on the southern adjoining property, near the southwest corner of the project site. Other areas that bound the project site to the south and east consists of vacant/undeveloped property. Surrounding uses within the project area include academic, residential, office/commercial, and undeveloped uses.

The project site is located in the western foothills of the Sierra Nevada Mountains, in the Cosumnes River watershed, and includes the centrally located El Dorado Irrigation District (EID) lift station and Deadman Creek. The

stream is located within the southeastern portion of the site and flows in a southern direction from the northeast to south boundary of the Project site. The topography of the project site ranges in elevation from approximately 1670 -1720 feet. Several vegetation communities and land cover types were documented in the Project site including: Baltic and Mexican rush marsh, interior live oak woodland and forest, blue oak woodland and forest, and wild oats and annual brome grassland. A total of 131 species of native or naturalized plants, 80 native (61%) and 51 non-native (39%), were recorded at the Project site. The locations of the vegetation communities within the project site are as follows: Wild oats and annual brome grassland occurs in the southern, the Baltic and Mexican rush marsh occurs in two wetted meadows in the northwestern and south-central areas, mixed oak woodland and forest occurs in the north and central areas, Shreve oak woodland and forest occurs in the northern, Blue oak woodland and forest occurs in the southwestern areas, and Blue oak and valley oak woodland and forest occurs in the eastern areas of the Project site.

At the project site there are 1.93 acres of aquatic resources including Deadman Creek, ephemeral drainage, two drainage ditches, two freshwater emergent wetlands, and two seasonal wetlands. The two freshwater emergent wetlands correspond to the Baltic and Mexican rush marsh and are dominated by Baltic rush and field sedge. The two seasonal wetlands are associated with an offsite drainage ditch that transfers rainwater and irrigation runoff from adjacent parcels south towards Deadman Creek. The one intermittent channel (Deadman Creek) channel ranges from 1 to 4 feet in width through the Project site and becomes more incised and rockier as it travels south. The margin of the channel was dominated by Douglas meadowfoam, Italian ryegrass, Baltic rush, and seep monkeyflower (*Erythrante gutatta*). The one ephemeral drainage in the project site channel is dependent on inputs during rain events and runoff from the surrounding uplands. The channel is dominated by non-native upland grasses and surrounded by grassland and oak woodland species. The two drainage ditches are both man-made and channel water in an easterly direction towards Deadman Creek. Both drainage ditches are linear depressions constructed in grassland and had water at the time of the survey with the banks containing hydrophytic plant species such as tall flatsedge (*Cyperus eragrostis*) and annual rabbitsfoot grass (*Polypogon monspeliensis*).

3.1.1.2 Scenic Resources

Scenic Vistas

No designated scenic vistas are within the project viewshed. Short distance views to and from the project site consist of nearby developed and undeveloped uses. Long distance views are generally shielded due to the presence of mature trees within the project site and surrounding areas.

Scenic Highways

Multiple highways in El Dorado County have been designated by the California Department of Transportation (Caltrans) as scenic highways or are eligible for such designation. The following state scenic highways have been designated in the county: U.S. Route 50 from the eastern limits of the Government Center interchange (Placerville Drive/Forni Road) in Placerville to South Lake Tahoe, and all of SR 89 (Caltrans 2023). U.S. Route 50 is located approximately 2.25 miles north of the project site and SR 89 is located approximately 43 miles northeast of the project site.

3.1.1.3 Light and Glare

Existing sources of light within the project vicinity can be observed through surrounding uses, including existing buildings and exterior lighting associated with educational uses, residences, and the Lake Oaks Senior Mobile

Home, north of the site. Existing sources of glare are limited, however, could be experienced through reflective surfaces along building exteriors (i.e., windows, metal roofing).

3.1.2 Regulatory Setting

3.1.2.1 Federal

There are no federal regulations pertaining to visual resources that are applicable to the proposed project.

3.1.2.2 State

California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. These highways are identified in Section 263 of the Streets and Highways Code. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. When a city or county nominates an eligible scenic highway for official designation, it must identify and define the scenic corridor of the highway. A scenic corridor is the land generally adjacent to and visible from the highway. A scenic corridor is identified using a motorist's line of vision. A reasonable boundary is selected when the view extends to the distant horizon. The corridor protection program does not preclude development but seeks to encourage quality development that does not degrade the scenic value of the corridor. Jurisdictional boundaries of the nominating agency are also considered. The agency must also adopt ordinances to preserve the scenic quality of the corridor or document such regulations that already exist in various portions of local codes. These ordinances make up the scenic corridor protection program. County roads can also become part of the Scenic Highway System. To receive official designation, the county must follow the same process required for official designation of State Scenic Highways. As described above, the nearest eligible scenic highways relative to the project is U.S. Route 50, located approximately 2.25 miles north of the project site.

3.1.2.3 Local

El Dorado County General Plan

The following policies from the Land Use Element and Open Space and Conservation Element of the El Dorado County General Plan are applicable to visual resources within and in the vicinity of the project site.

> Policy 2.8.1.1. Development shall limit excess nighttime light and glare from parking area lighting, signage, and buildings. Consideration will be given to design features, namely directional shielding for street lighting, parking lot lighting, sport field lighting, and other significant light sources, that could reduce effects from nighttime lighting. In addition, consideration will be given to the use of automatic shutoffs or motion sensors for lighting features in rural areas to further reduce excess nighttime light.

Policy 7.3.3.5. Rivers, streams, lakes and ponds, and wetlands shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site while disturbance to the resource is avoided or minimized, and fragmentation is limited.

Policy 7.3.4.1. Natural watercourses shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site without disturbance.

Policy 7.6.1.1. The General Plan land use map shall include an Open Space land use designation. The purpose of this designation is to implement the goals and objectives of the Land Use and the Conservation and Open Space Elements by serving one or more of the purposes stated below. In addition, the designations on the land use map for Rural Residential and Natural Resource areas are also intended to implement said goals and objectives. Primary purposes of open space include:

A. Conserving natural resource areas required for the conservation of plant and animal life including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, banks of rivers and streams and watershed lands;
B. Conserving natural resource lands for the managed production of resources including . forest products, rangeland, agricultural lands important to the production of food and fiber; and areas containing important mineral deposits;
C. Maintaining areas of importance for outdoor recreation including areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes including those providing access to lake shores, beaches and rivers and streams; and areas which serve as links between major recreation and open space reservations including utility easements, banks of rivers and streams, trails and scenic highway corridors;
D. Delineating open space for public health and safety including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs, and areas required for the protection and enhancement of air quality; and
E. Providing for open spaces to create buffers which may be landscaped to minimize the adverse impact of one land use on another.

El Dorado County Standards and Ordinances

The County has several standards and ordinances that address issues relating to visual resources. Many of these can be found in the County Zoning Ordinance (Title 130 of the County Code). The Zoning Ordinance consists of descriptions of the zoning districts, including identification of uses allowed by right or requiring a special-use permit and specific development standards that apply in particular districts based on parcel size and land use density. These development standards often involve limits on the allowable size of structures, required setbacks, and design guidelines.

Chapter 130.30 of the Zoning Ordinance contains general requirements for various types of development in the county, including standards regulating materials, parking, setbacks, frontage design, landscaping, and other design elements. The Zoning Ordinance establishes outdoor lighting standards, and requires that all outdoor lighting shall be located, adequately shielded, and directed such that no direct light falls outside the property line, or into the public right-of-way. It also references the adopted Outdoor Lighting Standards, which provide outdoor lighting criteria for lighting practices and systems.

Development projects in the County subject to discretionary review, such as the proposed project, are typically subject to design review to ensure the development is consistent with applicable plans and design standards and is compatible with surrounding development. The aspects of design considered in the design review process include architectural design, site design, adequacy of streets and accessways for all modes of travel, energy consumption, protection of environmentally sensitive features, safety, noise, and other relevant considerations.

3.1.3 Environmental Impacts and Mitigation Measures

3.1.3.1 Thresholds of Significance

The Thresholds of Significance criteria used to evaluate the project's impacts to Public Services and Recreation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to public services and recreation would occur if the project would:

A. Have a substantial adverse effect on a scenic vista.
B. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
C. In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality.
D. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Areas of No Impact

As evaluated in the Initial Study (Appendix A) as part of the scoping process, the project would have no impact with respect to the first two criteria, scenic vistas and scenic highways. Therefore, these topics are not discussed further in this EIR.

3.1.3.2 Analytical Methods

This impact evaluation for aesthetics is based on visual simulations and photometric plans (for lighting) prepared for the project. These analyses were compared to review of project site aerials, site conditions, and vantage points via Google Earth. Additional information has been gathered from Caltrans scenic highway data, the El Dorado County General Plan, the El Dorado County Parks and Trails Master Plan, and the El Dorado County General Plan EIR. Impacts were determined based on the character and quality of existing visual resources, the degree of anticipated change, and public views (the sensitivity and exposure of viewer groups).

3.1.3.3 Project Impact Analysis

The proposed project would have less than significant impacts with respect to the following thresholds of significance as described below.

Impact AES-1 The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings (in a nonurbanized area).

The proposed project will affect the existing visual character of the site as the project would change the landscape of the site, by going from a naturally vegetated area to a developed area (See Figure 3.1-1 Aerial View). Construction of the fields and associated facilities will require the removal and clearing of vegetation, which will change the visual characteristics of the existing site. The primary public view would be from Oak Dell Road, Snoopy Road, and the surrounding schools (those at former Charles F. Brown Elementary School and Union Mine High School). The introduction of recreational facilities would change the undeveloped character of the project site (which includes the existing EIR lift station but no other structures). New visual features would include paved parking areas, play fields, courts (tennis, basketball, and sand volleyball), lighting, and structures (including a gymnasium, restrooms, shade structures, picnic areas, and storage). The area east of Deadman Creek would remain undeveloped.

Viewer groups would include motorists on Oak Dell Road and Snoopy Road (primarily traffic to and from the schools and nearby residences) and students and staff of the schools. Private residential viewers include the mobile home park to the northeast, scattered low density development, and the Snowline Hospice to the northwest. Views from private viewers would be at least partially obscured by existing and proposed vegetation (see Figure 3.1-1). Views from the school would also be limited by existing and proposed vegetation. The visual character would not be too different from the school campuses themselves, although with more open space and fewer structures. For these reasons, the project is not expected to substantially degrade the character and quality of public views, and the project would have a **less than significant** impact.

Impact AES-2 The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The primary source of new light would be parking lot lighting and lighting of sport fields and courts. A photometric plan was prepared for this project. This lighting plan shows proposed lighting levels expressed in foot candles to illustrate the amount of light on and around the lighted fields. The plans show the lighting to be highly directional with no significant spillover onto adjacent properties. The proposed project would be compliant with El Dorado County Zoning Ordinance 130.34.020 Outdoor Lighting Standards: “All outdoor lighting shall be located, adequately shielded, and directed such that no direct light falls outside the property line, or into the public right-of-way”.

The project site is also surrounded by substantial tree cover and additional landscaping would be installed as part of the project. The vegetation would further reduce any indirect spillover of light onto adjacent properties. The combination of the lighting design and existing and proposed vegetation would result in light impacts from the proposed project being **less than significant**.

3.1.3.4 Cumulative Impacts

As discussed above, the project site is not within a scenic vista or scenic highway corridor, and thus would not result in a cumulative impact to those sources. The nature of the project location, including topography and vegetation, serves to minimize the cumulative impact of changes to the character and quality of the visual environment.

Artificial lighting can lead to a cumulative impact to night time views (sometimes referred to as “sky glow”). The County’s lighting ordinance (Section 130.34.020) is designed to reduce the cumulative impact of night time lighting on the County’s visual quality. Combined with the location of the project site, the implementation of the County lighting standards is expected to result in **less than significant** cumulative lighting impacts.

3.1.3.5 Mitigation Measures

No mitigation measures required.

3.1.4 References

California Department of Transportation. 2023. California Scenic Highway System Map. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed: April 18, 2023.

El Dorado County. 2021. Dorado Oaks Draft EIR. SCH # 2019071041. July 2021.

El Dorado County. 2004. *2004 El Dorado County General Plan.* Adopted June 19, 2004.

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FIGURE 3.1-1

Aerial Viewpoint

Diamond Springs Community Park Project

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3.2 Air Quality

This section describes the existing air quality conditions of the Diamond Springs Community Park Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant impacts related to implementation of the project. The analysis is based on the air quality modeling for the project, as part of the preparation of this environmental impact report (EIR). The results of the air quality modeling are summarized in this section and are included in Appendix B. No comments were received during the scoping period for this EIR that pertain to air quality.

3.2.1 Existing Conditions

3.2.1.1 Meteorological and Topographical Conditions

The project is located within the Mountain Counties Air Basin (MCAB) portion of El Dorado County. As summarized in the *Guide to Air Quality Assessment – Determining Significance of Air Quality Impacts Under the California Environmental Quality Act* (Guide to Air Quality Assessment) (EDCAQMD 2002), the MCAB comprises the mountainous area of the central and northern Sierra Nevada Mountains, from Plumas County to Mariposa County. Elevations within MCAB range from several hundred feet above mean sea level (amsl) in the foothills to over 10,000 feet amsl along the Sierra Crest. The general climate of the MCAB varies considerably with elevation and proximity to the Sierra ridge. The pattern of mountains and hills causes a wide variation in rainfall, temperature, and localized winds throughout the MCAB. Temperature variations have an important influence on basin wind flow, dispersion along mountain ridges, vertical mixing, and photochemistry. The Sierra Nevada receives large amounts of precipitation from storms moving in from the Pacific in the winter, with lighter amounts from intermittent "Monsoonal" moisture flows from the south and cumulus buildup in the summer. Precipitation levels are high in the highest mountain elevations but decline rapidly toward the western portion of the basin. Winter temperatures in the mountains can be below freezing for weeks at a time, and substantial depths of snow can accumulate, but in the western foothills, winter temperatures usually dip below freezing only at night and precipitation is mixed as rain or light snow. In the summer, temperatures in the mountains are mild, with daytime peaks in the 70s to low 80s degrees Fahrenheit, but the western end of the county can routinely exceed 100 degrees Fahrenheit (EDCAQMD 2002).

From an air quality perspective, the topography and meteorology of the MCAB combine such that local conditions predominate in determining the effect of emissions in the basin. Regional airflows are affected by the mountains and hills, which direct surface air flows, cause shallow vertical mixing, and create areas of high pollutant concentrations by hindering dispersion. Inversion layers, where warm air overlays cooler air, frequently occur and trap pollutants close to the ground. In the winter, these conditions can lead to carbon monoxide (CO) "hotspots" along heavily traveled roads and at busy intersections. During summer's longer daylight hours, stagnant air, high temperatures, and plentiful sunshine provide the conditions and energy for the photochemical reaction between reactive organic gases (ROG) and oxides of nitrogen (NO_x) that results in the formation of ozone (O_3). Because of its long formation time, O_3 is a regional pollutant rather than a local hotspot problem. In the summer, the strong upwind valley air flowing into the basin from the Central Valley to the west is an effective transport medium for O_3 precursors and ozone generated in the Bay Area and the Sacramento and San Joaquin valleys. These transported pollutants predominate as the cause of O_3 in the MCAB and are largely responsible for the exceedances of the state and federal O_3 ambient air quality standards (AAQS) in the MCAB. The California Air Resources Board (CARB) has officially designated the MCAB as O_3 impacted by transport from those areas (EDCAQMD 2002).

3.2.1.2 Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The national and California standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, nitrogen dioxide (NO_2), CO, sulfur dioxide (SO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. These pollutants, as well as toxic air contaminants (TACs), are discussed in the following paragraphs. [1]

Ozone

O_3 is a strong-smelling, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors. These precursors are mainly NO_x and ROG. The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere O_3 layer (stratospheric O_3) and at the Earth's surface in the troposphere (ground-level O_3).[2] The O_3 that the U.S. Environmental Protection Agency (EPA) and CARB regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O_3 is a harmful air pollutant that causes numerous adverse health effects and is thus considered "bad" O_3. Stratospheric, or "good," O_3 occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O_3 layer, plant and animal life would be seriously harmed.

O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2013). These health problems are particularly acute in sensitive receptors such as the sick, the elderly, and young children.

Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing, and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in and cause shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. While there are relatively few studies of O_3's effects on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale

1 The descriptions of the criteria air pollutants and associated health effects are based on the EPA's Criteria Air Pollutants (EPA 2022), CARB's Glossary of Air Pollutant Terms (CARB 2019a), and CARB's "Fact Sheet: Air Pollution Sources, Effects and Control" (CARB 2009).

2 The troposphere is the layer of the Earth's atmosphere nearest to the surface of the Earth. The troposphere extends outward about 5 miles at the poles and about 10 miles at the equator.

more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents, and adults who exercise or work outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2019b).

Nitrogen Dioxide and Oxides of Nitrogen

NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide, which is a colorless, odorless gas. NO_x, which includes NO_2 and nitric oxide, plays a major role, together with ROG, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources of NO_x are transportation and stationary fuel combustion sources (such as electric utility and industrial boilers).

A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the ambient air quality standards (AAQS) for NO_2, results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher levels of exposure compared to children with lower exposure levels. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2019c).

Carbon Monoxide

CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent. Notably, because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots is steadily decreasing.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress.

Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2019d).

Sulfur Dioxide

SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the non-asthmatic population. Effects of 1-hour exposure at levels near the 1-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath, and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 part per million) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. The elderly and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2019e).

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in particulate matter (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in airflow resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides, NO_x, and ROG.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. PM_{10} tends to collect in the upper portion of the respiratory system, whereas $PM_{2.5}$ is small enough

to penetrate deeper into the lungs and damage lung tissue. Suspended particulates also produce haze and reduce regional visibility and damage and discolor surfaces on which they settle.

A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24-hour duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days.[3] These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2017).

Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer (CARB 2017).

Lead

Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and, in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood because children are highly susceptible to the effects of lead. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Sulfates

Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere and can result in respiratory impairment, as well as reduced visibility.

Vinyl Chloride

Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels

[3] "Restricted activity days" are days that an individual adjusts behavior based on health reasons, such as a work-loss or school-loss day.

of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide

Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles

Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$ described above.

Reactive Organic Gases

Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as ROGs [also referred to as volatile organic compounds (VOCs)]. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of ROGs result from the formation of O_3 and its related health effects. High levels of ROGs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate health standards for ROGs as a group.

Non-Criteria Air Pollutants

Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics “Hot Spots” Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the California State Legislature (Legislature) in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples of TACs include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health

effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced with either short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter

Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70th the diameter of a human hair), and thus is a subset of $PM_{2.5}$ (CARB 2019f). DPM is typically composed of carbon particles ("soot," also called black carbon) and numerous organic compounds, including over 40 known carcinogenic organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2019d). CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM) (17 CCR Section 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars; and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of $PM_{2.5}$, DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2019f). Those most vulnerable to non-cancer health effects are children, whose lungs are still developing, and the elderly, who often have chronic health problems.

Naturally Occurring Asbestos

In El Dorado County, naturally occurring asbestos is another TAC of concern. Asbestos is the common name for a group of naturally occurring fibrous silicate minerals that can separate into thin but strong and durable fibers, with principal forms including chrysotile, crocidolite, amosite, tremolite, actinolite, and anthophyllite (OEHHA 2000). Naturally occurring asbestos is found in some areas throughout California, most commonly where ultramafic rock or serpentinite rock is present. When construction activities occur in areas with naturally occurring asbestos in the soils or rock, the asbestos fibers can become airborne and may be inhaled, which can cause chronic local inflammation and disrupt orderly cell division, both of which can facilitate the development of asbestosis (a noncancerous lung disease involving fibrotic scarring of the lungs) and cancer (OEHHA 2000).

Odorous Compounds

Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

3.2.1.3 Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. The term "sensitive receptors" is used to refer to facilities and structures where people who are sensitive to air pollution live or spend considerable amounts of time. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards (i.e., preschools and kindergarten through grade 12 schools), parks and playgrounds, daycare centers, nursing homes, hospitals, live in housing (i.e., prisons, dormitories, hospices, or similar), and residential communities (sensitive sites or sensitive land uses) (CARB 2005).

Sensitive receptors near the project site include existing residences in each direction, the nearest of which are adjacent to the northwest (Lake Oaks Senior Mobile Home) and southwest (along Snoopy Road) of the project boundary. The Snowline Hospice is located to the northwest. In addition, some of the Charter University Prep school and Union Mine High School facilities are adjacent to the project boundary. Finally, the Pacific Crest Academy is about 530 feet to the south of the project.

3.2.1.4 Regional and Local Air Quality Conditions

Mountain Counties Air Basin Attainment Designations

Pursuant to the 1990 federal Clean Air Act amendments, the EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as attainment for that pollutant. If an area exceeds the standard, the area is classified as nonattainment for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved maintenance plans to ensure continued attainment of the standards. Similar to the federal Clean Air Act, the California Clean Air Act designated areas as attainment or nonattainment, but based on California Ambient Air Quality Standards (CAAQS) rather than the NAAQS.

Table 3.2-1 identifies the current attainment status of the Air Basin, including the project area, with respect to the NAAQS and CAAQS, and the attainment classifications for the criteria pollutants. In summary, the western El Dorado County portion of the MCAB is designated as a nonattainment area for both federal and state O_3 standards, the state PM_{10} standard, and the federal $PM_{2.5}$ standard. El Dorado County is designated "unclassified" or "attainment" for all other criteria air pollutants (EPA 2023; CARB 2022).

Table 3.2-1. Mountain Counties Air Basin Attainment Status (Western El Dorado County)

Pollutant	Averaging Time	Designation/Classification
National Standards		
O_3	8 hours	Nonattainment/Serious (2015 NAAQS) Nonattainment/Severe (2008 NAAQS)

Table 3.2-1. Mountain Counties Air Basin Attainment Status (Western El Dorado County)

Pollutant	Averaging Time	Designation/Classification
NO_2	1 hour, annual arithmetic mean	Unclassifiable/Attainment
CO	1 hour; 8 hours	Unclassifiable/Attainment
SO_2	24 hours; annual arithmetic mean	Unclassifiable/Attainment
PM_{10}	24 hours	Unclassifiable/Attainment
$PM_{2.5}$	24 hours; annual arithmetic mean	Nonattainment/Moderate
Lead	Quarter; 3-month average	Unclassifiable/Attainment
California Standards		
O_3	1 hour; 8 hours	Nonattainment
NO_2	1 hour; annual arithmetic mean	Attainment
CO	1 hour; 8 hours	Unclassified
SO_2	1 hour; 24 hours	Attainment
PM_{10}	24 hours; annual arithmetic mean	Nonattainment
$PM_{2.5}$	Annual arithmetic mean	Unclassified
Lead	30-day average	Attainment
SO_4	24 hours	Attainment
H_2S	1 hour	Unclassified
Vinyl chloride	24 hours	No designation
Visibility-reducing particles	8 hours (10:00 a.m.–6:00 p.m.)	Unclassified

Sources: CARB 2022 (California); EPA 2023 (national).
Notes: O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SO_4 = sulfates; H_2S = hydrogen sulfide.

Local Ambient Air Quality

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across California. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. Table 3.2-2 presents the most recent background ambient air quality data for the nonattainment pollutants (i.e., O_3, PM_{10}, $PM_{2.5}$) from 2019 to 2021.[4] The nearest station that monitors O_3 in the MCAB is located at 561 Canal Street, Placerville, California (about 3.5 miles from the project). The nearest station that monitors PM_{10} is located at 151 N Sunrise Avenue, Roseville, California (about 24 miles from the project) and the nearest station that monitors $PM_{2.5}$ is located at 50 Natoma Street, Folsom, California (about 19 miles from the project). The data collected at these stations is considered generally representative of the air quality experienced in the vicinity of the project. This data is shown in Table 3.2-2 and includes the number of days that the ambient air quality standards were exceeded.

[4] There are no monitoring stations within the MCAB that monitor concentrations of NO_2 or CO.

Table 3.2-2. Local Ambient Air Quality Data

Averaging Time	Ambient Air Quality Standard	Measured Concentration and Exceedances by Year		
		2019	2020	2021
Ozone (O_3) – Placerville Monitoring Station				
Maximum 1-hour concentration (ppm)	0.09 ppm (state)	0.081	0.127	0.090
Number of days exceeding state standard (days)		*0*	*4*	*0*
Maximum 8-hour concentration (ppm)	0.070 ppm (state)	0.076	0.101	0.080
	0.070 ppm (federal)	0.075	0.101	0.080
Number of days exceeding state standard (days)		*4*	*20*	*10*
Number of days exceeding federal standard (days)		*4*	*20*	*10*
Coarse Particulate Matter (PM_{10}) – Roseville Monitoring Station				
Maximum 24-hour concentration (µg/m³)	50 µg/m³ (state)	63.1	244.3	150.7
	150 µg/m³ (federal)	61.3	251.8	155.7
Number of days exceeding state standard[a]		*2.0 (2)*	*38.0 (36)*	*11.0 (10)*
Number of days exceeding federal standard[a]		*0.0 (0)*	*5.3 (5)*	*1.1 (1)*
Annual concentration (state method) (µg/m³)	20 µg/m³ (state)	15.4	27.7	21.1
Fine Particulate Matter ($PM_{2.5}$) – Folsom Monitoring Station				
Maximum 24-hour concentration (µg/m³)	35 µg/m³ (federal)	25.4	19.6	265.7
Number of days exceeding federal standard[a]		*ND (0)*	*ND (0)*	*10.0 (10)*
Annual concentration (µg/m³)	12 µg/m³ (state)	ND	ND	9.3
	12.0 µg/m³ (federal)	ND	ND	10.3

Sources: CARB 2023.

Notes: ppm = parts per million; µg/m³ = micrograms per cubic meter; ND = insufficient data available to determine the value.

Data taken from CARB iADAM (http://www.arb.ca.gov/adam) and EPA AirData (http://www.epa.gov/airdata/) represent the highest concentrations experienced over a given year.

Exceedances of national and California standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed national or California standards during the years shown. There is no national standard for 1-hour ozone, annual PM_{10}, or 24-hour SO_2, nor is there a state 24-hour standard for $PM_{2.5}$.

Placerville Monitoring Station is located at 561 Canal Street, Placerville CA 95667.

Roseville Monitoring Station is located at 151 N Sunrise Ave, Roseville CA 95661.

Folsom Monitoring Station is located at 50 Natoma St, Folsom CA 95630.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard. Notably, the California $PM_{2.5}$ standard is based on annual concentrations and does not have daily exceedance information.

3.2.2 Regulatory Framework

3.2.2.1 Federal

Criteria Air Pollutants

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the Clean Air Act, including setting NAAQS for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

Hazardous Air Pollutants

The 1977 federal Clean Air Act amendments required the EPA to identify National Emission Standards for HAPs to protect public health and welfare. HAPs include certain VOCs, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act Amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

3.2.2.2 State

Criteria Air Pollutants

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. As stated previously, an ambient air quality standard defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. For each pollutant, concentrations must be below the relevant CAAQS before an air basin can attain the corresponding CAAQS. Air quality is considered in attainment if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.

California air districts typically based their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date when attainment will be achieved in the Air Basin for the NAAQS or CAAQS. Thresholds established by air districts are protective of human health, as they are based on attainment of the ambient air quality standards, which reflect the maximum pollutant levels in the outdoor air that would not result in harm to the public's health. Table 3.2-3 presents the NAAQS and CAAQS.

Table 3.2-3. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentrations[c]	Primary[c,d]	Secondary[c,e]
O_3	1 hour	0.09 ppm (180 µg/m³	—	Same as Primary[f]
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
NO_2	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (137 µg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)[h]	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}	24 hours	50 µg/m³	150 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m³	—	
$PM_{2.5}$	24 hours	—	35 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m³	12.0 µg/m³ [i]	15.0 µg/m³
Lead	30-day Average	1.5 µg/m³	—	
	Calendar Quarter	—	1.5 µg/m³ (for certain areas)[k]	
	Rolling 3-Month Average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—
Vinyl Chloride	24 hours	0.01 ppm (26 µg/m³)[j]	—	—
Sulfates	24 hours	25 µg/m³	—	—

Table 3.2-3. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentrations[c]	Primary[c,d]	Secondary[c,e]
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	

Source: CARB 2016.
Notes: ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; mg/m³= milligrams per cubic meter.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility-reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in 17 CCR Section 70200.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[e] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[f] On October 1, 2015, the primary and secondary NAAQS for O_3 were lowered from 0.075 ppm to 0.070 ppm.

[g] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[h] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated non-attainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[j] CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies about 200 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs. In 1987, the Legislature enacted the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere.

AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). The regulation is anticipated to result in an 80-percent decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment Program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several airborne toxic control measures (ATCMs) that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR Section 2449 et seq.), In-Use On-Road Diesel-Fueled Vehicles (13 CCR Section 2025), and Limit Diesel-Fueled Commercial Motor Vehicle Idling (13 CCR Section 2485).

Asbestos is strictly regulated due to its serious adverse health effects, including asbestosis and lung cancer, and based on its natural widespread occurrence and its use as a building material. CARB has established two ATCMs for naturally occurring asbestos. The first asbestos ATCM applies to Surfacing Applications (e.g., restricts the content of asbestos material used in surfacing applications, such as unpaved roads and parking lots), and the second asbestos ATCM is for Construction, Grading, Quarrying and Surface Mining Operations (i.e., requires implementation mitigation measures to minimize asbestos-laden dust during these activities). Pursuant to the ATCM for Construction, Grading, Quarrying and Surface Mining Operations, an Asbestos Dust Mitigation Plan is required for any project with greater than 1 acre of surface disturbance if any portion of the area to be disturbed is mapped as having serpentine or ultramafic rock, or if any portion of the area to be disturbed has naturally occurring asbestos as determined by the owner/operator or the Air Pollution Control Officer. The Asbestos Dust Mitigation Plan, which must include dust mitigation practices that are sufficient to ensure that no equipment or operation emits dust that is visible crossing the property line, would be required to be submitted to and approved by the local air district before any clearing, grading, or construction begins.

California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property (Health and Safety Code Section 41700). This section also applies to sources of objectionable odors.

3.2.2.3 Regional

El Dorado County Air Quality Management District

The El Dorado County Air Quality Management District (EDCAQMD) is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the MCAB, where the

project is located. The MCAB portion of El Dorado County lies within the area designated by the EPA as the Sacramento Federal Ozone Nonattainment Area (SFONA), comprised of Sacramento and Yolo counties, and parts of El Dorado, Solano, Placer, and Sutter counties.

The clean air strategy of the EDCAQMD includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the Clean Air Act and California Clean Air Act.

The Sacramento region is classified as a severe nonattainment area for the 2008 NAAQS. The EDCAQMD along with the other air districts which comprise the SFONA, developed the *Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (Ozone Attainment Plan) to demonstrate attainment of the 2008 8-hour NAAQS by an attainment year of 2024 (EDCAQMD *et al.* 2017). This plan was approved by EDCAQMD and the other air districts that comprise the SFONA on August 24, 2017. The Ozone Attainment Plan was adopted by CARB on November 16, 2017, which was then forwarded to EPA.

Air districts within the Sacramento Federal Nonattainment Area for $PM_{2.5}$ (SFNA-$PM_{2.5}$) prepared the *$PM_{2.5}$ Implementation/Maintenance Plan and Redesignation Request for Sacramento $PM_{2.5}$ Nonattainment Area* ($PM_{2.5}$ Maintenance Plan) to address how the region attained and would continue to attain the 24-hour $PM_{2.5}$ standard (EDCAQMD *et al.* 2013). Further, on May 10, 2017, EPA found that the SFNA-$PM_{2.5}$ attained the 2006 24-hour $PM_{2.5}$ NAAQS by the attainment date of December 31, 2015. The $PM_{2.5}$ Maintenance Plan will be updated and submitted in the future based on the clean data finding made by the EPA.

The EDCAQMD has adopted rules and regulations as a means of implementing the air quality plans for El Dorado County and has also prepared the Guide to Air Quality Assessment, which provides quantitative emission thresholds and established protocols for the analysis of air quality impacts from project and plans. The Guide to Air Quality Assessment outlines quantitative and qualitative significance criteria, methodologies for the estimation of construction and operational emissions and mitigation measures to reduce significant impacts (EDCAQMD 2002).

The EDCAQMD rules applicable to the project include the following:

- **Rule 205 – Nuisance.** This rule prohibits the discharge from any source such as quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property.
- **Rule 215 – Architectural Coatings.** This rule requires manufacturers, distributors, and users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of use of these coatings by placing limits on the VOC content of various coating categories.
- **Rule 223 – Fugitive Dust.** This rule governs the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. It applies to any construction or construction related activities including but not limited to, land clearing, grubbing, scraping, travel on site, and travel on access roads.
- **Rule 223-1 – Fugitive Dust – Construction.** This rule requires a Fugitive Dust Control Plan be submitted to the Air Pollution Control Officer prior to the start of any construction activity for which a grading permit was issued by El Dorado County.

- **Rule 223-2 – Fugitive Dust – Asbestos Hazard Mitigation.** This rule reduces the amount of asbestos particulate matter that may be released as a result from construction related activities through the use of required actions or mitigation.
- **Rule 224 – Cutback and Emulsified Asphalt Paving Materials.** This rule governs the use of asphalt and limits the VOC content in asphalt.

El Dorado County General Plan

The following are applicable goals and policies from the Public Health, Safety, and Noise Element of the General Plan (El Dorado County 2019), which was updated in August 2019. The most relevant goals, objectives, and policies are listed below.

Goal 6.7. Air Quality Maintenance. Strive to achieve and maintain ambient air quality standards established by the EPA and CARB and minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors.

Objective 6.7.1. Adopt and enforce Air Quality standards to reduce the health impacts caused by harmful emissions.

Policy 6.7.1.1. Improve air quality through land use planning decisions.

Policy 6.7.1.2. Support local and regional air quality improvement efforts.

Objective 6.7.2. Reduce motor vehicle air pollution by developing programs aimed at minimizing congestion and reducing the number of vehicle trips made in the County and encouraging the use of clean fuels.

Policy 6.7.2.2. Encourage, both through County policy and discretionary project review, the use of staggered work schedules, flexible work hours, compressed work weeks, teleconferencing, telecommuting, and carpool/van pool matching as ways to reduce peak-hour vehicle trips.

Policy 6.7.2.3. To improve traffic flow, synchronization of signalized intersections shall be encouraged as a means to reduce congestion, conserve energy, and improve air quality.

Policy 6.7.2.5. Upon reviewing projects, the County shall support and encourage the use of, and facilities for, alternative-fuel vehicles to the extent feasible. The County shall develop language to be included in County contract procedures to give preference to contractors that utilize low-emission heavy-duty vehicles.

Policy 6.7.2.6. The County shall investigate the replacement of its fleet vehicles with more fuel-efficient alternative fuel vehicles (e.g., liquid natural gas, fuel cell vehicles).

Objective 6.7.6. Separate air pollution sensitive land uses from significant sources of air pollution.

Policy 6.7.6.1. Ensure that new facilities in which sensitive receptors are located (e.g., schools, childcare centers, playgrounds, retirement homes, and hospitals) are sited away from significant sources of air pollution.

Objective 6.7.7. Reduce construction related, short-term emissions by adopting regulations which minimize their adverse effects.

Policy 6.7.7.1. The County shall consider air quality when planning the land uses and transportation systems to accommodate expected growth, and shall use the recommendations in the most recent version of the El Dorado County Air Quality Management (AQMD) Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act, to analyze potential air quality impacts (e.g., short-term construction, long-term operations, toxic and odor-related emissions) and to require feasible mitigation requirements for such impacts. The County shall also consider any new information or technology that becomes available prior to periodic updates of the Guide. The County shall encourage actions (e.g., use of light-colored roofs and retention of trees) to help mitigate heat island effects on air quality.

3.2.3 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts associated with the project related to air quality. The section identifies the thresholds of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the project's impacts and contribution to significant cumulative impacts, if any are identified. Mitigation measures are presented for identified significant or potentially significant impacts, and the level of significance with mitigation also is identified.

3.2.3.1 Thresholds of Significance

The thresholds of significance used to evaluate the impacts of the project related to air quality are based on Appendix G of the CEQA Guidelines, as listed below. A significant impact would occur if the project would:

A. Conflict with or obstruct implementation of the applicable air quality plan.
B. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
C. Expose sensitive receptors to substantial pollutant concentrations.
D. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

In addition, Appendix G of the CEQA Guidelines indicates that, where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to determine whether the proposed project would have a significant impact on air quality. The EDCAQMD Guide to Air Quality Assessment provides quantitative emission thresholds and established protocols for the analysis of air quality impacts from projects and plans. Project related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 3.2-4 are exceeded.

A project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O_3 (see Table 3.2-3), which is a nonattainment pollutant, if the project's construction or operational emissions would exceed the EDCAQMD ROG or NO_x thresholds shown in Table 3.2-4. These emission-based thresholds for O_3 precursors are intended to serve as a surrogate for an "O_3 significance threshold" (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly (see the previous discussion of O_3 and its sources), and the effects of an individual project's emissions of O_3 precursors (ROG and NO_x) on O_3 levels in ambient air cannot be reliably and meaningfully determined through air quality models or other quantitative methods. According to the

EDCAQMD, if ROG and NO_x are less than significant during construction and operations, then exhaust CO, SO_x, PM_{10}, and $PM_{2.5}$ would also be less than significant (Serieh 2023).

Table 3.2-4. EDCAQMD Air Quality Significance Thresholds

Pollutant	Construction	Operation
Criteria Pollutants Mass Daily Thresholds		
ROG	82 lbs/day	82 lbs/day
NO_x	82 lbs/day	82 lbs/day

Source: EDCAQMD 2002.
Notes: EDCAQMD = El Dorado County Air Quality Management District; lb/day = pounds per day; ROG = Reactive Organic Gases; NO_x = nitrogen oxides

Regarding dust particulates, the EDCAQMD Guide to Air Quality Assessment includes a screening method to conclude that fugitive dust PM_{10} is less than significant based on implementation of mitigation measures "that will prevent visible dust beyond the project property lines, in compliance with Rule 403 of the South Coast AQMD" (EDCAQMD 2002). As $PM_{2.5}$ is a subset of PM_{10} emissions, if PM_{10} emissions are controlled to a less than significant level, then $PM_{2.5}$ levels would also be anticipated to be less than significant.

For TACs, the following two alternative significance criteria from the EDCAQMD are used. Exceeding either of these criteria will lead to a conclusion that a project has a significant impact with respect to TACs:

1. Cancer Risk: The lifetime probability of contracting cancer of greater than 10 in 1 million; or
2. Non-Cancer Risk: Hazard Index of 1 or more for acute (short-term) and chronic (long-term) effects.[5]

For context, the National Cancer Institute estimates that approximately 39.5% of people will be diagnosed with cancer during their lifetimes (National Cancer Institute 2020). A cancer risk of 10 in a million indicates that a person has an additional risk of 10 chances in a million (0.001%) of developing cancer during their lifetime as a result of the air pollution scenario being evaluated, which is minimal and defined as the "No Significant Risk Level" for carcinogens in Proposition 65.

3.2.3.2 Analytical Methods

Potential impacts related to air quality were identified using modeling. Specifically, emissions from construction and operation of the Project and existing land uses were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.[6] CalEEMod input parameters, including the project land use type and size and construction schedule, were based on information provided by the County, or default model assumptions if project specifics were unavailable. The results of the air quality modeling are summarized in this section and are included in Appendix B Additional information on how impacts were analyzed is provided below.

[5] Non-cancer adverse health risks are measured against a hazard index, which is defined as the ratio of the predicted incremental exposure concentrations of the various noncarcinogens from the Project to published reference exposure levels that can cause adverse health effects.

[6] CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with the construction and operational activities from a variety of land use projects, such as residential, commercial, and industrial facilities.

Construction

For the purpose of estimating project emissions, construction was modeled beginning in May 2025 and concluding July 2033.[7] This is conservative, as it is unlikely that construction would occur over that entire duration. The analysis contained herein is based on the following schedule assumptions (duration of phases is approximate):

- **Site preparation:** May 2025 – November 2025
- **Grading:** November 2025 – December 2026
- **Building/ park construction:** April 2026 – July 2033
- **Paving:** December 2025 – April 2026
- **Architectural coating:** January 2027 – February 2027

Construction modeling assumptions for equipment and vehicles are provided in Table 3.2-5. Based on input from the County, it is anticipated that soils would be balanced on-site. For the analysis, it was generally assumed that heavy-duty construction equipment would be operating at the site up to 7 days per week.

Table 3.2-5. Construction Scenario Assumptions

Construction Phase	Average Daily One-Way Vehicle Trips			Equipment		
	Worker Trips	Vendor Truck Trips	Haul Truck Trips	Equipment Type	Quantity	Daily Usage Hours
Site Preparation	18	2	0	Rubber Tired Dozers	3	8
				Tractors/ Loaders/ Backhoes	4	8
Grading	20	2	0	Graders	1	8
				Excavators	2	8
				Tractors/ Loaders/ Backhoes	2	8
				Scrapers	2	8
				Rubber Tired Dozers	1	8
Building/ Park Construction	8	4	0	Forklifts	3	8
				Generator Sets	1	8
				Cranes	1	7
				Welders	1	8
				Tractors/ Loaders/ Backhoes	3	7
Paving	15	0	0	Pavers	2	8
				Paving Equipment	2	8
				Rollers	2	8

[7] It is possible that construction could be phased over a 10-to-15-year period, contingent on funding. The analysis herein assumes a compressed construction schedule that would be more intensive, and a construction start date of May 2025, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and greenhouse gas emissions, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

Table 3.2-5. Construction Scenario Assumptions

Construction Phase	Average Daily One-Way Vehicle Trips			Equipment		
	Worker Trips	Vendor Truck Trips	Haul Truck Trips	Equipment Type	Quantity	Daily Usage Hours
Architectural Coatings	2	0	0	Air Compressors	1	6

Source: Appendix B.

Operation

Operational criteria air pollutant emissions were estimated for mobile, area, and stationary sources for the project using CalEEMod. Notably, the project would not use natural gas, so there would be no energy-related criteria air pollutant emissions.[8] The first full year of project operations was assumed to be 2033. The calculation of operational air pollutant emissions is explained below.

Mobile Sources

The project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of park operations. Motor vehicles may be fueled with gasoline, diesel, or alternative fuels. The default vehicle mix provided in CalEEMod 2022.1, which is based on CARB's Mobile Source Emissions Inventory model (EMFAC) version 2021, was applied for the project. Trip generation rates for the project (weekdays and Saturdays) are based on the traffic data provided in Chapter 3.12, Transportation, of this EIR. Notably, Saturday trip rates were also input for Sundays to provide a conservative analysis.

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including consumer product use, architectural coatings, and landscape maintenance equipment.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2022). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of nonresidential buildings and on the default factor of pounds of VOCs per building square foot per day. For the asphalt surface land uses, CalEEMod estimates VOC emissions associated with use of parking surface degreasers based on the square footage of parking surface area and pounds of VOCs per square foot per day.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of nonresidential surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The model default reapplication rate of 10% of area per year is assumed.

[8] Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for greenhouse gases in CalEEMod, because criteria pollutant emissions occur at the site of the power plant, which is typically off-site.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values.

Stationary Sources

The project would include a small diesel-fueled 158-horsepower generator, which was assumed to operate one-hour a day for up to 50-hours a year for routine testing and maintenance.

Health Risk Assessment

Construction Health Risk Assessment

A health risk assessment (HRA) was performed to evaluate potential health risk associated with construction of the project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting construction HRA documentation, including detailed assumptions, is presented in Appendix B.

The greatest potential for TAC emissions during project construction would be DPM emissions from heavy equipment operations and heavy-duty trucks. Use of heavy-duty construction equipment is subject to a CARB ATCM for in-use diesel construction equipment to reduce diesel particulate emissions and use of diesel trucks is also subject to an ATCM. The HRA conducted for the project analyzes cancer and noncancer health risk from the project's use of diesel equipment and trucks during construction.

The most recent guidance from the Office of Environmental Health Hazard Assessment (OEHHA) is the 2015 Risk Assessment Guidelines Manual (OEHHA 2015). Cancer risk parameters, such as age-sensitivity factors, daily breathing rates, exposure period, fraction of time at home, and cancer potency factors were based on the values and data recommended by OEHHA as implemented in Hotspots Analysis and Reporting Program Version 2 (HARP2).

For risk assessment purposes, PM_{10} in diesel exhaust is considered DPM, originating mainly from off-road equipment operating at a defined location for a given length of time at a given distance from sensitive receptors. Less-intensive, more-dispersed emissions result from on road vehicle exhaust (e.g., heavy-duty diesel trucks).

The dispersion modeling for the HRA was performed using the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) (Version 22112), which is the model EDCAQMD requires for atmospheric dispersion of emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of surface and elevated sources, building downwash, and simple and complex terrain. A unit emission rate (1 gram per second) was normalized over the line of adjacent volume sources for the AERMOD run to obtain the "X/Q" values. X/Q is a dispersion factor that is the average effluent concentration normalized by source strength and is used as a way to simplify the representation of emissions from project construction. Three AERMOD runs were conducted depending on the receptors to be assessed, including residences, schools, and workers. Principal parameters of this modeling are presented in Table 3.2-6.

Table 3.2-6. Construction Health Risk Assessment American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters

Parameter	Details
Meteorological Data	AERMOD-specific meteorological data for the Sacramento Executive Airport (KSAC) was used for the dispersion modeling based on the recommendation of the EDCAQMD. A

Table 3.2-6. Construction Health Risk Assessment American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters

Parameter	Details
	meteorological data set from 2014 through 2018 was obtained in a preprocessed format suitable for use in AERMOD.
Urban versus Rural Option	Urban areas typically have more surface roughness as well as structures and low-albedo surfaces that absorb more sunlight—and thus more heat—relative to rural areas. Based on the project location, the rural dispersion option was selected.
Terrain Characteristics	Digital elevation data were imported into AERMOD and elevations were assigned to receptors and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View in the U.S. Geological Survey's National Elevation Dataset format with a resolution of 1 arc-second resolution.
Source Release Characterizations	Air dispersion modeling of DPM emissions was conducted assuming the off-road equipment and trucks would operate in accordance with the modeling scenario estimated in CalEEMod, based on the best information available at the time of analysis: ▪ Off-road equipment and trucks were modeled as a lines of adjacent volume sources across the project area with a release height of 5 meters, a plume height of 10 meters, and plume width of 10 meters.
Receptors	A 2-kilometer by 2-kilometer receptor grid with 100-meter spacing was placed over the facility and surrounding area to determine where the maximum off-site concentrations would be located. Additional receptors were placed as follows: ▪ For the residential run, an additional fine 0.6-kilometer by 0.6-kilometer grid with 20-meter spacing was placed over the mobile home park to the northeast of the project site in addition to discrete receptors placed at potential homes to the west of the project. ▪ For the school receptor run, fine grids with 20-meter spacing were placed over the Charter University Prep school, Union Mine High School, and Pacific Crest Academy. ▪ For the worker receptor run, discrete receptors were placed at buildings (including the schools) around the project site.

Notes: AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model; EDCAQMD = El Dorado County Air Quality Management District; DPM = diesel particular matter; CalEEMod = California Emissions Estimator Model.
See Appendix B.

Dispersion of DPM emissions was modeled using AERMOD, then cancer risk and noncancer health impacts were subsequently modeled using CARB's HARP2 Air Dispersion and Risk Tool (ADMRT, Version 22118). The concentration plot files were then used to estimate the long-term cancer and non-cancer health risk at the residential receptors, workers, and school children at Charter University Prep, Union Mine High School, and Pacific Crest Academy. The exposure parameters included in HARP2 for the different receptors are described below:

- **Maximally Exposed Individual Resident (MEIR):** For residential receptors during project construction, TAC exposure was assumed to begin in the 3rd trimester of pregnancy (assumed to be the worst-case scenario for cancer risk) for a duration of 8.21 years (project construction).
- **Worker:** For worker receptors during project construction, TAC exposure was assumed to begin at 16 years old for a duration of 8.21 years (construction).

- **School:** For school children at the nearby high schools, construction TAC exposure was assumed to begin at 14 years old for a duration of 4 years.[9]

The OEHHA Derived Method was used to estimate cancer and chronic noncancer risk. The cancer and chronic risk results were then compared to EDCAQMD thresholds to assess the project's impact significance. There is no reference exposure level for acute health impacts from DPM, and, thus, acute risk was not evaluated.

Operational Heath Risk Assessment

The routine testing and maintenance of the small emergency generator would result in minimal diesel fuel usage (about 404 gallons per year, per Chapter 3.5, Energy, of this EIR). In addition, as a community park, the project is anticipated to result in less than 10 heavy-duty diesel trucks per day, which is the screening level for TACs, as identified in the EDCAQMD Guide to Air Quality Assessment. Based on the preceding considerations, an operational HRA was determined to not be required for the project.

3.2.3.3 Project Impact Analysis

Impact AIR-1 The construction and operation of the project would not conflict with the EDCAQMD's AQMP.

As mentioned previously in Section 3.2.3.3, the MCAB is currently non-attainment for the O_3 CAAQS and NAAQS, as well as the CAAQS for PM_{10} and the $PM_{2.5}$ NAAQS. While an air quality plan exists for O_3, none currently exists for PM_{10} and the $PM_{2.5}$ Maintenance Plan is in the process of being resubmitted based on attaining the NAAQS. The Ozone Attainment Plan was developed for application within the Sacramento region, including the MCAB portion of El Dorado County (EDCAQMD *et al*. 2017). If a project can demonstrate consistency with the Ozone Attainment Plan for ROG and NO_x emissions, it would be determined that it would not have a significant cumulative impact with respect to O_3.

Projects within the MCAB portion of the County must demonstrate Ozone Attainment Plan consistency with the following four indicators:

1. The project does not require a change in the existing land use designation (e.g., a general plan amendment or rezone), or projected emissions of ROG and NO_x from a project are equal to or less than the emissions anticipated for the site if development under the existing land use designation;
2. The project does not exceed the "project alone" significance criteria;
3. The lead agency for the project requires the project to implement any applicable emission reduction measures contained in and/or derived from the Ozone Attainment Plan; and
4. The project complies with all applicable district rules and regulations.

The first way to assess project compliance with the Ozone Attainment Plan is to ensure that the population density and land use are consistent with the growth assumptions used in the plans for the MCAB. Through the analysis in the Initial Study , the proposed project includes no uses that would generate a long-term increase in population, does not require a change in land use designations applied to the project site, and the proposed use is consistent with the County Zoning Ordinance. Therefore, the proposed project would be consistent with the regional growth forecasts and would not conflict with or exceed the assumptions of the Ozone Attainment Plan.

[9] 4 years is the anticipated maximum duration a student would attend the nearby high schools.

The second criterion assesses a project's contribution to existing air quality violations. As discussed in Impact AIR-2 below, it was determined that the project would not contribute to an air quality violation because construction and operational emissions would not exceed the EDCAQMD thresholds of significance for ROG or NO_x emissions (and thus exhaust CO, SO_x, PM_{10}, and $PM_{2.5}$ would also be less than significant). As such, the project would not exceed the "project alone" significance criteria established by the EDCAQMD.

The third criterion is compliance with control measures in the Ozone Attainment Plan. Most of the control strategies in the Ozone Attainment Plan include measures in the categories of transportation and stationary sources. The non-regulatory control measures include; on-road and off-road mobile incentive programs, and an emerging/voluntary urban forest development program. These are followed by the regulatory control measures, which include; indirect source rules and a variety of stationary and area-wide source control measures. CARB's strategy for reducing mobile source emissions includes the following: new engine standards, reducing emissions from in-use fleet, requiring the use of cleaner fuels, supporting the use of alternative fuels, and pursuing long-term advanced technology measures. As these measures are primarily implemented at the state and regional level, rather than for an individual project, the proposed project would not conflict with any of these control measures.

The final criterion is compliance with the EDCAQMD rules and regulations. The EDCAQMD has adopted rules designed specifically to address a variety of air quality impacts through measures that construction and operational related air quality emissions. The project would be required by law to comply with all applicable rules and regulations.

In summary, the project would not conflict with the growth assumptions for the region, does not exceed the EDCAQMD significance thresholds after mitigation, would be consistent with all control measures of the Ozone Attainment Plan, and would comply with applicable EDCAQMD rules. Based on these considerations, the project would not conflict with or obstruct implementation of an applicable air quality plan and the impact would be **less than significant**.

Impact AIR-2 Construction of the project would result in emissions of dust that could violate any air quality standard or contribute substantially to an existing or projected air quality violation. Regarding other criteria air pollutants, construction and operation of the project would result in emissions that would not exceed adopted thresholds of significance, violate any air quality standard or contribute substantially to an existing or projected air quality violation.

The following discussion evaluates the potential for the project's construction and operational emissions to result in a considerable contribution to the region's cumulative air quality impact.

Construction

Construction of the project would result in the addition of pollutants to the local air shed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emission levels can only be estimated, with a corresponding uncertainty in precise ambient air quality impacts. Fugitive dust (PM_{10} and $PM_{2.5}$) emissions would primarily result from earthwork activities. NO_x and CO emissions would primarily result from the use of construction equipment and motor vehicles.

As discussed in Section 3.2.3.2, Analytical Methods, criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod based on the construction scenario presented in Table 3.2-5. Construction schedule assumptions, including phase type, duration, and sequencing, were based on information

provided by the County and its representatives and is intended to represent a reasonable scenario based on the best information available. Default values provided in CalEEMod were used where detailed project information was not available. Table 3.2-7 presents the estimated maximum unmitigated daily construction emissions generated during construction of the project.

Table 3.2-7. Maximum Daily Unmitigated Construction Emissions

Year	ROG	NO_x
	Pounds per Day	
Summer		
2025	3.40	31.80
2026	4.25	37.43
2027	1.07	9.58
2028	1.03	9.10
2029	1.00	8.75
2030	0.97	8.55
2031	0.95	8.26
2032	0.92	8.01
2033	0.90	7.80
Winter		
2025	4.21	37.39
2026	4.24	37.48
2027	10.70	10.44
2028	1.02	9.12
2029	0.99	8.76
2030	0.97	8.56
2031	0.95	8.28
2032	0.92	8.02
2033	0.90	7.81
Maximum Daily Emissions	**10.70**	**37.48**
EDCAQMD Threshold	*82*	*82*
Threshold exceeded?	**No**	**No**

Source: See Appendix B for detailed results.
Notes: EDCAQMD = El Dorado County Air Quality Management District; ROG = reactive organic gases; NO_x = oxides of nitrogen

As shown in Table 3.2-7, ROG and NO_x emissions would not exceed the EDCAQMD significance thresholds during construction; therefore, the project would have a less than significant impact. According to the EDCAQMD, if ROG and NO_x are less than significant during construction, then exhaust CO, SO_x, PM_{10}, and $PM_{2.5}$ would also be less than significant.

Regarding fugitive dust, the EDCAQMD has established a screening approach to determine significance based on implementation of measures in alignment with the South Coast Air Quality Management District (SCAQMD) Rule 403. The project would be considered **potentially significant** without these dust controls. However, with the implementation of mitigation (MM-AIR-1), which requires dust control measures from SCAQMD's Rule 403, the impact of the project would be less than significant.

Operation

Operation of the project would generate criteria pollutant emissions from mobile sources (vehicular traffic), area sources (consumer products, architectural coatings, and landscaping equipment), and stationary (emergency generator testing and maintenance). CalEEMod was used to estimate daily emissions from project-related operational sources. Table 3.2-8 summarizes the operational emissions criteria pollutants that would be generated from the project. Operational emissions were then compared to the EDCAQMD operational thresholds.

Table 3.2-8. Maximum Daily Unmitigated Operational Emissions

	ROG	NO_x
Year	Pounds per Day	
Summer		
Mobile	12.48	9.14
Area	0.54	0.01
Stationary	0.36	0.99
Total	**13.38**	**10.14**
Winter		
Mobile	11.48	10.62
Area	0.43	--
Stationary	0.36	0.99
Total	**12.27**	**11.62**
Maximum Daily Emissions	**13.38**	**11.62**
EDCAQMD Threshold	*82*	*82*
Threshold exceeded?	**No**	**No**

Source: See Appendix B for detailed results.
Notes: EDCAQMD = El Dorado County Air Quality Management District; ROG = reactive organic gases; NO_x = oxides of nitrogen

As shown in Table 3.2-8, ROG and NO_x emissions would not exceed the EDCAQMD significance thresholds during operations; therefore, the project would have a less than significant impact. According to the EDCAQMD, if ROG and NO_x are less than significant during operations, then exhaust CO, SO_x, PM_{10}, and $PM_{2.5}$ would also be less than significant.

Impact AIR-3 The project would potentially expose sensitive receptors to substantial pollutant concentrations during short-term construction but not during long-term operations.

Health Impacts of Toxic Air Contaminants

Construction Health Risk

As discussed in Section 3.2.3.2, a construction HRA was performed to estimate the potential health risk for proximate sensitive receptors associated with project construction. Results of the construction HRA are presented in Table 3.2-9. Detailed model outputs are presented in Appendix B.

Table 3.2-9. Construction Health Risk Assessment Results – Unmitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Cancer Risk – MEIR	Per Million	29.42	10.0	**Potentially Significant**
Chronic Hazard Index – MEIR	Not Applicable	0.0101	1.0	Less than Significant
Cancer Risk – School	Per Million	8.28	10.0	Less than Significant
Chronic Hazard Index – School	Not Applicable	0.0222	1.0	Less than Significant
Cancer Risk – Worker	Per Million	1.53	10.0	Less than Significant
Chronic Hazard Index – Worker	Not Applicable	0.0144	1.0	Less than Significant

Notes: CEQA = California Environmental Quality Act; MEIR = Maximally Exposed Individual Resident. See Appendix B.

As shown in Table 3.2-9, the results of the construction HRA for the project demonstrate that the construction emissions would result in a potential incremental increase in cancer risk at the MEIR that would exceed the 10 in a million-cancer risk threshold and a potential chronic hazard risk below the 1.0 Chronic Hazard Index threshold.[10] Cancer and chronic risk at the maximally exposed school and worker receptors would be less than the applicable thresholds. Nevertheless, due to the threshold exceedance for the MEIR, a **potentially significant** impact would occur due to project construction.

Implementation of MM AIR-2 (Construction Equipment Exhaust Reductions) would avoid potential exposure of sensitive receptors to substantial pollutant concentrations during construction by requiring that all diesel-fueled off-road construction equipment greater than 75 horsepower be equipped with CARB Tier 4 Final compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations). An exemption from these requirements may be granted, at the County's discretion, if the contractor documents that the required tier is not reasonably available and corresponding reductions in diesel particulate matter are achieved from other construction equipment to remain below the applicable EDCAQMD cancer risk threshold. Table 3.2-10 summarizes the results of the HRA for project construction after mitigation.

Table 3.2-10. Construction Health Risk Assessment Results – Mitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Cancer Risk – MEIR	Per Million	6.66	10.0	Less than Significant
Chronic Hazard Index – MEIR	Not Applicable	0.0023	1.0	Less than Significant
Cancer Risk – School	Per Million	1.87	10.0	Less than Significant

[10] Notably, the MEIR modeled would be at the Lake Oaks Senior Mobile Home Park, which is an age restricted (i.e., 55 years or older) community. As such, the most sensitive age bins of early childhood would not apply to these residents. However, the assumption that exposure would begin in the 3rd trimester of pregnancy was still incorporated to present a conservative analysis.

Table 3.2-10. Construction Health Risk Assessment Results – Mitigated

Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Chronic Hazard Index – School	Not Applicable	0.0050	1.0	Less than Significant
Cancer Risk – Worker	Per Million	0.35	10.0	Less than Significant
Chronic Hazard Index – Worker	Not Applicable	0.0033	1.0	Less than Significant

Notes: CEQA = California Environmental Quality Act; MEIR = Maximally Exposed Individual Resident. See Appendix B.

With implementation of MM-AIR-2, the project estimated construction emissions result in a potential maximum cancer risk at the MEIR below the 10 in one million cancer risk threshold and a potential chronic hazard risk below the 1.0 Chronic Hazard Index threshold. Cancer risk and chronic risk levels at the maximally exposed worker and school receptors would be reduced as well. As such, the project would result in a construction health risk impact that would be less than significant with mitigation.

Naturally Occurring Asbestos

Based on the Asbestos Review Areas Map for the Western Slope of El Dorado County (EDCAQMD 2018), the project area is not identified as containing naturally occurring asbestos. As such, the potential for exposure to asbestos would be a less than significant impact.

CO Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO "hotspots." CO transport is extremely limited and disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections operating at an unacceptable level of service (LOS) (LOS E or worse is unacceptable). Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots.

As described in Impact AIR-2 above, the project would result in less than significant emissions of exhaust CO. Accordingly, project-related traffic would not exceed CO standards and therefore, no further analysis was conducted for CO impacts.

Health Impacts of Other Criteria Air Pollutants

Construction and operation of the project would not result in emissions that would exceed any of the EDCAQMD exhaust thresholds for criteria air pollutants (see Impact AIR-2). Further, implementation of MM-AIR-1 would ensure that dust emissions would be less than significant.

Health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2019b). ROG and NO_x are precursors to O_3. The health effects associated

with O_3 are generally associated with reduced lung function. The contribution of ROG and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the MCAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of reliable and meaningful quantitative methods to assess this impact. However, because the project would not exceed EDCAQMD thresholds for ROG or NO_x, implementation of the project would not significantly contribute to regional O_3 concentrations or the associated health effects.

In addition to O_3, NO_x emissions contribute to potential exceedances of the NAAQS and CAAQS for NO_2 (since NO_2 is a constituent of NO_x). Health effects associated with NO_x and NO_2 include lung irritation and enhanced allergic responses (CARB 2019c). Because the project would not generate NO_x emissions that would exceed the EDCAQMD mass daily threshold and because the MCAB is designated as in attainment of the NAAQS and CAAQS for NO_2 and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards, the project would not contribute to exceedances of the NAAQS and CAAQS for NO_2 or result in significant health effects associated with NO_2 and NO_x.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2019d). CO tends to be a localized impact associated with congested intersections. Impacts associated with CO hotspots were identified above as less than significant. Thus, the project's CO emissions would not contribute to the health effects associated with this pollutant.

Health effects associated with PM_{10} include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2017). Construction and operation of the project would not result in significant PM_{10} or $PM_{2.5}$ exhaust or dust emissions (with implementation of MM-AIR-1). Therefore, the project would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or obstruct the MCAB from coming into attainment for these pollutants. Due to the minimal contribution of particulate matter during construction and operation, the project would not result in significant health effects associated with PM_{10} or $PM_{2.5}$.

Based on the preceding considerations, because construction and operation of the project would not result in the emissions of criteria air pollutants that would exceed the applicable EDCAQMD significance thresholds, and because the EDCAQMD thresholds are based on levels that the MCAB can accommodate without affecting the attainment date for the NAAQS and CAAQS, and the NAAQS and CAAQS are established to protect public health and welfare, it is anticipated that the project would not result in health effects associated with criteria air pollutants and the impact would be less than significant.

Impact AIR-4 Construction and operation of the project would not result in other emissions that would adversely affect a substantial number of people.

Based on available information, the project is not anticipated to result in other emissions that have not been addressed under Impact AIR-1 through Impact AIR-3, above. As such, this analysis focuses on the potential for the project to generate odors.

The occurrence and severity of potential odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during project construction. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Typical sources of operational odors include landfills, rendering plants, chemical plants, agricultural uses, wastewater treatment plants, and refineries. Regarding operations, the project involves a community park, which would not result in odors that would affect a substantial number of people. Therefore, impacts associated with odors during operation would be **less than significant**.

3.2.3.4 Cumulative Impacts Analysis

This section provides an evaluation of cumulative air quality impacts from the project and past, present, and reasonably foreseeable future projects, as identified in in Section 3.0, Introduction to Analyses. The entire MCAB is the geographic context for the evaluation of cumulative air quality impacts related to substantial pollutant concentrations and related health effects.

Construction and operation of the project, in combination with past, present, and reasonably foreseeable future development, would not result in a significant cumulative impact related to air quality.

Criteria Air Pollutants

As described in the EDCAQMD Guide to Air Quality Assessment, EDCAQMD's primary criterion for determining whether a project has significant cumulative impacts is whether the project is consistent with an approved plan or mitigation program of District-wide or regional application in place for the pollutants emitted by the project. This criterion is applicable to both the construction and operation phases of the project.

With respect to O_3, the Ozone Attainment Plan was developed to bring the region (including MCAB portion of El Dorado County) into attainment as required by the federal and California Clean Air Acts. The Ozone Attainment Plan shows the region is meeting the requirements under the Clean Air Act in demonstrating reasonable further progress and attainment of the standards. The Ozone Attainment Plan includes an updated emissions inventory, analyzes air quality trends, evaluates photochemical modeling results, and establishes new motor vehicle emission budgets for transportation conformity purposes. In addition, the Ozone Attainment Plan also documents the region's reasonably available control measure (RACM) analysis and vehicle miles traveled offset demonstration.

If a project can demonstrate consistency with the Ozone Attainment Plan for ROG and NO_x emissions, it can be categorized as not having a significant cumulative air quality impact with respect to O_3. As described under Impact AIR-1, the project would not conflict with the growth assumptions for the region, does not exceed the EDCAQMD significance thresholds after mitigation, would be consistent with all control measures of the Ozone Attainment Plan, and would comply with applicable EDCAQMD rules. Therefore, the cumulative impact of the project related to O_3 would be less than significant.

For other pollutants such as CO, PM_{10} (including $PM_{2.5}$), SO_2, and NO_2, there is no applicable air quality plan containing growth elements. Accordingly, the EDCAQMD applies the following pollutant-specific criteria for determining the significance of cumulative impacts:

- **CO:** CO is an attainment pollutant in El Dorado County, and local CO concentrations are expected to decline even further in the future as more stringent CO standards for motor vehicles take effect. The EDCAQMD does not consider CO to be an area-wide or regional pollutant that is likely to have cumulative effects. Accordingly, CO emissions for a project will ordinarily be considered not cumulatively significant as long as "project alone" emissions are not significant. As identified in Impact AIR-2, the project would result in less than significant project emissions of CO during construction and operations. CO emissions of the project would not be cumulatively considerable.
- **PM10, SO2, and NO2:** The MCAB is nonattainment for the state 24-hour PM_{10} standard, which dictates the use of a relatively sensitive criterion for identifying cumulative effects on PM_{10} ambient concentrations. The County is in attainment for the SO_2 and NO_2 ambient air quality standards, but SO_2 and NO_2 can also contribute to area wide PM_{10} impacts through their transformation into sulfate and nitrate particulate aerosols. There is no readily available model for predicting the combined ambient effects of directly emitted PM_{10}, SO_2 and NO_2 emissions from individual impacts. The EDCAQMD has determined that a project will be considered not significant for cumulative impacts of PM_{10}, SO_2 and NO_2 if the following conditions are met:
  - The project is not significant for "project alone" emissions of these pollutants;
  - The project complies with all applicable rules and regulations of the EDCAQMD; and
  - The project is not cumulatively significant for ROG, NO_x, and CO based on the criteria set forth above.

As shown under Impacts AIR-2, the project would not have a significant impact for "project alone" emissions. Additionally, the project complies with all applicable rules and regulations of the EDCAQMD. Lastly, the project was shown to not have a cumulatively significant impact for ROG, NO_x, or CO based on the discussions above. As such, the project would have a less than cumulatively considerable impact for other criteria air pollutants.

Toxic Air Contaminants

According to the EDCAQMD, emissions of TACs are typically localized and not region wide. Except in cases where there is information indicating the possible comingling of TACs from projects that are contiguous or nearby, EDCAQMD considers implementation of the "project alone" mitigation requirements, and compliance with all applicable emission limits and mitigation measures required by EPA, CARB, EDCAQMD rules and regulations, and local ordinances, sufficient for a finding of not significant for cumulative impacts of TACs. The project would result in less than significant impacts with respect to exposure of sensitive receptors to TACs during both construction (after mitigation) and operation. In addition, the maximally exposed receptor upon which the localized impact determination is based would be different for the project and for other cumulative projects based on dispersion of TACs over distance from the source. As such, the maximum localized emissions from each project would not be additive at the same receptors. Further, related projects would be subject to CEQA (or have already been reviewed under CEQA) and would require air quality analysis and, where necessary, would implement all feasible mitigation if the project would exceed EDCAQMD thresholds. Overall, TACs emitted during project construction and operations would not be cumulatively considerable.

Odors

Odors are a localized impact. As indicated in Impact AIR-4, the project's impact related to odor would be less than significant. Since the EDCAQMD does not have a specific regulation or rule that addresses objectionable odors, any actions related to odors would be based on public complaints made to the EDCAQMD. Additionally, all future projects, would be subject to EDCAQMD Rule 402 (Nuisances), which prohibits the discharge of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health, or safety of any such persons or the public; or which cause, or have a natural tendency to cause, injury or damage to business or property. Therefore, cumulative impacts related to odor would be less than significant.

3.2.3.5 Mitigation Measures

MM-AIR-1 Fugitive Dust Control Measures

a) During construction, implement SCAQMD's Best Available Fugitive Dust Control Measures as adopted by the EDCAQMD and required by EDCAQMD Rule 223-1 (Table 1), as follows.

Earth-moving (except construction cutting and filling areas)

1a. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the EDCAQMD; two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR

1a-1. For any earthmoving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.

Earth-moving – construction fill areas

1b. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the District; for areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM method 1557 or other equivalent method approved by the EDCAQMD, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content; two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.

Earth-moving – construction cut areas

1c. Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.

Disturbed surface areas (except completed grading areas)

2a/b. Apply dust suppression in a sufficient quantity and frequency to maintain a stabilized surface; any areas which cannot be stabilized, as evidenced by wind driven dust, must have an application of water at least twice per day to at least 80 percent of the unstabilized area.

Disturbed surface areas completed grading areas

2c. Apply chemical stabilizers within 5 working days or grading completion; OR

2d. Take action 3a or 3c specified for inactive disturbed surface areas.

Inactive disturbed surface areas

3a. Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible due to excessive slope or other safety conditions; OR

3b. Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR

3c. Establish a vegetative ground cover within 21 days after active operations have ceased; ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR

3d. Utilize any combination of control actions 3a, 3b and 3c such that, in total, they apply to all inactive disturbed surface areas.

Unpaved Roads

4a. Water all roads used for any vehicular traffic at least once per every two hours of active operations; OR

4b. Water all roads used for any vehicular traffic once daily and restrict vehicle speed to 15 mph; OR

4c. Apply chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.

Open storage piles

5a. Apply chemical stabilizers; OR

5b. Apply water to at least 80 percent of the surface areas of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR

5c. Install a three-sided enclosure with walls with no more than 50 percent porosity that extend, at a minimum, to the top of the pile.

Track-out control

6a. Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and width of at least 20 feet; OR

6b. Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control

device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device.

All Categories

7a. Any other control measures approved by the EDCAQMD.

b) During high wind conditions during construction with gusts exceeding 25 miles per hour, implement SCAQMD's Best Available Fugitive Dust Control Measures for High Wind Conditions required by SCAQMD Rule 403, as adopted by the EDCAQMD and presented below.

Earth-moving

1A. Cease all active operations; or

2A. Apply water to soil not more than 15 minutes prior to moving such soil.

Disturbed surface areas

0B. On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR

1B. Apply chemical stabilizers prior to a wind event; OR

2B. Apply water to all unstabilized disturbed areas 3 times per day; if there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR

3B. Establish a vegetative ground cover within 21 days after active operations have ceased; ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR

4B. Utilize any combination of control actions specified in Table 1, Items 1B, 2B and 3B, such that, in total, they apply to all disturbed surfaced areas.

Unpaved Roads

1C. Apply chemical stabilizers prior to a wind event; OR

2C. Apply water twice per hour during active operation; OR

3C. Stop all vehicular traffic.

Open storage piles

1D. Apply water twice per hour; OR

2D. Install temporary coverings.

Paved road track-out

1E. Cover all haul vehicles; OR

2E. Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for operation on both public and private roads.

All Categories

1F. Any other control measures approved by the EDCAQMD.

MM-AIR-2 Construction Equipment Exhaust Reductions. All diesel-fueled off-road construction equipment greater than 75 horsepower shall be equipped with California Air Resources Board (CARB) Tier 4 Final compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. An exemption from these requirements may be granted by El Dorado County in the event that the contractor documents that equipment with the required tier is not reasonably available and corresponding reductions in diesel particulate matter are achieved from other construction equipment (for example, another piece of equipment can be replaced with a zero-emission equipment to offset the emissions associated with using a piece of equipment that does not meet Tier 4 Final standards). Documentation shall be furnished to El Dorado County demonstrating that estimated project-generated construction emissions would not exceed the applicable EDCAQMD cancer risk threshold with the alternate construction methods. (This shall be demonstrated using industry-standard emission estimation methodologies.) If the documentation successfully demonstrates that project-generated construction emissions will remain below the applicable EDCAQMD cancer risk threshold, then the El Dorado County Planning Director may approve the alternate construction methods, at the Director's discretion.

3.2.3.6 Significance After Mitigation

With implementation of MM AIR-1, Dust Control Measures, Impact AIR-2 would be reduced to less than significant. With implementation of MM AIR-2, Construction Equipment Exhaust Reductions, Impact AIR-3 would be reduced to less than significant.

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3.3 Biological Resources

This section describes the existing biological resources of the biological study area (BSA), which constitutes the project site, offsite roadway improvements, and a 300-foot buffer where accessible. It also identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant impacts related to implementation of the proposed Diamond Springs Community Park Project (project). The existing conditions in this section is based on the Biological Resources Assessment (BRA) (Dudek 2022) for the proposed project, prepared to support this environmental impact report (EIR). The results of the BRA are summarized in this section and the entire report is included in Appendix C.

Comments related to biological resources received during the scoping meeting included general concerns for wildlife and aquatic resources.

3.3.1 Existing Conditions

Information on biological resources occurring or potentially occurring in the proposed project sites was obtained by reviewing pertinent literature, mapping vegetation communities and land cover, evaluating the BSA's potential to support special-status plant and wildlife species, and conducting a preliminary jurisdictional aquatic resources assessment. This section summarizes information presented in the BRA report (Appendix C).

3.3.1.1 Vegetation Communities and Land Cover Types

The BSA supports six natural vegetation communities and one non-natural land cover types. See Figure 3.3-1, Vegetation Communities and Land Cover Types. Detailed descriptions of each vegetation community or land cover type are provided in Appendix C. Table 3.3-1 summarizes the areal extent of each vegetation community or land cover type in the BSA.

Table 3.3-1. Summary of Vegetation Communities and Land Cover Types

Abbreviation	Vegetation Community/ Land Cover Type	Vegetation Alliance and CDFW Alliance Code	Sensitive? (Y/N)	Acreage
Vegetation Communities				
Herbaceous				
BGA	Wild Oats and Annual Brome Grasslands	Wild Oats and Annual Brome Grasslands (*Avena* spp.) *Bromus diandrus* Association; 42.026.11	No	5.31
BR-FS	Baltic and Mexican Rush Marshes	Baltic and Mexican Rush Marshes (*Juncus arcticus* var. *balticus*) Carex pergracilis Association; 45.562.04	No	1.74
Woodland				
MOW	Mixed Oak Woodland	Mixed oak – Pinus Sabiniana/grass Association; 71.100.07	No	12.10
ILO-GP	Interior Live Oak – Gray Pine Woodland and Forest	Interior Live Oak – Shreve Oak Woodland and Forest (*Quercus wislizeni*) *Pinus*	No	6.47

Table 3.3-1. Summary of Vegetation Communities and Land Cover Types

Abbreviation	Vegetation Community/ Land Cover Type	Vegetation Alliance and CDFW Alliance Code	Sensitive? (Y/N)	Acreage
		sabiniana/annual grass – herb Association; 71.080.42		
BOW	Blue Oak Woodland and Forest	Quercus douglasii/Mixed herbaceous; 71.020.05 Association; 71.020.11	No	7.96
BO-VO	Blue Oak – Valley Oak Woodland	Blue oak woodland and forest (*Quercus douglasii*) *Quercus lobata* Association; 71.020.11	Yes	5.01
Land Cover				
DEV	Developed	NA	No	0.58
			Total:	**38.59**

Notes: Totals may not sum due to rounding. NA: not applicable. State (S) ranks of 1-3 are considered highly imperiled by CDFW. Global (G) ranks are as follows: GX – eliminated; GH – presumed eliminated; G1 – critically imperiled; G2 – imperiled; G3 – vulnerable; G4 – apparently secure; G5 – secure.

3.3.1.2 Special-Status Biological Resources

Special-status biological resources occurring or potentially occurring in or near the BSA were determined based on Dudek's extensive literature review and results of field surveys. The following special-status biological resources are discussed below: sensitive vegetation communities, special-status plants, special-status wildlife, jurisdictional wetlands and waters, and wildlife corridors and habitat linkages.

Sensitive Natural Communities

Sensitive natural communities are "natural communities" (of vegetation) or "vegetation types" that have been evaluated by CDFW using NatureServe's Heritage Methodology (Faber-Langendon et al. 2012) and vegetation community classifications from A Manual of California Vegetation (Sawyer et. al. 2009), and are ranked by rarity and threat. Evaluation is done at both the global (i.e., full natural range within and outside of California) and state (i.e., within California) levels, resulting in a single 'G' (global) and 'S' (state) rank ranging from 1 (i.e., very rare and threatened) to 5 (i.e., demonstrably secure). Natural communities with an S rank of S1, S2, or S3 are considered "sensitive" by CDFW and are typically addressed during the CEQA review process. Within the BSA, one vegetation communities are designated as sensitive by CDFW: blue oak – valley oak woodland. This vegetation community has an S-rank of ranked S3 (vulnerable in California due to a restricted range, relatively few populations [often 80 or fewer], recent and widespread declines, or other factors making it vulnerable to extirpation).

Riparian vegetation communities occur along streams, ponds, rivers, and lakes and are considered sensitive because of their high habitat value for native wildlife. Riparian vegetation communities within the BSA include portions of the blue oak – valley oak woodland along Deadman's Creek.

Special-Status Plants

Special-status plants include those listed, or candidates for listing, as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW), and species identified as rare by the California Native Plant Society (CNPS) (particularly CRPR 1A – presumed extinct in California; CRPR 1B – rare, threatened, or endangered throughout its range; and CRPR 2 – rare or endangered in California, more

common elsewhere). No special-status plant species were observed within the BSA during surveys conducted during focused surveys from April 28, 2022 and July 12, 2022 (Appendix C).

Dudek biologists performed an extensive desktop review of literature, existing documentation, and GIS data to evaluate the potential for special-status plant species to occur within the BSA. Out of 18 special-status plant species identified as occurring or potentially occurring in the BSA, two special-status plant species was determined to have a moderate potential to occur in the BSA (Table 3.3-2). For detailed descriptions of the special-status plant species refer to Appendix C.

Table 3.3-2. Special-Status Plant Species with at Least a Moderate Potential to Occur within the Biological Study Area

Common Name	Scientific Name	Federal/State/CRPR	Potential
Nissenan manzanita	*Arctostaphylos nissenana*	None/None/1B.2	**Moderate.** Chaparral habitat is present on the project site. There closest occurrence was documented 1 mile southeast in 2005.
Red Hills soaproot	*Chlorogalum grandiflorum*	None/None/1B.2	**Moderate.** The project site lacks gabbroic and serpentinite soils. The closest occurrence was documented 8 miles northwest in 2017.
Parry's Horkelia	*Horkelia parryi*	None/None/1B.2	**Moderate.** Chaparral and cismontane woodland habitat are present on the project site. The closest occurrence was documented 3 miles northeast in 1923.

Sources: Appendix C, Attachment 3a
Status Legend
Federal
FE: Federally endangered
CRPR (California Rare Plant Rank)
CRPR List 1B: Plants rare, threatened, or endangered in California and elsewhere
Threat Rank:
1 Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
2 Fairly endangered in California (20% to 80% of occurrences threatened)

Special-Status Wildlife

Special-status wildlife include those listed, or candidates for listing, as threatened or endangered by USFWS and CDFW, and designated as species of special concern by CDFW and sensitive by USFWS. Dudek biologists performed an extensive desktop review of literature, existing documentation, and GIS data to evaluate the potential for special-status wildlife species to occur within the BSA. Of the 12 special-status wildlife species identified as occurring or potentially occurring in the BSA, two were determined to have a moderate potential to occur (Table 3.3-3). For detailed descriptions of the special-status wildlife species refer to Appendix C. There is no USFWS-designated critical habitat for listed wildlife species within the BSA (USFWS 2023).

Table 3.3-3. Special-Status Wildlife Species Detected or with at Least a Moderate Potential to Occur in the Biological Study Area

Common Name	Scientific Name	Federal/State	Potential to Occur in Biological Study Area
Amphibians			
Foothill yellow-legged frog – south Sierra DPS	*Rana boylii* pop. 5	FPE/SE	**High** Foothill yellow-legged frog has a high potential to occur in Deadman Creek within the BSA. The closest extant occurrence was documented less than 2 miles southwest (CNDDB 2023).
Reptiles			
western pond turtle	*Actinemys marmorata*	None/SSC	**Moderate.** Western pond turtle has moderate potential to occur in Deadman Creek and adjacent uplands within the BSA. There were three occurrences documented 2 miles southwest in 2005 (CNDDB 2023; No 667, 668, 673).
Invertebrates			
Western bumble bee	*Bombus occidentalis*	BCC/SCE	**Unlikely.** The project site is within the historical range but not the modern-day range for this species (CDFW 2023). There are no documented occurrences within 10 miles of the project site (CDFW 2023 & Richardson 2022).
Crotch bumble bee	*Bombus crotchii*	None/SCE	**Low.** The project site is within the species' range and has appropriate floral resources and nesting habitat to support this species. There are no documented occurrences within 10 miles of the project site (CDFW 2023 & Richardson 2022).
Monarch – California overwintering population	*Danaus plexippus plexippus* pop. 1	FC/None	**Unlikely.** There are no documented occurrences within 10 miles of the project site (CNDDB 2023).

Source: CDFW 2021.Appendix C, Attachment 3b.
Status Legend
Federal
FE: Federally endangered
FT: Federally threatened
BCC: USFWS bird of conservation concern
State
FP: Fully protected
SSC: California species of special concern

Bumble Bees

During the field surveys and drafting of the BRA, bumble bee species were not listed with federal or state protections. Since then, various *Bombus* spp. have been listed and require research to determine the potential of presence within the BSA (see Table 3.3-3). Resources were searched extensively including CDFW's California Natural Diversity Database (CNDDB 2023) and Xerces Society's Bumble Bee Watch for bumble bee ranges and occurrence data. Based upon the lack of records in proximity to the BSA, both Western bumble bee and Crotch bumble bee were determined to be unlikely and low potential to occur, respectively.

Jurisdictional Aquatic Resources

Jurisdictional aquatic resources include waters (i.e., wetlands and non-wetland waters) of the United States under U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the federal Clean Water Act (CWA), waters of the state under Regional Water Quality Control Board (RWQCB) jurisdiction pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act, and streams and lakes under CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code (CFGC). Several potentially jurisdictional features were identified within the project site, see Appendix C for detailed descriptions.

Non-wetland waters within the study area include one intermittent channel (Deadman Creek), one ephemeral drainage (ED-01), and two drainage ditches (D-01 and -02) totaling 0.08 acres. Wetland waters include two freshwater emergent wetlands (FEW-01 and -02) and two seasonal wetlands (SW-01 and -02) totaling 1.85 acres. There is a total of 1.93 acres of potentially federal and/or state jurisdictional aquatic resources (see Figure 3.3-2, Aquatic Resources).

Wildlife Corridors/Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals, and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as steppingstones for dispersal.

The BSA has value as a potential habitat linkage between areas of adjacent forest habitats. Deadman creek is an intermittent drainage that flows along the eastern portion of the BSA, from the northern boundary continuing south outside the bounds of the project site. This creek corridor is likely used by several common and special-status wildlife species as cover and foraging habitat, and to move between adjacent similar habitats. However, the BSA is not recognized as an important regional wildlife corridor by any state agency or jurisdiction, and it is not considered critical to the ecological functioning of adjoining watersheds and open space areas. The project site is located outside the El Dorado County Important Biological Corridor (IBC), Priority Conservation Areas (PCA), and Ecological Preserve (EP) overlay areas (El Dorado County, 2004). It is also located outside of Important Habitat for Migratory Deer Herds (El Dorado County, 2010).

3.3.2 Regulatory Framework

3.3.2.1 Federal

Clean Water Act

The Federal Water Pollution Control Act of 1972 (Clean Water Act) (33 USC 1251 et seq.), as amended by the Water Quality Act of 1987 (PL 100-4), is the major federal legislation governing water quality. The purpose of the Clean Water Act is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” The definition of what constitutes “waters of the United States” (provided in 33 CFR Section 328.3(a)) has changed

multiple times over the past 36 years starting with the *United States v. Riverside Bayview Homes, Inc*. court ruling in 1985. Subsequent court proceedings, rule makings, and congressional acts in 2001 (*Solid Waste Agency of North Cook County v. United States Army Corps of Engineers*), 2006 (*Rapanos v. United States*), 2015 (Waters of the United States [WOTUS] Rule), 2018 (suspension of the WOTUS Rule), 2019 (formal repeal of the WOTUS Rule), 2020 (Navigable Waters Protection Rule, NWPR), and 2021 (*Pasqua Tribe et al v. United States Environmental Protection Agency* resulting in remand and vacatur of the NWPR and a return to the "pre-2015 regulatory regime") have attempted to provide greater clarity to the term and its regulatory implementation. On December 30, 2022, the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE) announced a final rule establishing a new definition of "waters of the United States" that restores federal jurisdiction over waters that were protected prior to 2015 under the Clean Water Act for traditional navigable waters, the territorial seas, interstate waters, as well as upstream water resources that significantly affect those waters. The rule was published in the Federal Register on January 18, 2023, and is effective on March 20, 2023.

On May 25, 2023, the Supreme Court issued its long-anticipated decision in Sackett v. EPA., in which it rejected the EPA's claim that "waters of the United States," as defined in the CWA, includes wetlands with an ecologically significant nexus to traditional navigable waters. The Supreme Court held that only those wetlands with a continuous surface water connection to traditional navigable waterways would be afforded federal protection under the CWA. Specifically, to assert jurisdiction over an adjacent wetland under the CWA, a party must establish that (1) the adjacent body of water constitutes water[s] of the United States' (i.e., a relatively permanent body of water connected to traditional interstate navigable waters) and (2) the wetland has a continuous surface connection with that water, making it difficult to determine where the water ends and the wetland begins. The Rule will need to be modified by the Biden administration in light of this decision.

The term "wetlands" (a subset of waters of the United States) is defined in 33 CFR, Section 328.3(c)(16), as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the "ordinary high water mark," which is defined in 33 CFR 328.3(c)(7) as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

In California, the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) are responsible for implementing Section 401 of the Clean Water Act and related elements of the California Water Code (see Section 2.2.4 Porter-Cologne Water Quality Act).

Important applicable sections of the Clean Water Act are as follows:

- Section 401 requires an applicant for any federal permit for an activity that may result in a discharge of pollutants into waters of the United States to obtain certification from the state that the activity complies with all applicable water quality standards, limitations, and restrictions. Section 401 water quality certification is provided by the RWQCB and typically include conditions to minimize impacts on water quality.
- Section 402 establishes the National Pollutant Discharge Elimination System, a permitting system for municipal and industrial discharges of any pollutant (except for dredge or fill material) into waters of the United States. The National Pollutant Discharge Elimination System program establishes limits on allowable

concentrations and mass emissions of pollutants contained in point source and non-point source discharges. This program is administered by the RWQCB. Conformance with Section 402 is typically addressed in conjunction with water quality certification under Section 401.

- Section 404 provides for issuance of permits for the discharge of dredge or fill material into waters of the United States, including wetlands, by USACE. Two types of permits are issued by the USACE under Section 404: General Permits and Individual Permits. General Permits, which authorize groups of activities with minimal impacts to an aquatic environment, can include Nationwide Permits, Regional General Permits, and Programmatic General Permits. Individual Permits are issued for projects that could cause more than minimal impacts to the aquatic environment and require a lengthier public review process.

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973, as amended, (16 USC 1531 et seq.) serves as the enacting legislation to list, conserve, and protect threatened and endangered species, and the ecosystems on which they depend, from extinction. The FESA is administered by the USFWS for terrestrial and freshwater fish species and by the National Marine Fisheries Service (NMFS) for marine and anadromous species. Section 9(a)(1)(B) of the FESA prohibits the taking, possession, sale, or transport of any endangered fish or wildlife species. "Take" is defined to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC 1532 (19)). Harm is defined as "any act that kills or injures the species, including significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering" (50 CFR 17.3).

The FESA also enables the USFWS and NMFS to designate critical habitat, which is defined specific geographic areas, whether occupied by listed species or not, that contain "physical or biological features essential to the conservation of the species" and that "may require special management considerations or protection" (50 CFR 424.12). Designated critical habitat units, published in the Federal Register by USFWS or NMFS, are often large and may contain areas that do not provide habitat for the species. Only areas within the critical habitat units that support the species' *primary constituent element*s (PCEs) are subject to FESA consultation and analysis of critical habitat effects. PCE was a term introduced in the critical habitat designation regulations to describe aspects of ''physical or biological features.'' On May 12, 2014, USFWS and NMFS proposed to revise these regulations to remove the use of the term ''primary constituent elements'' and replace it with the statutory term ''physical or biological features'' (79 FR 27066). However, the shift in terminology does not change the approach used in conducting a ''destruction or adverse modification'' analysis, which is the same regardless of whether the original designation identified PCE, physical or biological features, or both (81 FR 7220, 2/11/16).

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans (HCPs) on public or private property without any other federal agency involvement. The proposed project would overlap with the permit areas for three HCPs approved by the USFWS, two of which were co-developed by the City; these HCPs are described below.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others. The MBTA protects over 800 species

of birds (including their parts, eggs, and nests) from killing, hunting, pursuing, capturing, selling, and shipping unless expressly authorized or permitted.

3.3.2.2 State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (California Water Code Division 7, Section 13000 et seq.) established the State Water Resources Control Board (SWRCB) and RWQCBs (collectively Water Boards) as the principal state agencies responsible for the protection of water quality in California. The Central Coast RWQCB has regulatory authority over portions of the BSA. The Porter-Cologne Water Quality Control Act provides that "All discharges of waste into the waters of the State are privileges, not rights." Waters of the State are defined in Section 13050(e) of the Porter-Cologne Water Quality Control Act as "…any surface water or groundwater, including saline waters, within the boundaries of the state." All dischargers are subject to regulation under the Porter-Cologne Water Quality Control Act, including both point and nonpoint source dischargers. The RWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction. On April 2, 2019, the SWRCB adopted by Resolution 2019-0015 the "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State" ("Procedures") for inclusion in the Water Quality Control Plans for Inland Surface Waters, Enclosed Bays, and Estuaries of California. The Procedures became effective on May 28, 2020; however, the Procedures have been the subject of a legal judgement by the California Superior Court.[1]

In adopting the Procedures, the SWRCB noted that under the Porter-Cologne Water Quality Control Act discharges of dredged or fill material to waters of the state are subject to waste discharge requirements or waivers. The SWRCB further explained that "although the state has historically relied primarily on requirements in the Clean Water Act to protect wetlands, U.S. Supreme Court rulings reducing the jurisdiction of the Clean Water Act over wetland areas by limiting the definition of 'waters of the United States' have necessitated the use of California's independent authorities under the Porter-Cologne Act to protect these vital resources."

By adopting the Procedures, the SWRCB mandated and standardized the evaluation of impacts and protection of waters of the state from impacts due to dredge and fill activities. The Procedures include: (1) a wetland definition; (2) a jurisdictional framework for determining if a feature that meets the wetland definition is a water of the state; (3) wetland delineation procedures; and 4) procedures for application submittal, and the review and approval of dredge or fill activities.

The Procedures define an area as a wetland if it meets three criteria: wetland hydrology, wetland soils, and (if vegetated) wetland plants. An area is a wetland if: (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation. This modified three-parameter definition is similar to the federal definition in that it identifies three wetland characteristics that determine the presence of a wetland: wetland hydrology, hydric soils,

[1] On January 26, 2021, the Superior Court in *San Joaquin Tributaries Authority v. California State Water Resources Control Board* issued a judgment and writ enjoining the SWRCB from applying, via the Water Quality Control Plan for Inland Surface Waters and Enclosed Bays [and Estuaries], the Procedures to waters other than those for which water quality standards are required by the Federal Clean Water Act. The SWRCB subsequently adopted another resolution on April 2, 2021 confirming that the Board's April 2, 2019 action relied, in part, on Water Code Section 13140, that allows the SWRCB to formulate and adopt state policy for water quality control and that the Procedures are therefore effective for all waters of the state as state policy for water quality control.

and hydrophytic vegetation. However, unlike the federal definition, the Procedures' wetland definition allows for the presence of hydric substrates as a criterion for wetland identification (not just wetland soils) and wetland hydrology for an area devoid of vegetation (less than 5% cover) to be considered a wetland.

California Endangered Species Act

The California Endangered Species Act (CESA) (CFGC Section 2050 et seq.) prohibits the "take" of any plant, fish, or wildlife species listed as endangered or threatened, or designated as candidates for listing, under CESA. Take under CESA is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." It does not include "the taking of habitat alone or the impacts of the taking" (Environmental Council of Sacramento v. City of Sacramento, 142 Cal. App. 4th 2018 (2006).

Like FESA, CESA allows exceptions to the prohibition for take that occurs during lawful activities. Sections 2081(b) and (c) of the CFGC authorize take of endangered, threatened, or candidate species if take is incidental to otherwise lawful activity and the applicants submits an approved plan that "fully mitigates" the impact of the take.

California Fish and Game Code

Fully Protected Species

The classification of "fully protected" was the state's initial effort in the 1960s to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians and reptiles and birds. Fully protected species may not be taken or possessed at any time, except through natural community conservation plans (see CFGC Section 2801 et seq.), and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the species for the protection of livestock.

Lake and Stream Resources

Under CFGC Section 1602, CDFW has authority to regulate work that will substantially divert or obstruct the natural flow of or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake. CDFW also has authority to regulate work that will deposit or dispose of debris, water, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to any person, state, or local governmental agency or public utility (CFGC Section 1601). CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of (1) definable bed and banks and (2) existing fish or wildlife resources. Because riparian habitats do not always support wetland hydrology or hydric soils, wetland boundaries (as defined by Clean Water Act Section 404) sometimes include only portions of the riparian habitat adjacent to a river, stream, or lake. Therefore, jurisdictional boundaries under CFGC Section 1602 may encompass a greater area than those regulated under Clean Water Act Section 404; CDFW does not have jurisdiction over ocean or shoreline resources.

Fish and Game Code Sections 3503, 3503.5, 3511, 3513, and 4150

CFGC Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. CFGC Section 3503.5 protects all birds-of-prey (raptors) and their eggs and nests. Section 3511 states fully protected birds or parts thereof may not be

taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA. All nongame mammals, including bats, are protected by CFGC Section 4150.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 directed CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the CFGC. To align with federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" animals into the act as threatened species but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, appropriate compensatory mitigation measures for significant impacts to rare plants are typically negotiated with the CDFW.

California Environmental Quality Act

CEQA requires identification of a project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. The act also provides guidelines and thresholds for use by lead agencies for evaluating the significance of project impacts.

CEQA Guidelines Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" (14 California Code of Regulations [CCR] 15380(b)(1). A rare animal or plant is defined in Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or … [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened under CEQA if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of "Special Species" as "a general term that refers to all of the taxa the California Natural Diversity Database (CNDDB) is interested in tracking, regardless of their legal or protection status." This is a broader list than those species that are protected under FESA, the CESA, and other CFGC provisions, and includes lists developed by other organizations, such as the Audubon Watch List Species. Guidance documents prepared by other agencies, including the Bureau of Land Management Sensitive Species and USFWS Birds of Special Concern, are also included on this CDFW Special Species list. Additionally, CDFW has concluded that plant species included on the CNPS's California Rare Plant Rank (CRPR) List 1 and 2 are covered by CEQA Guidelines Section 15380.

CEQA Guidelines Section IV, Appendix G (Environmental Checklist Form), requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service" (14 CCR 15000 et seq.).

CEQA Guidelines Section 15065, subdivision (a) (as reflected in the portion of the CEQA Guidelines Appendix G Environmental Checklist form devoted to Mandatory Findings of Significance), requires lead agencies to find significant environmental effects where a proposed project would substantially reduce the habitat of a fish or wildlife

species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of an endangered, rare or threatened species.

3.3.2.3 Local

The proposed project relates to the development of a public park including sports fields, utility buildings, and landscaping. Where applicable and when feasible to meet project objectives, the proposed project would be constructed consistent with local policies and ordinances. This section describes local programs, policies, and regulations related to biological resources that may apply to the proposed project.

County of El Dorado

General Plan

The following goals and policies from the County of El Dorado General Plan are relevant to the biological resources found within the BSA. These policies guide the location, design, and quality of development to protect biological resources such as wildlife habitat, open space corridors, and ecosystems.

Goal 7.3. Water Quality and Quantity. Conserve, enhance, and manage water resources and protect their quality from degradation.

Objective 7.3.3. Wetlands: Protection of natural and man-made wetlands, vernal pools, wet meadows, and riparian areas from impacts related to development for their importance to wildlife habitat, water purification, scenic values, and unique and sensitive plant life.

Policy 7.3.3.1. For projects that would result in the discharge of material to or that may affect the function and value of river, stream, lake, pond, or wetland features, the application shall include a delineation of all such features. For wetlands, the delineation shall be conducted using the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual.

Policy 7.3.3.3. The County shall develop a database of important surface water features, including lake, river, stream, pond, and wetland resources.

Policy 7.3.3.4. The Zoning Ordinance shall be amended to provide buffers and special setbacks for the protection of riparian areas and wetlands. The County shall encourage the incorporation of protected areas into conservation easements or natural resource protection areas.

Exceptions to riparian and wetland buffer and setback requirements shall be provided to permit necessary road and bridge repair and construction, trail construction, and other recreational access structures such as docks and piers, or where such buffers deny reasonable use of the property, but only when appropriate mitigation measures and Best Management Practices are incorporated into the project. Exceptions shall also be provided for horticultural and grazing activities on agriculturally zoned lands that utilize “best management practices (BMPs)” as recommended by the County Agricultural Commission and adopted by the Board of Supervisors.

Until standards for buffers and special setbacks are established in the Zoning Ordinance, the County shall apply a minimum setback of 100 feet from all perennial streams, rivers, lakes, and

50 feet from intermittent streams and wetlands. These interim standards may be modified in a particular instance if more detailed information relating to slope, soil stability, vegetation, habitat, or other site- or project-specific conditions supplied as part of the review for a specific project demonstrates that a different setback is necessary or would be sufficient to protect the particular riparian area at issue.

For projects where the County allows an exception to wetland and riparian buffers, development in or immediately adjacent to such features shall be planned so that impacts on the resources are minimized. If avoidance and minimization are not feasible, the County shall make findings, based on documentation provided by the project proponent, that avoidance and minimization are infeasible.

Policy 7.3.3.5. Rivers, streams, lakes and ponds, and wetlands shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site while disturbance to the resource is avoided or minimized and fragmentation is limited.

Goal 7.4. Wildlife and Vegetation Resources. Identify, conserve, and manage wildlife, wildlife habitat, fisheries, and vegetation resources of significant biological, ecological, and recreational value.

Objective 7.4.1. Pine Hill Rare Plant Species: The County shall protect Pine Hill rare plant species and their habitats consistent with Federal and State laws.

Policy 7.4.1.1. The County shall continue to provide for the permanent protection of the eight sensitive plant species known as the Pine Hill endemics and their habitat through the establishment and management of ecological preserves consistent with County Code Chapter 130.71 and the USFWS's Gabbro Soil Plants for the Central Sierra Nevada Foothills Recovery Plan (USFWS 2002).

Policy 7.4.1.2. Private land for Pine Hill rare plant preserve sites will be purchased only from willing sellers.

Policy 7.4.1.3. Limit land uses within established Pine Hill rare plant preserve areas to activities deemed compatible. Such uses may include passive recreation, research and scientific study, and education. In conjunction with use as passive recreational areas, develop a rare plant educational and interpretive program.

Policy 7.4.1.4. The Pine Hill Preserves, as approved by the County Board of Supervisors, shall be designated Ecological Preserve (-EP) overlay on the General Plan land use map.

Objective 7.4.4. Forest, Oak Woodland, and Tree Resources. Protect and conserve forest, oak woodland, and tree resources for their wildlife habitat, recreation, water production, domestic livestock grazing, production of a sustainable flow of wood products, and aesthetic values.

Policy 7.4.4.1. The Natural Resource land use designation shall be used to protect important forest resources from uses incompatible with timber harvesting.

Policy 7.4.4.2. Through the review of discretionary projects, the County, consistent with any limitations imposed by State law, shall encourage the conservation protection, planting, restoration, and regeneration of native trees in new developments and within existing communities.

Policy 7.4.4.3. Encourage the clustering of development to retain the largest contiguous areas of forests and oak woodlands possible.

Policy 7.4.4.4. For all new development projects or actions that result in impacts to oak woodlands and/or individual native oak trees, including Heritage Trees, the County shall require mitigation as outlined in the El Dorado County Oak Resources Management Plan (ORMP). The ORMP functions as the oak resources component of the County's biological resources mitigation program, identified in Policy 7.4.2.8.

3.3.3 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts of the proposed project on biological resources. The section identifies the thresholds of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the proposed project's impacts and contribution to significant cumulative impacts, if any are identified. Mitigation measures are presented for identified significant or potentially significant impacts, and the level of significance with mitigation is also identified.

3.3.3.1 Thresholds of Significance

The thresholds of significance used to evaluate the impacts of the proposed project on biological resources are based on Appendix G of the CEQA Guidelines. A significant impact would occur if the proposed project would:

A. Result in a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
B. Result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
C. Result in a substantial adverse effect on state or federally protected wetlands, (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
E. Result in conflicts with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.
F. Result in conflicts with the provision of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Additionally, CEQA Guidelines Section 15065(a)(1) sets forth three mandatory findings of significance related to degradation of biological resources. Therefore, a significant impact to biological resources related to these mandatory findings would occur if the proposed project would:

A. Substantially reduce the habitat of a fish or wildlife species.
B. Cause a fish or wildlife population to drop below self-sustaining levels.
C. Threaten to eliminate a plant or animal community.
D. Substantially reduce the number or restrict the range of a rare or endangered plant or animal.

3.3.3.2 Analytical Methods

Potential impacts to biological resources were identified based on the results of the literature review and field surveys summarized in Appendix C and the known or potential location of such resources relative to the proposed project. Additional information on how impacts were analyzed is provided below.

Construction

The impact analysis presented below focuses on temporary construction-related impacts of the proposed project. Work would be confined to the existing project footprint and includes grading, fill, installation of utilities, construction of retaining walls, and landscaping. Upon completion of construction, temporary work areas would be revegetated and/or restored, as relevant.

Operations and Maintenance

Post-construction operations and maintenance activities would be consistent with public parks. Park design includes operation times during daylight hours (dawn to dusk) and downcast lighting (up to 10 pm) to prevent light pollution that may affect wildlife species (see section 3.1 Aesthetics). These standard operation and maintenance activities include mowing, cleaning and maintaining park facilities and buildings, and maintenance of walking paths. None of these activities would require new ground disturbance outside the project area.

Impact Evaluation Approach

Impacts are evaluated with respect to the thresholds of significance described above. Both direct and indirect impacts are considered.

- **Direct impacts** refer to removal of a biological resource and may be permanent or temporary. Direct permanent impacts refer to the complete and permanent loss of a resource while direct temporary impacts refer to the short-term removal of a resource where the resource is expected to fully recover its function upon project completion. For purposes of this EIR, direct impacts, whether permanent or temporary, refer to areas within the project site where vegetation clearing, grubbing, or excavation removes biological resources.
- **Indirect impacts** are reasonably foreseeable effects caused by the proposed project but that occur at a different time or place. Indirect impacts may include short-term, temporary impacts on biological resources outside the project site during construction (i.e., occur at a different place), or long-term, permanent impacts on biological resources inside or outside the project site after project completion (i.e., occur at a different time). Temporary indirect impacts during construction may include increased dust, noise, and human activity that disrupts normal wildlife behavior, and construction-related soil erosion and runoff.

3.3.3.3 Impact Analysis

Areas of No Impact

The proposed project would have no impact with respect to the following thresholds of significance as described below.

- **Interfere Substantially with Fish or Wildlife Movement or Established Wildlife Corridors (Significance Threshold D).** There are no federally or state-designated regionally important wildlife corridors that overlap the BSA. Wooded portions of the BSA have value as a habitat linkage between areas of adjacent forest

habitats. Construction activities could temporarily disrupt local wildlife movement but would not create any new movement barriers to wildlife. Wildlife that currently move through the BSA or along Deadman Creek would continue to do so after construction is completed. Therefore, the proposed project would not interfere substantially with fish or wildlife movement or established wildlife corridors and there would be no impact.

- **Conflict with an Adopted Habitat Conservation Plan or Natural Community Conservation Plan (Significance Threshold F).** There are no Habitat Conservation Plans or Natural Community Conservation Plans that affect the proposed project, therefore there would be no impact.
- **Cause a Fish or Wildlife Population to Drop Below Self-Sustaining Levels or Threaten to Eliminate a Plant or Animal Community (Significance Thresholds H and I).** The proposed project would not cause a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate a plant or animal community. The proposed project would involve the removal of vegetation that could impact individual plant and animal species, which can be mitigated to a less-than-significant level. None of the proposed project components, either individually or collectively, would cause the elimination of entire plant or animal communities. Although some sensitive vegetation communities occur in or adjacent to the project site and may be temporarily impacted during construction,

Project Impacts

Impact BIO-1 The proposed project could have a substantial adverse effect on special-status plant and wildlife species during construction.

Special-Status Plants

Three special-status plant species have moderate potential to occur in the BSA (Table 3.3-2) but none have been observed in the project site to date nor were they detected during focused rare plant surveys conducted in 2022, which were performed during the time of year when these species would be evident and identifiable. Nevertheless, these species may occur in the area, and may become established at the project site prior to construction. Project construction could therefore impact these species should they occur.

Special Status Species

Foothill Yellow-Legged Frog

Foothill yellow-legged frog has high potential to utilize Deadman Creek while it maintains water. This drainage, however, does not contain water year-round and is therefore no suitable breeding habitat for this species. The proposed project avoids any work directly within the creek itself. Potential direct effects could occur if this species were moving through the area at the time of construction.

Western Pond Turtle

Western pond turtle has moderate potential to occur in and adjacent to Deadman Creek. Potential ground disturbance in the uplands could injure or kill individuals of these species if present in affected habitat at the time of construction. This would be a substantial adverse effect because any mortality of individuals or habitat loss would further contribute to population declines of these species.

Impact BIO-2 The proposed project could have a substantial adverse effect on riparian habitat or sensitive natural communities.

Blue oak – valley oak woodland is a sensitive natural community in the BSA with 0.53 acres expected to be impacted. This community is located along and east of Deadman creek at the eastern portion of the BSA. The proposed project leaves the majority of this community unaffected, however west of the creek trees will be removed. In accordance with County Code, the proposed project would have a substantial adverse effect on sensitive natural communities and the impact is **potentially significant**.

Impact BIO-3 The proposed project could have a substantial adverse effect on state or federally protected wetlands or waters.

There are 1.37 acres of aquatic resources that will be permanently removed by the proposed project. The two freshwater emergent marshes (FEW-01 and -02), seasonal wetland (SW-01), and ditch are anticipated to be directly impacted. Approximately 152.11 feet of linear aquatic resources (ditches) will be directly impacted. The proposed project was designed to avoid all impacts to Deadman creek. A 25-foot buffer around Deadman creek is part of the project design to avoid any indirect impacts to the feature. Therefore, the impact of the proposed would be **potentially significant**.

Impact BIO-4 The proposed project could impede the use of native wildlife nursery sites by removing or causing abandonment of active native bird nests.

Nursery sites are locations where fish and wildlife congregate for hatching and/or raising young, such as bird nests, colonial waterbird (e.g., herons and egrets) rookeries, spawning areas for fish, fawning areas for deer, and bat maternity roosts. For the purposes of this EIR, nursery sites are considered for native wildlife that are not designated as special-status species, which are addressed separately. The BSA contains suitable nesting habitat for ground and tree-nesting bird species, particularly within wooded areas and undeveloped lands. If conducted during the nesting season (February 1 to August 31), tree removals or trimming could directly impact any birds nesting in affected trees and increased human disturbance and construction-generated noise and vibration could cause abandonment of nests by adults. Therefore, the impact of the proposed project would be **potentially significant**.

Impact BIO-5 The proposed project could conflict with local policies or ordinances protecting oak trees.

The proposed project will remove approximately 20.79 acres of oak woodlands and heritage oak trees protected under the County's Oak Resources Management Plan (ORMP) and Oak Resources Conservation Ordinance. ORMP defines the County's Oak Resources and outlines impact mitigation requirements where impacts occur. Oak resources are defined as oak woodlands, individual native oak trees, and heritage trees. The BSA contains approximately 33.5 acres of oak woodland, covering most of the project site. Therefore, the impact of the proposed project would be **potentially significant**.

Impact BIO-6 The proposed project would not substantially reduce fish or wildlife species habitat.

The proposed project does not have the potential to substantially reduce the habitat of fish or wildlife species. The proposed project would not result in permanent changes to fish habitat in the Deadman Creek and would not appreciably reduce existing habitat or degrade aquatic conditions for fish species that may be present in these locations. The proposed project does have the potential to impact other aquatic or terrestrial wildlife species, including special-status species (see Impact BIO-1), because of ground disturbance and tree removal and trimming. However, the extent of anticipated ground disturbance does not extend to the creek itself. Therefore, the proposed project would not substantially reduce the habitat of a fish or wildlife species and the impact would be **less than significant.**

3.3.3.4 Cumulative Impacts

This section identifies and evaluates potential cumulative impacts on biological resources from the proposed project and past, present, and reasonably foreseeable future projects, as identified in Section 3.0.3.2 - Cumulative projects and Scope of Analysis, and as relevant to this topic. The geographic area considered in the cumulative analysis for this topic is the greater El Dorado County. The cumulative projects considered include other construction/development projects proposed by the County or private entities within the County. Cumulative projects in the project vicinity would be those that would contribute to construction- or operations-related biological resources resulting from the proposed project.

The construction of the proposed project would occur in phases over a period of several years, beginning in 2025 and ending in 2041. As shown in Section 3.0.3.2 - Cumulative projects and Scope of Analysis, there are several cumulative projects that are located at or near the project sites that could be under construction during this same period of time as the proposed project.

The proposed project would not contribute to cumulative impacts related to conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (Significance Threshold F) because it would have no impact related to this threshold, as described above. Therefore, this significance threshold is not further evaluated.

Other future projects within the County as noted above could result in impacts to biological resources. However, these projects would be subject to review and approval by the relevant jurisdiction on a case-by-case basis. Independent CEQA review would be required for all future projects with the potential to impact biological resources and mitigations would be incorporated into such projects to the extent feasible. Thus, it can be reasonably assumed that these projects would be designed or otherwise conditioned to avoid and minimize impacts to biological resources and would be required to comply with federal, state, and local regulations, policies, and ordinances.

Implementation of the proposed project would result in impacts to aquatic resources. Mitigation measures have been identified to reduce and avoid potential impacts to special-status wildlife species, sensitive vegetation communities, and jurisdictional aquatic resources resulting from project implementation to less-than-significant levels. Thus, there would be no net loss of wetlands, nor will there be impacts to other special-status resources. Post-construction, the proposed project would be operated and maintained in a manner consistent with such recreation facilities. Therefore, the proposed project, in combination with the reasonably foreseeable future projects in the watershed and vicinity would result in less-than-significant impacts to biological resources, and no further mitigation measures are required.

3.3.3.5 Mitigation Measures

MM BIO-1 Special-Status Amphibian and Reptile Species Survey and Monitoring. A pre-construction survey for Foothill yellow-legged frog and western pond turtle shall be conducted within 48 hours prior to the initiation of ground disturbance in suitable habitat for these species (i.e., damp upland areas near/adjacent to Deadman Creek). The survey area shall include all suitable habitat within the work areas, plus a 50-foot buffer. Following the survey, the contractor, under the direction of a qualified biologist, shall install wildlife exclusion fencing along the boundary of the work area containing suitable habitat to prevent special-status amphibians and reptiles from entering the work area. The wildlife exclusion fencing must be trenched into the soil at least 4 inches in depth, with the soil compacted against both sides of the fence for its entire length and must have

intermittent exit points. Turnarounds shall be installed at access points to direct amphibians and reptiles away from gaps in the fencing.

MM BIO-2 Worker Environmental Awareness Program. All workers shall receive worker environmental awareness program (WEAP) training conducted by a qualified biologist or their designated representative prior to any project construction activities. WEAP may also be conducted through a video created by a qualified biologist specifically for this project. WEAP shall instruct workers to recognize all special-status species potentially present in the project area, identify suitable habitat for these species, identify sensitive or protected habitats within the project area, and understand the nature and purpose of protective measures including best management practices (BMPs) and buffers to protect these biological resources. Additional items included in the training shall cover requirements for spill kits and the prevention of spills, and the contact information for the qualified biologist.

MM-BIO-3 Preconstruction Nesting Bird Survey. Vegetation removal activities shall be conducted outside the bird nesting season (February 1 through August 31) as much as possible to avoid direct impacts to nesting birds. For construction and vegetation removal activities occurring during the nesting season, an avian nesting survey of the work areas and contiguous habitat within 300 feet of all impact areas must be conducted for protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 14 days prior to the start of vegetation removal or construction activities. Once construction has started, if there is a break in activities that exceeds 14 days, then another avian nesting survey shall be conducted. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans along with an appropriate no disturbance buffer, which will be determined by the biologist based on the species' sensitivity to disturbance. The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The no disturbance buffer shall be demarcated in the field with flagging and stakes or construction fencing as determined appropriate by the biologist.

MM-BIO-4 Rare Plant Survey. Prior to any construction-related activities, a rare plant survey shall be conducted to determine if there are any special-status plants within the project area and which may potentially be disturbed. Surveys shall be timed according to the blooming period for the target species, and known reference populations will be visited prior to surveys to confirm the species is evident and identifiable at the time of the survey. If special-status species are identified, avoidance zones may be established around plant populations to clearly demarcate areas for avoidance. Avoidance measures and buffer distances may vary between species, and the specific avoidance zone distance will be determined in coordination with the appropriate resource agencies. No construction activity or grading would be permitted within the avoidance zone. Where avoidance is infeasible, and the plant(s) are subject to removal or potential damage from construction, the project applicant shall develop and implement a mitigation plan pursuant to State and Federal regulation. The mitigation plan shall provide for no net loss of habitat and shall include, but is not limited to, relocation of the affected plants, replanting, and monitoring of relocated and planted specimens.

MM BIO-5 Oak Tree Mitigation. The County of El Dorado Oak Resources Management Plan provides for oak woodland and individual oak tree mitigation. In general, removal of oak trees shall be replaced at a ratio of 1:1 (1 inch of new planting for each inch of tree removed). For oak woodland, the ratio is 1:1 (for up to 50% removal of oak woodland), 1.5:1 (for up to 75% removal), or 2:1 (for more than 75% removal). The proposed landscaping plan for the park includes plantings of native oak trees, which

will contribute towards mitigation. If full on-site mitigation is not feasible, off-site mitigation in approved conservation areas, or payment of in-lieu fees at the current County rate schedule may be used. The current in-lieu fee rate for oak woodlands are $8,285 per acre, individual trees are $153 per inch, and heritage trees are $459 per inch (El Dorado County 2017). Included in the fee are acquisition, initial management and monitoring, long term management and monitoring, and administration costs (El Dorado County 2017).

MM BIO-6: Aquatic Resources Mitigation. Prior to impacts occurring to U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) (collectively, the Resource Agencies) jurisdictional aquatic resources, the County of El Dorado or its designee shall obtain the following permits: ACOE 404 permit or authorization under a Nationwide Permit, RWQCB 401 Water Quality Certification, and California Fish and Game Code 1602 Streambed Alteration Agreement. To mitigate for impacts to jurisdictional waters, the project Proponent may purchase mitigation bank credits, including establishment, re-establishment, enhancement, or rehabilitation. Alternatively, a suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process. Either of these mitigation options would result in no net loss of jurisdictional aquatic resources. The precise mitigation ratio shall be no less than 1:1 and shall depend on the functions and values of the mitigation site and any restoration activities that may be conducted to further increase the functions and values of the mitigation site.

If mitigation is proposed to occur within the project Site or within the offsite mitigation area, then a Wetlands Mitigation and Monitoring Plan shall be prepared. Prior to issuance of land development permits, including clearing, grubbing, and grading permits for activities that would impact jurisdictional aquatic resources, the project proponent shall prepare a Wetlands Mitigation and Monitoring Plan to the minimum standards of the Resource Agencies. The Conceptual Wetlands Mitigation and Monitoring Plan shall, at a minimum, prescribe site preparation, planting, irrigation, and a 5-year maintenance and monitoring program with qualitative and quantitative evaluation of the revegetation effort and specific performance criteria to determine successful revegetation.

3.3.3.6 Significance After Mitigation

Implementation MM BIO-1 (Survey and Monitoring) and MM BIO-2 (Workers Environmental Awareness Program) would avoid substantial adverse effects on special-status amphibians and reptiles by conducting a preconstruction survey, installing wildlife exclusion fencing along the boundary of the work area containing suitable habitat to prevent individual from entering the work area, monitoring of vegetation removal and initial ground disturbance and the integrity of the exclusion fencing, and relocating any individuals within the construction area to nearby habitat that has equivalent value to support the species. Therefore, implementation of the above mitigation measures would reduce the impact on special-status amphibians and reptiles to less than significant. Implementation of MM BIO-3 (Pre-Construction Nesting Bird Surveys) would avoid impacts to protected bird species. Implementation of MM BIO-4 (Rare Plant Survey) would avoid substantial adverse effects to special status plants. Therefore, implementation of the above mitigation measures would reduce the impact on special-status bees to less than significant. Impact BIO-1 would be reduced to less than significant.

Implementation of MM BIO-5 (Oak Tree Mitigation) would avoid substantial adverse effects on sensitive natural vegetation communities by mitigating for oak tree woodland removal. Implementation of BIO MM-06 (Aquatic Resources Mitigation) would ensure no net loss of riparian habitat. Impact BIO-2 would be reduced to less than significant.

Implementation of Mitigation Measure (MM) BIO-6 (Aquatic Resources Mitigation) would lead to no net loss of aquatic resources. Therefore, implementation of the above mitigation measures would reduce the impact on aquatic resources, Impact BIO-3, to less than significant.

Implementation of MM BIO-3 (Pre-Construction Nesting Bird Survey) would avoid substantial adverse effects nesting bird species. Therefore, implementation of the above mitigation measures would reduce Impact BIO-4 to less than significant.

Implementation of MM BIO-5 (Oak Tree Mitigation) would avoid substantial adverse effects to oak trees. Therefore, implementation of the above mitigation measures would Impact BIO-5 to less than significant.

3.3.4 References

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SOURCE: Bing Maps 2021, OpenStreetMap

DUDEK

0 150 300 Feet

FIGURE3.3-1

Vegetation Communities and Land Cover Types

Biological Resources Constraints Analysis for the Diamond Springs Community Park Project

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SOURCE: Bing Maps 2021, OpenStreetMap

DUDEK

0 150 300 Feet

FIGURE 3.3-2

Aquatic Resources Delineation

Biological Resources Constraints Analysis for the Diamond Springs Community Park Project

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3.4 Cultural and Tribal Cultural Resources

This section describes the existing cultural resources and tribal cultural resources conditions of the project site, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant impacts related to implementation of the proposed Diamond Springs Community Park Project (proposed project). The analysis is based the Archaeological Resources Inventory Report (ARIR) (Dudek 2022) prepared for the project and to support this environmental impact report (EIR). The results of the ARIER are summarized in this section and the entire ARIER is included in Appendix D.

A summary of the comments received during the scoping period for this EIR is provided in Table 2-1, Scoping Comments Summary, in Chapter 2, Introduction, and a complete list of comments is provided in Appendix A.

3.4.1 Existing Conditions

The project site consists of two undeveloped parcels within an urban cluster area. The project area is mostly undeveloped, with gentle slopes of grassland, various oaks, and wetlands. A perennial stream, Deadman Creek, flows generally north-south through the eastern portion of the property. The project site is broadly within the Sierra Nevada foothills, approximately 14 miles east of the edge of the Central Valley. Elevation within the project area varies from approximately 1,670-1,720 feet.

The project site is bounded by the Lake Oaks Senior Mobile Home Park to the north, which surrounds Patterson Lake, a clinical office, Snowline Hospice, to the northeast, along with two residential properties located off of Farnsworth Lane. The former Charles F. Brown Elementary School as well as several residential properties are located west of the site, while Union Mine High School and Virtual Academy High School adjoin the project site to the southwest. A single residence is located on the southern adjoining property, near the southwest corner of the project site. Other areas that bound the project site to the south and east consists of vacant/undeveloped property. Surrounding uses within the project area include academic, residential, office/commercial, and undeveloped uses.

3.4.1.1 Cultural Context

Information sourced from recorded archaeological assemblages throughout California for the past 12,000 years have led to the development of numerous cultural chronologies. Some of these are based on geologic time, most are interpreted through temporal trends derived from archaeological assemblages, and others are interpretive reconstructions. The spatial extent and detail of these chronologies is also highly variable, with detail chronologies developed in some areas based on substantial numbers of radiocarbon dates, while other areas rely on cross-dating of stylistically distinct artifact styles or cultural patterns. However, each of these chronologies describes essentially similar trends in assemblage composition and cultural succession, with varying degrees of detail. California's archaeological assemblage composition is generally accepted as falling within the following overarching patterns: Paleoindian Period (11,550–8550 cal BC), Archaic Period (8550 cal BC–cal AD 1100), Emergent/Prehistoric Period (cal AD 1100–1750), and Ethnohistoric Period (post-AD 1769).

Prehistoric Setting

Paleoindian Period (11,550–8,550 cal BC)

Occupation of the Central Valley and Sierra Foothills is likely to have occurred at least 9,000 years ago, but only a handful of Paleoindian Period lithic bifacial points have been recorded. The nearest of these fluted points were found in Sierra Valley (west of Reno, Nevada), Ebbett's Pass (south of Lake Tahoe), and at the Sailor Flat site (in the Tahoe National Forest). Fluted points from this area have generally been recorded as isolated finds or recovered from contexts of mixed provenience. The primary examples of the Paleoindian pattern, to which such fluted and stemmed points are generally assigned, have been recorded east of the Sierra Nevada.

While the limited available data relating to the earliest occupation in the region has provided for a relatively broad and consistent interpretation of the Paleoindian Period, subsequent prehistoric temporal sequences are much more geographically defined and variable due to the greater amount of available data.

Martis Complex (3000 B.C.–A.D. 500)

The Martis complex has been identified to extend from Lassen County to Alpine County. The date range, 3000 B.C. to approximately 500 A.D. has been substantiated by obsidian hydration and radiocarbon dates. Subsistence during the Martis Complex was based on hunting and seed collecting economy, with highly mobile populations that exploited both upper and lower regions based on the relative seasonal abundance of resources. Projectile points are variable during this period, and were most commonly heavy with low formality, providing some resemblance to those identified in the Great Basin regions. Temporally representative tools include finger-held drills or punches, retouched volcanic flake scrapers, spokeshave-notched tools, and large biface blades and cores. During this period, there is a more intensive exploitation of local materials, rather than non-local cherts and obsidian, for the manufacture of formed flaked tools.

Kings Beach Complex (A.D. 500–Historic Contact)

Similar to the Martis Complex, the Kings Beach Complex was characterized by populations that migrated between upper areas in the warmer months and lower elevations during the fall and winter. Subsistence during this period shifted toward a focus on fishing and gathering. A reduction in size and weight of projectile points corresponded with adoption of bow and arrow technology. Typical point forms within this region included Desert Side-notched, Cottonwood, and Rosegate series. Obsidian and chert replaced volcanic materials such as basalt as the preferred materials for the manufacture of lithic tools. As both high quality cherts and obsidian are not local, the greater presence of such exotic materials suggests that there was an increase in trade with neighboring tribes during this period. The Kings Beach Complex additional included a greater reliance on exploitation of acorns. This trend is exemplified by the increased presence of bedrock mortars and pestles formed from local cobbles. It should be noted that while bedrock mortars were predominantly used for crushing and grinding acorns, they were also employed for the processing of a variety of other foods, including deer meat, camas roots and seeds. While the creation of mortars indicated a relatively high investment of time and energy, bedrock milling features found as frequently at sites with limited-to-no subsurface cultural deposits as at intensive use occupation areas with well-developed midden soils.

Ethnography Setting

The region surrounding the project area would have been in Hill Nisenan (also known as the southern Maidu) tribal territory during the ethnohistoric period. This group inhabited the Yuba, Bear, and American river watersheds, extending from the Sierra Nevada summit to the Sacramento River. Ethnographic work, most prominently conducted by Stephen Powers in the 1870s, writes of a relatively high population of indigenous inhabitants in this region. Notably, Powers identified 18 named villages alone along the Bear River, further suggesting that there may have been a larger portion of villages of which he has no knowledge. This was substantiated by interviews conducted by Hugh Littlejohn in 1928, who recorded a number of additional named habitation areas Nisenan village locations were also mapped along the Yuba, American, and Cosumnes Rivers. The earliest of these mapped villages, Opok, is centered just west of Diamond Springs, approximately 1 km north of the project area.

Nisenan habitation areas were most commonly situated near primary drainages and along ridgelines with mild slopes and south-facing exposures. Traditional village features included bedrock milling stations, granaries, conical house structures, as well as sweat and ceremonial houses. The dead were typically cremated and buried within the boundaries of the habitation area.

The Nisenan subsistence strategy was centered on fishing, hunting, and collecting vegetative resources. This group was highly mobile, with larger central habitation areas and surrounding satellite sites used during hunting excursions and for pre-processing of collected plant resources such as acorns. Common food items included deer, rabbits, birds, bear, rodents, other mammals of small and moderate size, as well as various insects. Deer were sometimes partially processed using mortar and pestle. Common tools included the bows and arrow, traps, harpoons, hooks, nets, portable and stationary grinding implements, and pestles and handstones. A number of goods were made using fibrous plants, including canoes constructed tule balsa or logs. Imported items included shell ornaments and beads (particularly disk beads as a monetary unit), green pigment, tobacco, steatite items, and obsidian. Exported items included bows and arrows, animal skins, pine nuts, and other local resources.

Historic Period Setting

Spanish Period (1769–1822)

Gaspar de Portolá entered what is now the San Francisco Bay in 1769. Additional explorations of the San Francisco Bay and the plains to the east were conducted by Father Pedro Fages in 1772 and Juan Bautista De Anza in 1776. In 1808, Lieutenant Gabriel Moraga led the first Spanish expedition into present-day Sacramento Valley. This group explored areas along the American, Calaveras, Cosumnes, Feather, Merced, Mokelumne, Sacramento, and Stanislaus River watersheds. The most recent Spanish expedition into this region was conducted by Luis Arguello in 1817. This group traveled up what is now the Sacramento River to the mouth of what is now the Feather River. Spanish missionization of Alta California was initiated in San Diego 1769. A total of 21 missions were constructed by the Dominican and Franciscan orders from 1769 through 1823.

Mexican Period (1822–1848)

Mexico's separation from the Spanish empire in 1821 and the secularization of the California missions in the 1830s caused further disruptions to native populations. Following the establishment of the Mexican republic, the government seized many of the lands belonging to Native Americans, providing them as parts of larger land grants to affluent Mexican citizens and rancheros. Captain John Sutter was granted the two largest areas of land in the Sacramento Valley area. Sutter founded New Helvetia, a trading and agricultural empire, in 1839. The headquarters

was located within Valley Nisenan territory at the confluence of the Sacramento and American Rivers. The 1833 Secularization Act passed by the Mexican Congress ordered half of all mission lands to be transferred to native populations, and the other half to remain in trust and managed by an appointed administrator. These orders were never implemented due to several factors that conspired to prevent Native Americans from regaining their patrimony. American fur trappers and traders conducted a number of exploratory intrusions into west Sierra Nevada Mexican territory. Notably, in 1826, Jebediah Smith led a small party of trappers in an expedition along the Sierra Nevada range, eventually entering what is now the Sacramento Valley in 1827. This group covered the area along the American and Cosumnes Rivers. From these travels, maps of this terrain were created and disseminated, providing for the waves of European prospectors, ranchers, and settlers who would come in the following decades.

American Period (Post-1848)

The end of the Mexican American war with the Treaty of Guadalupe Hidalgo in 1848 marks the beginning of the American Period in California. The early portion of the American Period is largely shaped by the mining of precious metals and other minerals, prompted in large part by the discovery of gold in January 1848 at Sutter's Mill in Coloma, on the South Fork of the American River. The California Gold Rush led to what has been characterized as "the greatest mass migration in American history", with extensive and enduring changes California's physical and cultural landscape. Within months of the initial discovery, gold was being collected in the gravel bars of the north, middle, and south forks of the American River, and extensive placer mining was occurring in nearly every adjacent gulch and ravine. The effects of these activities are still evident in the form of tailings, ditches, and other mining features scattered throughout these areas. Mining can also be credited for the placement of early transportation and communication corridors among the western Sierra Nevada, Sacramento, and San Francisco areas, and the subsequent development of agriculture and ranching throughout the foothills. As the gold fields swiftly dried up and the allure of gold mining declined, many new arrivals to the area refocused their efforts toward other economic opportunities. Agriculture and ranching became more prominent and productive pursuits in the lower foothills and Central Valley, while the timber industry gained importance at higher elevations. The earliest documented landowners in the vicinity of the project were Bradford and Mary Hammell, who owned and were living on a 160-acre parcel which included the project area by 1860. The Hammel property was bounded on the east by Knight's Ranch, on the south by Vaugh's Ranch, on the west by the L. M. Davis Ranch, and on the east by the Robinson and Ellis Ranch. Hammel and all of his neighbors were farmers and fruit growers. El Dorado County Deed records indicate that the Hammell's owned the property until 1916 when it was bought by Joseph Windle who subsequently sold part of the property to Edward Redemske.

3.4.1.2 Records Searches, Surveys, and Consultation

Record Searches

Investigation consisted of a records search for the project area and a 0.5-mile radius around the project site at the North Central Information Center (NCIC) at California State University Sacramento of the project site on April 14, 2022. The records search identified 21 previous studies performed within the records search area, of which three intersect with the project area. These 21 studies were conducted from dates ranging from 1984 to 2005. The three reports that intersect with the project area include two cultural resource assessment dating to 1988. The third study, also a cultural resource assessment, was conducted in 1990.

Historic research was also performed to better understand the history of land use of the project area. This research consisted of reviewing historic topographic maps and aerials. Documentation of cultural resources complied with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation, and the

California Office of Historic Preservation Planning Bulletin Number 4(a), December 1989, Archaeological Resource Management Reports: Recommended Contents and Format for the Preparation and Review of Archaeological Reports. All cultural resources identified during this inventory were recorded on California Department of Parks and Recreation (DPR) Form DPR 523 (Series 1/95), using the Instructions for Recording Historical Resources (Office of Historic Preservation 1995), including updates to previously recorded resources.

The records search identified three cultural resources within the project area and an additional 14 cultural resources within 0.5 miles of the project site (See Table 2 in Appendix D). The three cultural resources identified within the project site are described below.

P-09-001857

P-09-001857 is a historic-era resource consists of several ditch segments, an earthen berm or "penstock crossing", mining tailings, and a possible abandoned road. The site initially recorded in 1988, at which time the two northern ditches and penstock, a low partially washed out earthen berm spanning a small drainage and connecting the two ditch segments, were recorded and mapped. Northeast and upstream of the penstock are the remnants of another berm or mine tailings. In 1990 a second southern ditch segment and the possible roadbed were added to the site. Both of the recorded ditch segments extend beyond their recorded limits onto adjacent properties. The ditch segments are between 1-1.5m in width and up to 0.8m deep, with a 2m wide berm on the downslope side. In addition to the features, the 1988 record documents three sections of iron banded wood pipe and section of riveted iron pipe in the penstock area.

It was concluded that the ditch was constructed relatively recently, given its condition and the lack of fill-in from erosion, deeming it unlikely that the ditch was related to mining but was instead related to water conveyance in support of later agricultural activity, specifically orchards, in the area. Subsequent archival research found no mention of the ditch or any water conveyance in the deeds and patents for the parcel, nor any mention of the ditch in water rights books, resulting in the conclusion that the ditch was likely used to convey water for the fruit trees, crops, or livestock for the original property owner (Bradford Hammell) and was maintained and used by subsequent owners of the property.

P-09-001882

P-09-001882 is a multi-component site consisting of a bedrock milling feature, cluster of historic-era mining features, and a historic-era trash scatter. The bedrock milling feature is a large bedrock boulder with 14 mortars. The mortars vary from 8-20cm in diameter and 1-25cm in depth. Near the bedrock milling feature is a cluster of historic-era mining features consisting of five partially collapsed mine shafts/adits (horizontal passage or shaft leading into a mine for access or drainage) and four prospect pits, all with associated tailings piles. A historic-era trash scatter is also reported west of the milling feature, composed of can fragments, crockery, glass fragments of several colors, wire, an aluminum alarm clock, a back plate, a rubber sole, and some modern refuse. A small ditch segment is depicted on the sketch map of the site record, upslope and northeast of the mining features, but is not listed in the site constituents on the site record, nor was a separate site record included in the record search results describing the feature.

P-34-001883

P-09-001883 is a historic-era mining site initially recorded as an isolate in 1990, described as a one-half mile long area of intermittent tailings and prospect pits along Deadman Creek. The portion of the site south of the project

area was updated and recorded with greater detail during a later survey. The southern portion of the site varies from 60 to 100 feet in total width, generally following the course of Deadman Creek. The site is bounded by a combination of mining scarps/cuts into the bank and a ditch remnant, with low eroded tailings piles, stacked cobble concentrations, and small eroded prospect pits along the banks of the creek.

Historic-Period Map Review

Aerial photographs of the project area were available for the years 1946, 1952, 1962, 1982, 1984, 1993, 2005, 2009, 2010, 2012, 2014, 2016, 2018. Topographic maps including the project area were available for the years 1950, 191953, 1955, 1956, 1958, 1966, 1976, 1977, 1987, 2012, 2015, 2018. These historical documents indicate that very little change has occurred within most of the project in the past 75 years.

In the 1946 aerial image, the project area is undeveloped, with a mix of trees and grasses covering the visible area. The project area and immediate vicinity appear unchanged on the 1952 and 1962 maps, however Patterson Lake and buildings at the former Charles F. Brown Elementary School appear on the 1962 image, indicating their construction at some point in the decade between the photographs. The area to the northwest of the project area also appears to be graded in the 1962 image. A small road is visible running across the project area is evident to the project area in the 1984 image, additionally the houses/mobile homes southwest of Patterson Lake now appear on the aerial imagery. No additional changes are depicted within the project area on any of the later aerial images and by 2009 the area surrounding the project appears developed to its current condition.

The 1950 topographic map does not show any development within or adjacent to the project area, with the only Deadman's Creek depicted within the project area and the nearest development consisting of Pleasant Valley Road and numerous adjacent buildings to the northwest. No changes are evident on the topographic maps from 1953 to 1966. The 1976 topographic map depicts Patterson Lake north of the project area, several rectangular buildings to the northwest of the project—at the current location of the Snowline Hospice clinical office—and buildings at the location of the former Charles F. Brown Elementary School to the west of the project. The 1976 map also shows a new housing development and roads approximately 500 meters east of the project area. The 1977 topographic map appears the same as the earlier maps from 1950 to 1966. No differences are evident between the 1987 and 1976 maps. The 2012 map only depicts roads and topography, while the 2015 and 2018 maps depict roads, topography, and public buildings, with the former Charles F. Brown Elementary School, Virtual Academy High School, and Union Mine High School depicted on the map.

Survey

The current survey methods can be classified as intensive because short-interval transect spacing and full documentation of cultural resources were completed. Survey staff exceed the applicable Secretary of Interior's Professional Qualifications Standards for archaeological survey. Dudek archaeologists surveyed the entire project site. Survey was conducted with transects spaced no more than 15 meters apart and oriented along the project alignment. A GPS receiver with sub-meter accuracy and loaded with a shapefile of the project area boundary was used to verify the accuracy of the survey coverage. Evidence for buried cultural deposits was opportunistically sought through inspection of natural or artificial erosion/excavation exposures and the spoils from rodent burrows. In areas with low visibility to due dense vegetation, periodic boot scrapes were employed to inspect the site surface. Field recording and photo documentation of resources were completed as appropriate.

Newly Recorded Resources

There was one newly recorded site documented as a result of inventory efforts. This is summarized in detail below. Please see Confidential Appendix D in the Cultural Resources Report for the DPR form related to this site.

DSCP-01

One previously undiscovered resource, DSCP-01, was identified during pedestrian survey. DSCP-01 consists of two segments of an earthen berm or dam on either side of an ephemeral drainage southeast of a wet meadow. The northern segment measures approximately 40ft long, 10ft high, 5ft wide at the top, and 20ft wide at the bottom. The southern segment is approximately 45 feet long, 4 feet high, 9 feet wide at the top, and 16-20 feet wide at the bottom. The southern segment is slightly higher on the slope, such that the tops of the segments are at roughly the same elevation. The two segments are also in line with one another, with a gap of approximately 500 feet between them.

Both berms are constructed from dirt and appear to have been constructed from locally available material. The features are in fair-to poor condition with some erosion evident and dense vegetation growing on the intact portions of the berm. The exact function of the features is unclear but, given their similarity in size and orientation, they are likely part of the same original construction. The segments may have been originally connected as one continuous berm that is now washed out or served as independent segments funneling water toward the center of the drainage. No reservoir or other water feature is evident on any of the historic aerial photographs or topographic maps, indicating that the features probably predate 1946.

3.4.1.3 Tribal Coordination and Consultation

The proposed project is also subject to compliance with AB 52 (California Public Resources Code Section 21074) which requires consideration of impacts to TCRs as part of the CEQA process. AB 52 requires the County, as the lead agency responsible for CEQA compliance for the proposed project, to notify any California Native American Tribes (who have requested notification) of the proposed project who are traditionally or culturally affiliated with the geographic area of the project. Because AB 52 is a government-to-government process, all records of correspondence related to AB 52 notification and any subsequent consultation are on file with the County. On May 8, 2023, the County sent notification letters pursuant to AB 52 to tribes who are traditionally and culturally affiliated with the area of the project. Three tribes responded to the notice: United Auburn Indian Community, Wilton Rancheria, and the Shingle Springs Band of Miwok Indians. The United Auburn Indian Community deferred to the Shingle Springs Band regarding consultation on the project. The Shingle Springs Band requested the cultural resources study prepared for the project but did not request further consultation. Wilton Rancheria requested monitoring of ground disturbing activities on the project site, development of a monitoring and discovery plan, and appropriate training for all construction personnel. The mitigation measures were modified as a result of this consultation.

NAHC Sacred Lands File Search and Outreach

Dudek requested an NAHC search of the Sacred Lands File on April 14 2022, to check for the presence of sacred sites or locations of religious or ceremonial importance within the vicinity of the project, which returned negative results. The NAHC additionally provided a list of Native American tribes and individuals/organizations that might have knowledge of cultural resources in this area.

Following the NAHC response, letters were sent to the NAHC-listed tribal representatives with the intent of requesting information, opinions, or concerns relating to the proposed project impacts. These letters contained a brief description of the planned project, reference maps, and a summary of the NAHC Sacred Lands File search results.

3.4.2 Regulatory Framework

3.4.2.1 Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) established the NRHP and the President's Advisory Council on Historic Preservation (ACHP), and provided that states may establish State Historic Preservation Officers to carry out some of the functions of the NHPA. Most significantly for federal agencies responsible for managing cultural resources, Section 106 of the NHPA directs that

> [t]he head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP.

Section 106 also affords the ACHP a reasonable opportunity to comment on the undertaking (16 USC 470f).

Title 36 of the Code of Federal Regulations, Part 800 (36 CFR 800) implements Section 106 of the NHPA. It defines the steps necessary to identify historic properties (those cultural resources listed in or eligible for listing in the NRHP), including consultation with federally recognized Native American tribes to identify resources with important cultural values; to determine whether they may be adversely affected by a proposed undertaking; and the process for eliminating, reducing, or mitigating the adverse effects.

The content of Title 36 of the Code of Federal Regulations, Section 60.4, defines criteria for determining eligibility for listing in the NRHP. The significance of cultural resources identified during an inventory must be formally evaluated for historic significance in consultation with the ACHP and the California State Historic Preservation Officer to determine if the resources are eligible for inclusion in the NRHP. Cultural resources may be considered eligible for listing if they possess integrity of location, design, setting, materials, workmanship, feeling, and association.

Regarding criteria A through D of Section 106, the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, cultural resources, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that (36 CFR 60.4):

A. Are associated with events that have made a significant contribution to the broad patterns of our history; or
B. Are associated with the lives of persons significant in our past; or
C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. have yielded or may be likely to yield, information important in prehistory or history.

The 1992 amendments to the NHPA enhance the recognition of tribal governments' roles in the national historic preservation program, including adding a member of an Indian tribe or Native Hawaiian organization to the ACHP.

The NHPA amendments:

- Clarify that properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization may be determined eligible for inclusion in the National Register
- Reinforce the provisions of the Council's regulations that require the federal agency to consult on properties of religious and cultural importance.

The 1992 amendments also specify that the ACHP can enter into agreement with tribes that permit undertakings on tribal land and that are reviewed under tribal regulations governing Section 106. Regulations implementing the NHPA state that a federal agency must consult with any Indian tribe that attaches religious and cultural significance to historic properties that may be affected by an undertaking.

3.4.2.2 State

California Register of Historic Resources

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California Public Resources Code Section 5020.1[j]). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California Public Resources Code Section 5024.1[a]). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to California Public Resources Code Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally

designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- California Public Resources Code Section 21083.2(g) defines "unique archaeological resource."
- California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a) define "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource." It also defines the circumstances when a project would materially impair the significance of an historical resource.
- California Public Resources Code Section 21074(a) defines "tribal cultural resources."
- California Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- California Public Resources Code Sections 21083.2(b)-(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

Historical Resources

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5[b]). If a site is either listed or eligible for listing in the CRHR, or if it is included in a local register of historic resources or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code Section 5024.1[q]), it is a "historical resource" and is presumed to be historically or culturally significant for purposes of CEQA (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5[a]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5[b][1]; California Public Resources Code Section 5020.1[q]). In turn, CEQA Guidelines section 15064.5(b)(2) states the significance of an historical resource is materially impaired when a project:

1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
3. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance is materially impaired.

Where a project has been determined to conform with the Secretary of the Interior's Standards, the project's impact on historical resources would be considered mitigated to below a level of significance and, thus, not significant (14 CCR Section 15126.4[b][1]). In most cases, a project that demonstrates conformance with the Secretary of the Interior's Standards is categorically exempt from CEQA (14 CCR Section 15331), as described in the CEQA Guidelines:

> Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of the historical resource will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (Weeks and Grimmer 1995), the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant (14 CCR Section 15126.4[b][1]).

The Secretary of the Interior's Standards are a series of concepts focused on maintaining, repairing, and replacing historic materials, as well as designing new additions or making alterations. They function as common-sense historic preservation principles that promote historic preservation best practices. There are four distinct approaches that may be applied to the treatment of historical resources:

- Preservation focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time.
- Rehabilitation acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.
- Restoration depicts a property at a particular period of time in its history, while removing evidence of other periods.
- Reconstruction recreates vanished or non-surviving portions of a property for interpretive purposes.

The choice of treatment depends on a variety of factors, including the property's historical significance, physical condition, proposed use, and intended interpretation. The Guidelines provide general design and technical recommendations to assist in applying the Standards to a specific property. Together, the Standards and Guidelines provide a framework that guides important decisions concerning proposed changes to a historic property.

Unique Archaeological Resources

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in

an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Public Resources Code Section 21083.2[a], [b], and [c]).

Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (Public Resources Code Section 21083.2[a]; CEQA Guidelines Section 15064.5[c][4]). However, if a non-unique archaeological resource qualifies as tribal cultural resource (Public Resources Code Section 21074[c], 21083.2[h]), further consideration of significant impacts is required. CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in Public Resources Code Section 5097.98.

California Environmental Quality Act Assembly Bill 52 Consultation

State AB 52, effective July 1, 2015, recognizes that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities. The law establishes a separate category of resources in the CEQA called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation. Public Resources Code Section 21074 defines a "tribal cultural resource" as either:

- Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Nature American tribe that is either listed, or determined to be eligible for listing, on the national, state, or local register of historic resources; or
- A resource determined by the lead agency chooses, in its discretion and supported by substantial evidence, to treat as a tribal cultural resource.

The California Public Resources Code Section 21084.2 now establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." The Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project.

California Health and Safety Code

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the County Coroner has examined the remains (California Health and Safety Code Section 7050.5b). Public Resources Code Section 5097.98 outlines the process to be followed in the event that remains are discovered. If

the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (California Health and Safety Code Section 7050.5c). The NAHC would notify the most likely descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the MLD by the NAHC. The MLD may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

3.4.2.3 Local

The study area for the proposed project includes the jurisdiction of the El Dorado County. The general plan includes policies and programs related to cultural resources. Chapter 7, Conservation and Open Space discusses applicable general plan policies related to cultural resources, as relevant to the proposed project.

Specific details are provided in this section about the El Dorado County historic inventories, as this information was used in the evaluation of the proposed project.

El Dorado County General Plan

The following policies are from the Conservation and Open Space Element of the El Dorado County General Plan. All the listed policies are applicable to the cultural resources both in and within the project site vicinity.

Goal 7.5. Cultural Resources: Ensure the preservation of the County's important cultural resources.

Policy 7.5.1.2. Reports and/or maps identifying specific locations of archaeological or historical sites shall be kept confidential in the Planning Department but shall be disclosed where applicable.

Policy 7.5.1.3. Cultural resource studies (historic, prehistoric, and paleontological resources) shall be conducted prior to approval of discretionary projects. Studies may include, but are not limited to, record searches through the North Central Information Center at California State University, Sacramento, the Museum of Paleontology, University of California, Berkeley, field surveys, subsurface testing, and/or salvage excavations. The avoidance and protection of sites shall be encouraged.

Policy 7.5.1.4. Promote the registration of historic districts, sites, buildings, structures, and objects in the National Register of Historic Places and inclusion in the California State Office of Historic Preservation's California Points of Historic Interest and California Inventory of Historic Resources.

Policy 7.5.1.6. The County shall treat any significant cultural resources (i.e., those determined California Register of Historical Resources/National Register of Historic Places eligible and unique paleontological resources), documented as a result of a conformity review for ministerial development, in accordance with CEQA standards.

El Dorado County Cultural Resources Ordinance

General Plan Policy 7.5.1.1 advised the County to establish a Cultural Resources Ordinance. The "*Ordinance shall provide a broad regulatory framework for the mitigation of impacts on cultural resources (including historic, prehistoric and paleontological resources) by discretionary projects*". Additionally, that the "*County shall request to*

become a Certified Local Government (CLG) through the State Office of Historic Preservation". Policy 7.5.1.1 has not yet been implemented and the County has not requested to become a CLG.

3.4.3 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts associated with the proposed project related to cultural resources and tribal cultural resources. The section identifies the standards of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the proposed project's impacts and contribution to significant cumulative impacts, if any are identified.

3.4.3.1 Analytical Methods

As described in the Archaeological Resources Inventory Report (Appendix D of the EIR), a records search and pedestrian survey were conducted. Several types of information were considered relevant to evaluating the types of archaeological sites and site distribution that might be encountered within the project area. The information evaluated prior to conducting the pedestrian survey includes data maintained by the North Central Information Center, and available published and unpublished documents relevant to regional prehistory, ethnography, and early historic developments.

Pursuant to AB 52, The United Auburn Indian Community of the Auburn Rancheria (UAIC), the Wilton Rancheria, the Washoe Tribe of Nevada and California, the Ione Band of Miwok Indians, the T'si Akim Maidu, the Colfax-Todds Valley Consolidated Tribe, and the Shingle Springs Band of Miwok Indians (SSBMI) were notified of the proposed project. The SSBMI requested, and received, the Cultural Resource Report and Biological Study for the project. UAIC deferred consultation to SSBMI. The Wilton Rancheria responded to the request. As a result of consultation, mitigation measures for tribal cultural resources have been revised.

3.4.3.2 Thresholds of Significance

The standards of significance used to evaluate the impacts of the proposed project related to cultural resources and tribal cultural resources are based on statutory language found in Public Resources Code Sections 21083.2(a), 21084.1, 21084.2, CEQA Guidelines Section 15064.5(b), Appendix G of the CEQA Guidelines as listed below. A significant impact would occur if the proposed project would:

A. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
B. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5.
C. Disturb any human remains, including those interred outside of formal cemeteries.
D. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074.

3.4.3.3 Project Impact Analysis

This section provides a detailed evaluation of cultural resources and tribal cultural resource impacts associated with the proposed Project.

Impact CUL-1 The project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

The project site currently consists of two vacant parcels. The records search indicated that there are three cultural resources that overlap with the project site. These resources include a historic-era water conveyance system, a historic-era mining site, and a multicomponent site with historic-era mining features and a prehistoric bedrock milling feature. No historic built-environment resources were found to be present within the project area. Potentially historic archaeological resources are addressed in Impact CUL-2. Thus, the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5, **no impact** would occur.

Impact CUL-2 The project may cause a substantial adverse change in the significance of a historic or unique archaeological resource pursuant to Section 15064.5.

A records search was completed for the current project site and identified three cultural resources within project area boundary, all of which were relocated and revisited during survey. One newly recorded resource was identified within the project area during Dudek's pedestrian survey. Three of the resources intersecting with the project area were considered not to be representative of "unique" resources as defined under CEQA. Therefore, impacts to these resources to be less than significant.

However, the prehistoric component of P-09-001882 remains unevaluated and is assumed to be eligible for listing in the California Register. This resource is, therefore, considered a potentially significant archeological resource for the purposes of CEQA. Impacts to this resource would be **potentially significant**.

To reduce impacts to archeological resources, to a less than significant level, the resources are to be avoided by a minimum distance of 50ft to ensure appropriate preservation in place. In addition, implementation of Mitigation Measure CUL-1 Avoidance of Sensitive Archeological Resources would ensure that, in the event that the resources cannot be avoided, additional archeological efforts would be required such as subsurface exploratory testing to further assess the resources eligibility for NRHP/CRHR listing.

Furthermore, there is potential for encountering unanticipated significant cultural resources during project implementation. Impacts to previously undiscovered archeological resources would be reduced to a less than significant level through implementation of Mitigation Measure CUL-2 Archaeological and Native American Monitoring, which would ensure that resource locations are avoided, and that archaeological monitoring occurs in specified high-sensitive areas.

Through implementation of recommended management strategies, potentially significant impacts to archaeological resources would be reduced.

Impact CUL-3 The project may disturb any human remains, including those interred outside of formal cemeteries.

No prehistoric or historic-era burials were identified within the APE as a result of the records search. The project is not part of a dedicated cemetery. The NCIC records search did not indicate that burials of prehistoric Native American origin have been identified within 0.5 miles of the APE. Nevertheless, the project site is considered to have moderate sensitivity (Appendix D). In the event that human remains are encountered, the impact may be **potentially significant**. The recommended mitigation measure (MM CUL-3 Monitoring and Inadvertent Discovery

Plan) pertaining to preparing and implementing an archaeological monitoring and discovery plan and Worker Environmental Awareness Program would help ensure that unanticipated human remains would be appropriately respected and treated in compliance with regulatory requirements, including California Health and Safety Code Section 7050.5, PRC Section 5097.98, and other pertinent regulatory requirements.

Impact CUL-4 The project may cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074.

Based on the natural environment, the prehistoric and ethnohistoric context, the records search results and the archeological survey completed fort eh proposed project, there is one prehistorical archaeological resource in the project are that is considered to be eligible for the California Register. This resource, (P-09-001882) is a bedrock milling feature with potential for additional material present in the vicinity of the features. As such, the resource remains unevaluated and is assumed eligible for listing in the CRHR/NRHP.

The resources are to be avoided during construction activities to reduce impacts to tribal cultural resources. The project plans include avoiding the areas of known significant archaeological resources. Furthermore, mitigation measures (**MM CUL-1 and CUL-2**) would ensure that the resource areas are avoided during construction activities. This measure includes avoidance of resource P-09-001882 by a minimum of 50 feet and archeological and Native American monitoring within 300 feet of the boundaries of the known tribal cultural resource.

In the event that cultural materials are inadvertently identified during project construction, and the materials are determined to be tribal cultural resources, damage to the resources would be potentially significant. However, implementation of **MM-CUL-3** would reduce impacts to previously undiscovered tribal cultural resources to a less than significant level by ensuring that all resources identified during the construction process would be handled in compliance with applicable regulations.

3.4.3.4 Cumulative Impacts Analysis

Cumulative impacts on cultural resources which include CEQA historical resources (primarily built environment), archaeological resources, TCRs, and human remains consider whether impacts of the proposed project together with other projects in the larger region, when taken as a whole, substantially diminish the number of such resources within the same or similar context or type.

The proposed project, in conjunction with, past, present, and reasonably foreseeable probable future projects would not have a cumulative impact on archeological resources, tribal cultural resources and human remains.

As discussed in Section 3.4.3.3, Project Impact Analysis, the project as presently designed would not directly impact any known historical resources. It was further discussed that the project has the potential to impact prehistoric archeological resources, human remains, and TCRs on the proposed project site. These impacts are reduced to a less than significant level with the implementation of mitigation measures MM-CUL-1 (Avoidance of Sensitive Archaeological Resources), MM-CUL-2 (Archaeological and Native Monitoring), and MM-CUL-3 (Monitoring and Inadvertent Discovery Plan). These measures require protocol for avoidance of known sensitive archaeological resources on site as well as protocol in the event archaeological or tribal resources, or human remains are identified during ground disturbing activities. Implementation of these mitigation measures would effectively avoid damage to or loss of resources, and little to no residual impact would remain after mitigation. With implementation of these mitigation measures, the project's contribution to this cumulative impact would not be cumulatively considerable (less than significant).

The regulatory setting above presents numerous laws, regulations, and statutes, on both the federal and state levels, that seek to protect cultural resources including TCRs. Future projects within the region would also be subject to the same requirements as the proposed project. Technical studies and consultation would be required as part of the due diligence process and would result in the documentation and appropriate consideration of any resources that may be present. For archaeological resources, cumulative projects may require extensive excavation in culturally sensitive areas, and thus may result in adverse effects to known or previously unknown, inadvertently discovered archaeological resources. There is the potential for accidental discovery of other archaeological resources by the proposed project as well as by cumulative projects. These determinations would be made on a case-by-case basis, and the effects of cumulative development on historical and archaeological resources would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements. Therefore, impacts on archaeological and cultural resources would not be cumulatively considerable with mitigation incorporated as MM-CUL-1, MM-CUL-2, and MM-CUL-3.

3.4.3.5 Mitigation Measures

MM-CUL-1 Avoidance of Sensitive Archeological Resources Resource P-09-001882 should be avoided by a minimum of 50 feet. If the resource cannot be avoided by this distance additional archaeological efforts will be required, including subsurface exploratory testing to assess the presence/absence and general distribution of the resource, and/or evaluation for NRHP/CRHR listing.

MM-CUL-2 Archaeological and Native American Monitoring Archaeological monitors shall be present during all initial ground-disturbing activities within 300 feet of the prehistoric component of P-09-001882 and within 100 feet of Deadman Creek, where there is increased potential to encounter cultural resources. An archaeological monitoring and discovery plan shall be developed under the oversight of a qualified archaeological principal investigator meeting Secretary of the Interior's Professional Qualification Standards prior to construction.

MM-CUL-3 Monitoring and Inadvertent Discovery Plan. Prior to, a Secretary of the Interior-qualified archaeologist shall prepare a plan for cultural resources monitoring and inadvertent discovery. The plan shall include (but not be limited to) the following components:

Worker Environmental Awareness Training. Training program for all construction and field workers involved in site disturbance; on-site personnel shall attend a mandatory pre-project training led by a Secretary of the Interior-qualified archaeologist. The training will outline the general archaeological sensitivity of the area (without providing site specifics) and the procedures to follow in the event an archaeological resource and/or human remains are inadvertently discovered.

Monitoring Plan. The monitoring plan shall incorporate the requirements of MM-CUL-1 and CUL-2 and include the following:

- Person(s) responsible for conducting monitoring activities, including a request to Native American representatives for a Native American monitor;
- Person(s) responsible for overseeing and directing the monitors;
- How the monitoring shall be conducted and the required format and content of monitoring reports, including schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports;

- Clear delineation and fencing of sensitive cultural resource areas requiring monitoring;
- Clear delineation and fencing of sensitive cultural resource areas to be avoided;
- Protocol for notifications in case of encountering cultural resources, as well as methods of dealing with the encountered resources (e.g., collection, identification, curation);
- Methods to ensure security of cultural resources sites, including protocol for notifying local authorities (i.e. sheriff, police) should site looting and other illegal activities occur during construction.
- During the course of the monitoring, the archaeologist may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources.

Inadvertent Discovery of Cultural Resources. If prehistoric or historic-era archaeological resources are encountered, all construction activities within 100 feet will halt. The archaeological monitor will immediately notify the County of El Dorado of the encountered archaeological resource. Any culturally affiliate tribes would assess the significance of the find and make recommendations for further evaluation and treatment if necessary.

Inadvertent Discovery of Human Remains. In the event of discovery of any human remains during construction activities, such activities within 100 feet of the find shall cease until the El Dorado County Coroner has been contacted to determine that no investigation of the cause of death is required. The Native American Heritage Commission will be contacted within 24 hours if it is determined that the remains are Native American. The Commission will then identify the person or persons it believes to be the most likely descendant (MLD) from the deceased Native American, who in turn would make recommendations to the County of El Dorado for the appropriate means of treating the human remains and any grave goods.

After review of the find and consultation with the MLD, the authority to proceed may be accompanied by the addition of development requirements which provide for protection and preservation of the site and/or additional measures necessary to address the sensitive and unique nature of the site. All treatment recommendations made by the affiliated tribe(s) and other cultural resources specialists will be documented in the confidential portion of the project record. Work in the area(s) of the cultural find may only proceed after authorization from the lead agency in coordination with the Tribe.

3.4.3.6 Significance After Mitigation

With implementation of Mitigation Measures CUL-1 through CUL-3, impacts to cultural and tribal cultural resources would be reduced to less than significant. Implementation of MM-CUL-3 would also reduce the potential impacts of accidental discovery of human remains to less than significant.

3.4.4 References

Dudek. 2022. Archeological Resources Inventory Report for the Diamond Springs Community Park Project, El Dorado County, California. July 2023.

3.5 Energy

This section describes the existing energy conditions of the proposed Diamond Springs Community Park Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant impacts related to implementation of the project. The analysis is based on energy consumption modeling for the project, as part of the preparation of this environmental impact report (EIR). The results of the modeling are summarized in this section. No comments were received during the scoping period for this EIR that pertain to energy.

3.5.1 Existing Conditions

3.5.1.1 Electricity and Natural Gas

Pacific Gas and Electric Company (PG&E) provides electrical and natural gas service to the region. Incorporated in California in 1905, PG&E is one of the largest combination natural gas and electric utilities in the United States. It currently provides service to approximately 16 million people throughout a 70,000-square-mile service area in northern and central California from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east. The service area includes 106,681 circuit miles of electric distribution lines, 18,466 circuit miles of interconnected transmission lines. PG&E and other privately owned public utilities in the state are regulated by the California Public Utilities Commission (CPUC) (PG&E 2023).

According to the U.S. Energy Information Administration (EIA), California used approximately 247,250 gigawatt hours of electricity in 2021 (EIA 2022a). Electricity usage in California for different land uses varies substantially by the types of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. In 2019, California was the second-largest total energy consumer among the states, but its per capita energy consumption was less than in all other states except Rhode Island, due in part to its mild climate and its energy efficiency programs. (EIA 2022b).

In El Dorado County, PG&E reported an annual electrical consumption of approximately 1,293 million kilowatt hours (kWh) in 2021 (CEC 2023a).

According to the EIA, California used approximately 2,092,612 million cubic feet of natural gas in 2021 (EIA 2023a). The majority of California's natural gas customers are residential and small commercial customers (core customers). These customers account for approximately 35% of the natural gas delivered by California utilities (CPUC 2021). Large consumers, such as electric generators and industrial customers (noncore customers), account for approximately 65% of the natural gas delivered by California utilities (CPUC 2021). CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. Biogas (e.g. from wastewater treatment facilities or dairy farms) is just beginning to be delivered into the gas utility pipeline systems, and the State has been encouraging its development (CPUC 2021).

In 2021, PG&E had delivered approximately 33 million therms to El Dorado County (CEC 2023b).

3.5.1.2 Transportation-Related Energy Consumption

According to the EIA, California used approximately 524 million barrels of petroleum in 2020, with the majority (433 million barrels) used for the transportation sector, which was a substantial reduction from 2019 (659 million barrels of petroleum) due to the COVID-19 pandemic (EIA 2023b). According to EIA's "Energy Outlook 2021", it may take years for the U.S. to return to 2019 levels of energy consumption following the impact of COVID-19 on the U.S. economy and global energy sector (EIA 2021). There are 42 U.S. gallons in a barrel, so in 2020, total daily use of approximately 60.3 million gallons of total petroleum was consumed in California. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and greenhouse gas (GHG) emissions, and reduce vehicle miles traveled (VMT). Section 3.5.2, Regulatory Setting, discusses in more detail both federal and state regulations that would help increase fuel efficiency of motor vehicles and reduce GHG emissions. Market forces have driven the price of petroleum products steadily upward over time, and technological advances have made use of other energy resources or alternative transportation modes increasingly feasible.

Largely as a result of and in response to these multiple factors, gasoline consumption within the state has declined in recent years, and availability of other alternative fuels/energy sources has increased. The quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend will likely continue and accelerate. Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state. According to the California Air Resources Board's (CARB's) Emission Factor (EMFAC) Web Database, El Dorado County on-road transportation sources are projected to consume about 66 million gallons of petroleum in 2033 (CARB 2021), which is analyzed as the first year of project operations herein.

3.5.2 Regulatory Framework

3.5.2.1 Federal

Federal Energy Policy and Conservation Act and CAFE Standards

In 1975, Congress enacted the federal Energy Policy and Conservation Act, which established the first fuel economy standards, known as the Corporate Average Fuel Economy (CAFE) standards, for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration (NHTSA) is responsible for establishing additional vehicle standards. In 2012, new CAFE standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. The act includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. The act requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in the act. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. The Energy Policy Act also requires states to consider a variety of

incentive programs to help promote AFVs. The Energy Policy Act provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased CAFE standards for motor vehicles, the EISA facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances
- Requiring approximately 25% greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200% greater efficiency for light bulbs, or similar energy savings, by 2020
- While superseded by the U.S. Environmental Protection Agency (EPA) and NHTSA actions described previously, establishing miles per gallon targets for cars and light trucks and directing the NHTSA to establish a fuel economy program for medium-and heavy-duty trucks and create a separate fuel economy standard for trucks

This federal legislation requires ever-increasing levels of renewable fuels (the RFS) to replace petroleum (EPA 2023). EPA is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains at least a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act and established the first renewable fuel volume mandate in the United States. As required under the Energy Policy Act, the original RFS program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several ways that laid the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as “RFS2” and includes the following:

- The EISA expanded the RFS program to include diesel, in addition to gasoline.
- The EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- The EISA established new categories of renewable fuel and set separate volume requirements for each one.
- The EISA required EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green (environmentally beneficial) jobs.

Intermodal Surface Transportation Efficiency Act of 1991

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 promoted the development of intermodal transportation systems to maximize mobility and address national and local interests in air quality and energy. ISTEA contained factors for metropolitan planning organizations to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, metropolitan planning organizations adopted policies defining the social, economic, energy, and environmental values guiding transportation decisions.

Transportation Equity Act for the 21st Century

The Transportation Equity Act for the 21st Century was signed into law in 1998 and builds on the initiatives established in the ISTEA legislation (previously discussed). The Transportation Equity Act authorizes highway, highway safety, transit, and other efficient surface transportation programs. The act continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of transportation decisions. The Transportation Equity Act also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of intelligent transportation systems to help improve operations and management of transportation systems and vehicle safety.

3.5.2.2 State

Warren-Alquist Act

The California legislature passed the Warren-Alquist Act in 1974. The Warren-Alquist Act created the California Energy Commission (CEC). The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation's first energy conservation standards for buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

State of California Energy Action Plan

CEC and CPUC approved the first State of California Energy Action Plan in 2003. The Energy Action Plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are provided, and identified policies, strategies, and actions that are cost effective and environmentally sound for California's consumers and taxpayers. In 2005, CEC and CPUC adopted a second Energy Action Plan to reflect various policy changes and actions of the preceding 2 years.

At the beginning of 2008, CEC and CPUC determined that it was not necessary or productive to prepare a new Energy Action Plan. This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of

2006 (discussed in "Assembly Bill 32 and Senate Bill 32"). Rather than produce a new Energy Action Plan, CEC and CPUC prepared an update that examines the state's ongoing actions in the context of global climate change.

Senate Bills 1078, 107, X1-2, 350, 100, and 1020

Senate Bill (SB) 1078 (2002) established the California RPS Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. As a related measure, SB 1078 required CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

SB 107 (2006) accelerated the RPS Program established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) required all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 set a three-stage compliance period: by December 31, 2013, 20% of electricity had to come from renewables; by December 31, 2016, 25% of electricity had to come from renewables; and by December 31, 2020, 33% was required to come from renewables.

SB 350 (2015) expanded the RPS Program by requiring retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) accelerated and expanded the standards set forth in SB 350 by establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030, should be obtained from qualifying renewable energy sources. SB 100 also states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity does not increase carbon emissions elsewhere in the western grid. Additionally, 100% zero-carbon electricity cannot be achieved through resource shuffling.

SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035; 95% by December 31, 2040; and 100% by December 31, 2045.

Consequently, utility energy generation from non-renewable resources is expected to be reduced based on implementation of the RPS requirements described above. The project's reliance on non-renewable energy sources would be reduced accordingly.

Assembly Bill 1007 (2005)

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32, Senate Bill 32, and Assembly Bill 1279

In 2006, the state legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In 2022, the legislature enacted AB 1279, the California Climate Crisis Act, with the goal of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and for statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels by 2045. In accordance with AB 32 and SB 32, and more recently, AB 1279, CARB prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies, using renewable resources, and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources.

California Building Standards

The California Building Standards Code was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure that new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every 3 years by the Building Standards Commission and the California Energy Commission (CEC) and revised if necessary (California Public Resources Code Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, to "reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code Section 25402[d]) and cost effectiveness (California Public Resources Code Section 25402[b][2–3]). As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment. The current Title 24 standards are the 2022 Title 24 building energy efficiency standards, which became effective January 1, 2023.

In addition to CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24), which is commonly referred to as California's Green Building Standards (CALGreen), establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality.

State Vehicle Standards

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO_2) emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emissions standards for passenger vehicles, light-duty trucks, and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state. AB 1493 required that CARB set GHG emissions standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009–2012 standards resulted in a reduction in GHG emissions of approximately 22% compared to emissions from the 2002 fleet, and the 2013-2016 standards resulted in a reduction of approximately 30% compared to the 2002 fleet.

In 2019, EPA and NHTSA published the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1) (84 FR 51310), which revoked California's authority to set its own GHG emissions standards and set ZEV mandates in California. In March 2020 Part Two was issued, which set CO_2 emissions standards and CAFE standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. In December 2021, NHTSA withdrew its portions of the SAFE I rule (NHTSA 2021). In March 2022, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate. EPA's action concludes its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and are now entirely rescinded.

Although the focus of the state's vehicle standards is on the reduction of air pollutants and GHG emissions, one co-benefit of implementation of these standards is a reduced demand for petroleum-based fuels.

3.5.2.3 Regional

Metropolitan Transportation Plan/ Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions reduction mandates established in AB 32. As codified in California Government Code Section 65080, SB 375 requires Metropolitan Planning Organizations (MPOs) to include a sustainable communities strategy in their regional transportation plans. The main focus of the sustainable communities strategy (SCS) is to plan for growth in a fashion that will ultimately reduce GHG emissions, but the strategy is also part of a bigger effort to address other development issues, including transit and vehicle miles traveled (VMT), which influence the consumption of petroleum-based fuels.

SACOG is designated by the state and federal governments as the MPO and is responsible for developing the Metropolitan Transportation Plan (MTP)/SCS in coordination with Sacramento, Yolo, Yuba, Sutter, El Dorado and Placer counties and the 22 cities within those counties (excluding the Tahoe Basin). In November 2019, SACOG adopted the 2020 MTP/SCS, which lays out a path for improving our air quality, preserving open space and natural resources, and helping California achieve its goal to reduce GHG that contribute to climate change (SACOG 2019).

El Dorado County General Plan

The following goal, objective, and policy from the Public Services and Utilities Element of the General Plan (El Dorado County 2019) would apply to the project:

Goal 5.6 Gas, Electric, and Other Utility Services. Sufficient utility service availability consistent with the needs of a growing community.

Objective 5.6.2 Encourage Energy Efficient Development. Encourage development of energy-efficient buildings, subdivisions, development, and landscape designs.

Policy 5.6.2.1. Require energy conserving landscaping plans for all projects requiring design review or other discretionary approval.

3.5.3 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts associated with the project related to energy. The section identifies the thresholds of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the project's impacts and contribution to significant cumulative impacts, if any are identified. Mitigation measures are presented for identified significant or potentially significant impacts, and the level of significance with mitigation also is identified.

3.5.3.1 Thresholds of Significance

The thresholds of significance used to evaluate the impacts of the project related to energy are based on Appendix G of the CEQA Guidelines. A significant impact would occur if the project would:

A. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
B. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.5.3.2 Analytical Methods

Construction

Electricity

The amount of electricity used during construction of the project would be minimal because demand generally would be generated from use of electrically powered hand tools. As such, construction electricity demand is qualitatively addressed.

Natural Gas

Natural gas is not anticipated to be required during construction of the project; therefore, construction natural gas demand is qualitatively addressed.

Petroleum

Potential impacts were assessed for off-road equipment and on-road vehicle trips during construction based on the California Emissions Estimator Model (CalEEMod) outputs (see Appendix B). Fuel consumption from equipment and vehicles was estimated by converting the total CO_2 emissions to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton (MT) CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per MT CO_2 per gallon (The Climate Registry 2022). Heavy-duty construction equipment associated with construction activities, vendor trucks, and haul trucks are assumed to use diesel fuel. Worker vehicles are assumed to be gasoline fueled. The details for construction criteria air pollutant emissions modeling discussed in the air quality section apply to the energy analysis as well; see Section 3.2.3.2, Analytical Methods, for air quality.

Operation

Energy consumption in support of or related to project operations would include facilities energy demands (energy consumed by building operations and site maintenance activities), transportation energy demands (energy consumed by on-road vehicles accessing the project site), and stationary sources.

Electricity

The project's operational phase would require electricity for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, electronics, and for water and wastewater treatment and conveyance.

Natural gas

The project would be all-electric and would not require natural gas combustion during long-term operations.

Petroleum

The fuel consumption resulting from the project's operational phase would primarily be attributable to vehicles traveling to and from the project site. Energy that would be consumed by traffic is a function of total VMT and estimated vehicle fuel economies for the vehicles accessing the project. Annual VMT was estimated based on the default trip lengths in CalEEMod and the trip generation rates for the project (weekdays and Saturdays), which are based on the traffic data provided in Chapter 3.12, Transportation, of this EIR. Notably, Saturday trip rates were also input for Sundays to provide a conservative analysis. With respect to estimated VMT, the project would generate an estimated 5,298,327 VMT. The project also includes a small diesel-fueled 158-horsepower generator, which was assumed to operate one-hour a day for up to 50-hours a year for routine testing and maintenance. Finally, gasoline was assumed to be required for landscaping equipment. Fuel consumption from all operational equipment and vehicles was estimated by converting the total CO_2 emissions to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Details of these calculations and assumptions are provided in Appendix B.

3.5.3.3 Project Impact Analysis

This section provides a detailed evaluation of energy impacts associated with the project.

Impact ENE-1 The project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

Construction

Electricity

Temporary electric power for as-necessary lighting and electronic equipment would be provided by PG&E. The amount of electricity used during construction would be minimal because typical demand would be generated by electrically powered hand tools. The electricity used for construction activities would be temporary and minimal; therefore, project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity.

Natural Gas

Natural gas is not anticipated to be required during construction of the project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below. Any minor amounts of natural gas that may be consumed as a result of project construction would be temporary and negligible and would not have an adverse effect; therefore, project construction would not result in wasteful, inefficient, or unnecessary consumption of natural gas.

Petroleum

Offroad equipment used during construction of the project would primarily rely on diesel fuel, as would vendor and haul trucks. In addition, construction workers would travel to and from the project site throughout the duration of construction. It is assumed in this analysis that construction workers would travel in gasoline-powered light-duty vehicles.

The estimated diesel fuel usage from construction equipment and trucks, as well as estimated gasoline fuel usage from worker vehicles, is shown in Table 3.5-1.

Table 3.5-1. Total Project Construction Petroleum Demand

Scenario	Off-Road Equipment (diesel)	Haul Trucks (diesel)	Vendor Trucks (diesel)	Worker Vehicles (gasoline)
	Gallons			
Project Construction	456,096	0.00	15,137	17,514
			Total Petroleum Consumed for Project Construction	488,747

Source: Appendix B.

In summary, construction associated with the development of the project is estimated to consume a total of approximately 488,747 gallons of petroleum. Notably, the project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology requirements.

Overall, while construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. Further, the petroleum consumed related to construction would be typical of construction projects of similar types and sizes and would not necessitate new petroleum resources beyond what are typically consumed in California. Therefore, because petroleum use during project construction would be temporary and minimal and would not be wasteful or inefficient, impacts are determined to be less than significant.

Operations

Electricity

Based on information provided by the County, the project would consume approximately 250,000 kWh per year during operation. The additional electricity demand for the project would be comparable to other similar projects of scale and configuration and would not be unusual or wasteful as compared to overall local and regional demand for energy resources. For these reasons, electricity consumption of the project would not be considered inefficient or wasteful, and impacts would be less than significant.

Natural Gas

The project would be all-electric and would not require natural gas combustion during long-term operations.

Petroleum

During operations, fuel consumption would involve the use of motor vehicles traveling to and from the project site, emergency generator testing and maintenance, and landscaping equipment. Fuel demand estimates for the project are provided in Table 3.5-2.

Table 3.5-2. Operational Petroleum Demand

Scenario	On-Road Vehicles (gasoline)	On-Road Vehicles (diesel)	Emergency Generator (diesel)	Landscape Equipment (gasoline)
	Gallons			
Project Operations	148,267	43,815	404	25
Total Petroleum Consumed for Project Operations				192,510

Source: Appendix B.

As summarized in Table 3.5-2, the project would result in an estimated annual increase in fuel demand of approximately 192,510 gallons of petroleum. Notably, however, as described in the *Transportation Impact Study* (Appendix H), based on the project's configured uses and its location in an area where similar uses are not provided, the project has the potential to divert traffic from parks much further away, which would result in a VMT reduction in the region. This VMT reduction was not accounted for in the estimate of petroleum provided in Table 3.5-2. Trip generation and VMT associated with the project are consistent with other parks of similar scale and configuration. That is, the project does not propose uses or operations that would inherently result in excessive and wasteful activities, nor associated excess and wasteful vehicle energy consumption. Finally, enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future fuel demands per VMT. As supported by the preceding discussions, the project's operational petroleum consumption would not be considered inefficient, wasteful, or otherwise unnecessary and impacts would be less than significant.

Renewable Energy Potential

As part of the project's design process, the County considered how the project could potentially increase its reliance on renewable energy sources to meet the project's energy demand. Renewable energy sources that were

considered for their potential to be used to power the project, consistent with the California Energy Commission's (CEC's) definition of eligible renewables, include biomass, geothermal, solar, wind, and small hydroelectric facilities.

Given the project's location and the nature of the project, there are considerable site constraints including incompatibility with surrounding land uses for large scale power generation facilities, unknown interconnection feasibility, compatibility with utility provider systems, and no known water or geothermal resources to harness, that would eliminate the potential for biomass, geothermal, wind, and hydroelectric renewable energy to be installed onsite.

The project would comply with all applicable Title 24 code provisions, such as installation of solar photovoltaic panels on the gym roof and electric vehicle (EV) charging stations. While the project does not propose battery storage at the time, the project does not preclude installation of battery storage in the future if determined to be a feasible and compatible land use of the site.

Summary

As explained above, the project would install solar panels and EV charging stations and would not result in wasteful, inefficient, or unnecessary consumption of energy resources, including electricity, natural gas, or petroleum during project construction or operation. Impacts would be less than significant.

Impact ENE-2 The project would not result in conflicts with or otherwise obstruct a state or local plan for renewable energy or energy efficiency.

Part 6 of Title 24 of the California Code of Regulations establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically (every 3 years) to incorporate and consider new energy efficiency technologies and methodologies. Title 24 also includes Part 11, the California Green Building Standards Code (CALGreen). CALGreen institutes mandatory minimum environmental performance standards for all ground-up, new construction of commercial and state-owned buildings. The components of the project that include new structures would meet all applicable Title 24 and CALGreen standards to reduce energy demand and increase energy efficiency. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and would have less-than-significant impacts related to conflicts with applicable plans.

3.5.3.4 Cumulative Impacts Analysis

This section provides an evaluation of cumulative energy impacts associated with the project and past, present, and reasonably foreseeable future projects, as identified in identified in Section 3.0, Introduction to Analyses, and as relevant to this topic. The geographic area considered for the analysis of cumulative energy impacts is El Dorado County.

The project, in combination with past, present, and reasonably foreseeable future development, would not result in a significant cumulative impact related to energy.

Potential cumulative impacts on energy would result if the project, in combination with past, present, and future projects, would result in the wasteful or inefficient use of energy. Significant energy impacts could result from development that would not incorporate sufficient building energy efficiency features, achieve building energy efficiency standards, or if projects result in the unnecessary use of energy during construction or operation.

As discussed in Impact ENE-1 and Impact ENE-2, the project would not result in wasteful, inefficient, or unnecessary use of energy during construction or operations, nor would it conflict with an applicable plan. Each of the cumulative projects listed in Section 3.0 would have a construction period during which primarily petroleum would be used; however, it is expected that such usage would be temporary and would not constitute a wasteful, inefficient, or unnecessary consumption of energy. Regarding operations, it is anticipated that these other projects would also be designed to be comparable to other similar projects of scale and configuration and would not contribute to any potential cumulative energy impacts. Furthermore, any commercial and residential cumulative projects that may take place in the County that include long-term energy demand would be subject to CALGreen, which provides energy efficiency standards. In addition, cumulative projects would be required to meet or exceed the Title 24 building standards, as applicable, further reducing the inefficient use of energy. Furthermore, various federal and state regulations, including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program, would serve to reduce the transportation fuel demand of cumulative projects.

For the reasons above, the project, together with the cumulative projects would not result in wasteful, inefficient, or unnecessary use of energy or conflicts with applicable plans. Therefore, the project, in combination with past, present, and reasonably foreseeable future development, would not result in a significant cumulative impact related to energy.

3.5.3.5 Mitigation Measures

No mitigation measures are required.

3.5.4 References

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3.6 Geology and Soils

This section describes the existing geology and soils conditions of the project site and vicinity, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant impacts related to implementation of the proposed the Diamond Springs Community Park Project (proposed project or project). The analysis is based in part on a site-specific geotechnical report prepared for the project (Youngdahl Consulting Group 2023). The results of the geotechnical report are summarized in this section and the report is included as Appendix E of this EIR.

No scoping comments were received directly addressing geology and soils, although a letter was received from the Regional Water Quality Control Board. Board requirements include compliance with the Construction Storm Water General Permit, which includes erosion controls. Scoping letters are provided in Appendix A of this EIR.

3.6.1 Existing Conditions

3.6.1.1 Regional Geologic Setting

The proposed project site is located within the foothills of the Sierra Nevada Mountain Range. The mountain range is characterized as a tilted fault block about 400 miles long north-to-south and about 70 miles at its widest across east-to-west. The majority of the range is composed of granitic rocks with some metavolcanic and metasedimentary rocks. The eastern faces of the range are high rugged steep slopes that contrast with the gentle western slope of the range that eventually disappear under the sediments of the Great Valley as it descends westward. Deep river canyons are cut into the western slope. The proposed project site is underlain in part by surface soils, which in turn is underlain by weathered metavolcanic bedrock (Appendix E).

3.6.1.2 Site Geology

As part of the geotechnical investigation, a field study was conducted to identify the underlying materials (Appendix E). The field study included 9 test pits that were excavated to a maximum depth of 8 feet below ground surface. In general, all of the test pits encountered surfaces soils that consisted of silty sands and sandy silts to depths that varied from 1 to approximately 3 feet below ground surface. Dense clayey sand was also encountered in one test pit. Weathered bedrock was encountered beneath the surface soils to the maximum depth explored at 8 feet (Appendix E). According to a geologic map, the bedrock at the site is mapped as Mesozoic Era (252 to 66 million years ago) granitic rocks and Jurassic Period (201 to 145 million years ago) metavolcanic rocks known as the Logtown Ridge Formation.

3.6.1.3 Slope Stability

Landslides, slope failures, and mudflows of earth materials generally occur where slopes are steep and/or the earth materials are weak. Earthquake-induced landslides may also occur due to seismic ground shaking. According to the geotechnical report, the absence of a permanent elevated groundwater table combined with relatively low seismicity of the area and shallow depth to bedrock make the potential for slope instability low (Appendix E).

3.6.1.4 Subsidence

Subsidence occurs when a substantial portion of land is vertically displaced, usually due to the withdrawal of groundwater, oil, or natural gas, or as a result of decomposition of natural organic materials. Soils that are particularly subject to subsidence include those with high silt or clay content and/or high organic content. The effects of subsidence include damage to buildings and infrastructure, increased flood risk in low-lying areas, and lasting damage to groundwater aquifers and aquatic systems. The project site is not located in an area of historic or recent subsidence due to groundwater extraction, peat loss, or oil extraction (USGS 2023). In addition, the relatively shallow depth to bedrock also makes the likelihood of subsidence occurring low.

3.6.1.5 Expansive Soils

Expansive soils are composed predominantly of clays, which greatly increase in volume when saturated with water and shrink when dried. Expansive soils can cause structural foundations to rise during the rainy season and fall during the dry season. If this expansive movement varies underneath various parts of the structure, foundations may crack and portions of the structure may be distorted. The potential for soil to undergo shrink and swell is greatly enhanced by the presence of a fluctuating, shallow groundwater table. Changes in the volume of expansive soils can result in the consolidation of soft clays after the lowering of the water table or the placement of fill. According to the geotechnical report, the clayey sands that were encountered in one test pit (located near the proposed gymnasium) was found to be moderately expansive but only had a limited presence at the site (Appendix E).

3.6.1.6 Regional Seismicity and Seismic Hazards

The proposed project site is not considered to be located in a very seismically active region of California. There are no Holocene-active faults[1] located within 45 miles of the Project site (Appendix E). The nearest mapped faults to the site are related to the Bear Mountains and Melones Fault zones located from 3 miles west and east of the site respectively (Appendix E). The closest Holocene-active fault to the Project site is the West Tahoe fault, located approximately 46 miles to the northeast. However, western El Dorado County may experience ground shaking from a distant Holocene-active fault (El Dorado County 2018). For example, the 1906 earthquake on the San Andreas fault caused damage to structures in Sacramento (El Dorado County 2018). The effects of ground shaking depend on a number of factors including distance to the source of the earthquake, duration of shaking, and characteristics of the underlying materials.

Regional Faulting

The CGS classifies faults as:

- Holocene-active faults, which are faults that have moved during the past approximate 11,700 years. These faults, which are capable of surface rupture, are also known as active faults.
- Pre-Holocene faults, which are faults that have not moved in the past 11,700 years. This class of fault may be capable of surface rupture, but is not regulated under the Alquist-Priolo Earthquake Fault Zoning Act of 1972. These faults are also known as potentially active faults.

[1] Holocene-active faults are defined as faults where evidence suggests displacement has occurred within the last 11,700 years and are considered the most likely source of future seismic activity (CGS 2018).

- Age-undetermined faults, which are faults where the recency of fault movement has not been determined (CGS 2018). These faults are also known as inactive faults.

This fault classification is consistent with criteria of the Alquist-Priolo Earthquake Fault Zoning Act of 1972 (see Section 3.6.2 Regulatory Framework, for information about this act). There are no Alquist-Priolo Fault hazard zones located on or near the Project site.

Surface Rupture

Surface rupture involves the displacement and cracking of the ground surface along a fault trace. Surface ruptures are visible instances of horizontal or vertical displacement, or a combination of the two, typically confined to a narrow zone along the fault. Surface rupture is more likely to occur in conjunction with Holocene-active fault segments, where earthquakes are large, or where the location of the movement (earthquake hypocenter) is shallow.

As noted above, the Alquist-Priolo Earthquake Fault Zone located closest to the project site is associated with the West Tahoe Fault Zone, located approximately 46 miles northeast of the proposed project site (CGS 2023). Therefore, the proposed project site is not susceptible to fault rupture.

Liquefaction

Soil liquefaction occurs when ground shaking from an earthquake causes a sediment layer saturated with groundwater to lose strength and take on the characteristics of a fluid, thus becoming like quicksand. Factors determining the liquefaction potential are soil type, the level and duration of seismic ground motions, the type and consistency of soils, and the depth to groundwater. Liquefaction generally occurs at depths of less than 50 feet in soils that are young (Holocene-age, or less than 11,700 years old), saturated, and loose (CGS 2004). Soils that are most susceptible to liquefaction are clay-free deposits of sands and silts, and unconsolidated alluvium. According to the geotechnical report, the absence of a permanent elevated groundwater table combined with the shallow depth to bedrock and relatively low seismicity of the area result in a low potential for liquefaction (Appendix E).

3.6.1.7 Paleontological Resources

The Society of Vertebrate Paleontology (SVP) has established standard guidelines that outline professional protocols and practices for conducting paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation (SVP 2010).

The SVP guidance include an assessment of the paleontological potential of rock units, ranging from high to no potential for containing resources.

As described above, the project site is underlain by shallow bedrock consisting of granitic and Jurassic Period metavolcanic rock known as the Logtown Ridge Formation. These formations are not considered to have potential for paleontological resources.

3.6.2 Regulatory Framework

3.6.2.1 Federal

There are no federal regulations directly applicable to geology and soils at the project site.

3.6.2.2 State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Act (Public Resources Code [PRC] Sections 2621 through 2630) was passed in 1972 to mitigate the hazard of surface faulting to structures designed for human occupancy. The main purpose of the law is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. A structure for human occupancy is defined as any structure used or intended for supporting or sheltering any use or occupancy, which is expected to have a human occupancy rate of more than 2,000 person-hours per year. The law addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Alquist-Priolo Act requires the State Geologist to establish regulatory zones known as Earthquake Fault Zones around the surface traces of active faults and to issue appropriate maps. The maps are distributed to all affected cities, counties, and state agencies for their use in planning efforts. Before a structure for human occupancy can be permitted in a designated Alquist-Priolo Earthquake Fault Zone, the local agency must require a geologic investigation to demonstrate that proposed buildings would not be constructed across active faults.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (PRC Sections 2690 through 2699.6 et seq.), passed by the California State Legislature in 1990, addresses earthquake hazards from non-surface fault rupture, including liquefaction and seismically induced landslides. The act established a mapping program for areas that have the potential for liquefaction, strong ground shaking, or other earthquake and geologic hazards. The Project site area has not been mapped as part of this legislation which focuses on higher density populated areas.

California Building Standards Code

The state regulations protecting structures from geo-seismic hazards are contained in the California Building Standards Code (24 California Code of Regulations Part 2) (the California Building Code), which is updated every 3 years. These regulations apply to public and private buildings in the state. Until January 1, 2008, the California Building Code was based on the then-current Uniform Building Code and contained additions, amendments, and repeals specific to building conditions and structural requirements of the State of California. The 2022 California Building Code, effective January 1, 2023, is based on the current (2021) International Building Code and enhances the sections dealing with existing structures. Seismic-resistant construction design is required to meet more stringent technical standards than those set by previous versions of the California Building Code. Construction activities are also subject to Chapter 33 of the California Building Code.

California Division of Occupational Safety and Health

Construction activities are subject to occupational safety standards for excavation and trenching, as specified in California Division of Occupational Safety and Health (also known as Cal/OSHA) regulations (Title 8 of the California Code of Regulations). These regulations specify the measures to be used for excavation and trench work where

workers could be exposed to unstable soil conditions. The proposed project would be required to employ these safety measures during excavation and trenching.

State Earthquake Protection Law

The State Earthquake Protection Law (Health and Safety Code Section 19100 et seq.) requires that structures be designed and constructed to resist stresses produced by lateral forces caused by wind and earthquakes, as provided in the California Building Code. Chapter 16 of the California Building Code sets forth specific minimum seismic safety and structural design requirements, requires a site-specific geotechnical study to address seismic issues, and identifies seismic factors that must be considered in structural design. Because the project site is not located within an Alquist-Priolo Earthquake Fault Zone, as noted above, no special provisions would be required for the proposed project related to fault rupture.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines require that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to paleontological resources. Paleontological resources, which are limited, nonrenewable resources of scientific, cultural, and educational value, are recognized as part of the environment under these state guidelines. This analysis satisfies project requirements in accordance with CEQA (13 PRC Section 21000 et seq.) and PRC Section 5097.5 (Stats 1965, c. 1136, p. 2792). This analysis also complies with guidelines and significance criteria specified by the Society of Vertebrate Paleontology (SVP) (SVP 2010).

Paleontological resources are explicitly afforded protection by CEQA, specifically in Section VII(f) of CEQA Guidelines Appendix G, the "Environmental Checklist Form," which addresses the potential for adverse impacts to "unique paleontological resource[s] or site[s] or … unique geological feature[s]." This provision covers fossils of signal importance—remains of species or genera new to science, for example, or fossils exhibiting features not previously recognized for a given animal group—as well as localities that yield fossils significant in their abundance, diversity, preservation, and so forth. Further, CEQA provides that generally, a resource shall be considered "historically significant" if it has yielded or may be likely to yield information important in prehistory (PRC Section 15064.5[a][3][D]). Paleontological resources would fall within this category. Chapter 1.7, Sections 5097.5 and 30244 of the PRC defines unauthorized removal of fossil resources as a misdemeanor and requires mitigation of disturbed sites.

Construction General Permit (SWRCB Order No. 2009-0009-DWQ, as Amended)

For stormwater discharges associated with construction activity in the State of California, the SWRCB has adopted and administers the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) to avoid and minimize water quality impacts attributable to such activities. The Construction General Permit applies to all projects in which construction activity disturbs 1 acre or more of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling and excavation. The Construction General Permit requires development and implementation of a stormwater pollution prevention plan (SWPPP), which would specify water quality BMPs designed to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site. Routine inspection of all BMPs is required under the provisions of the Construction General Permit, and the SWPPP must be prepared and implemented by qualified individuals as defined by the SWRCB.

To receive coverage under the Construction General Permit, the project proponent must submit a Notice of Intent and permit registration documents to the SWRCB and applicable RWQCB. Permit registration documents include completing a construction site risk assessment to determine appropriate coverage level; detailed site maps showing disturbance area, drainage area, and BMP types/locations; the SWPPP; and, where applicable, post-construction water balance calculations and active treatment systems design documentation.

3.6.2.3 Local

Grading, Erosion, and Sediment Control Ordinance

The County Grading, Erosion, and Sediment Control Ordinance (Grading Ordinance; Chapter 15.14 of the County Code) establishes provisions for public safety and environmental protection associated with grading activities on private property. The Grading Ordinance requires the intended land use be consistent with the El Dorado County General Plan, the adopted Stormwater Management Plan, California Fire Safe Standards, and applicable El Dorado County ordinances including the Zoning Ordinance and the California Building Code. The Grading Ordinance prohibits grading activities that would cause flooding where it would not otherwise occur or would aggravate existing flooding conditions. The Grading Ordinance also requires all drainage facilities, aside from those in subdivisions that are regulated by the County's Subdivision Ordinance, be approved by the County Transportation Division. Pursuant to the ordinance, the design of the drainage facilities in the county must comply with the County of El Dorado Drainage Manual.

El Dorado County General Plan

The El Dorado County General Plan provides Countywide policies for regulating land use, development, and conservation in the County. Policies relevant to hydrology and water quality in the El Dorado County General Plan include:

Public Health, Safety, and Noise Element

Goal 6.3. Geologic and Seismic Hazards - Minimize the threat to life and property from seismic and geologic hazards.

Objective 6.3.2. County-Wide Seismic Hazards - Continue to evaluate seismic related hazards such as liquefaction, landslides, and avalanche, particularly in the Tahoe Basin.

Policy 6.3.2.1. The County shall maintain updated geologic, seismic and avalanche hazard maps, and other hazard inventory information in cooperation with the State Office of Emergency Services, California Department of Conservation-Division of Mines and Geology, U.S. Forest Service, Caltrans, Tahoe Regional Planning Agency, and other agencies as this information is made available. This information shall be incorporated into the El Dorado County Operational Area Multi-Hazard Functional Emergency Operations Plans.

Policy 6.3.2.5. Applications for development of habitable structures shall be reviewed for potential hazards associated with steep or unstable slopes, areas susceptible to high erosion, and avalanche risk. Geotechnical studies shall be required when development may be subject to geological hazards. If hazards are identified, applicants shall be required to mitigate or avoid identified hazards as a condition of approval. If no mitigation is feasible, the project will not be approved.

Conservation Element

Goal 7.1. Soil Conservation - Conserve and protect the County's soil resources.

Objective 7.1.1. Erosion/Sedimentation - Minimize soil erosion and sedimentation.

Policy 7.1.2.1. Development or disturbance of slopes over 30% shall be restricted. Standards for implementation of this policy, including but not limited to exceptions for access, reasonable use of the parcel, and agricultural uses shall be incorporated into the Zoning Ordinance.

Policy 7.1.2.2. Discretionary and ministerial projects that require earthwork and grading, including cut and fill for roads, shall be required to minimize erosion and sedimentation, conform to natural contours, maintain natural drainage patterns, minimize impervious surfaces, and maximize the retention of natural vegetation. Specific standards for minimizing erosion and sedimentation shall be incorporated into the Zoning Ordinance.

Policy 7.1.2.3. Enforce Grading Ordinance provisions for erosion control on all development projects and adopt provisions for ongoing, applicant-funded monitoring of project grading.

Goal 7.2. Mineral Resources - Conserve of the County's significant mineral resources.

Objective 7.2.1. Identification of the County's important mineral resources.

Policy 7.2.1.1. In accordance with California Code of Regulations, Sections 3675- 3676, the County shall maintain all Mineral Land Classification reports produced by the State Department of Conservation, California Geological Survey, which pertain to El Dorado County. El Dorado County hereby recognizes, accepts, and adopts by reference those State Classification Reports as they currently exist and as may be amended, or supplemented, in the future.

Policy 7.2.1.2. Areas designated as Mineral Resource (-MR) overlay on the General Plan Land Use Map shall be identified by the Mineral Resource (-MR) combining zone district on the zoning maps when the likely extraction of the resource through surface mining methods will be compatible with adjacent land uses as determined by Policy 7.2.2.2.

Policy 7.2.1.3. The County shall utilize the most recent State Department of Conservation assessment of the location and value of non-metallic mineral materials. The County shall zone them and the surroundings to allow for mineral resource management.

3.6.3 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts associated with the proposed project related to geology and soils. The section identifies the thresholds of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the proposed project's impacts and contribution to significant cumulative impacts, if any are identified. Mitigation measures are presented for identified significant or potentially significant impacts, and the level of significance with mitigation also is identified.

3.6.3.1 Thresholds of Significance

The thresholds of significance used to evaluate the impacts of the proposed project related to geology and soils are based on Appendix G of the CEQA Guidelines and the City of Santa Cruz CEQA Guidelines. A significant impact would occur if the proposed project would:

A. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
   a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.
   b. Strong seismic ground shaking.
   c. Seismic-related ground failure, including liquefaction.
   d. Landslides.
B. Result in substantial soil erosion or the loss of topsoil.
C. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
D. Be located on expansive soil, as defined in the 2022 California Building Code, creating substantial direct or indirect risks to life or property.
E. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
F. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

3.6.3.2 Analytical Methods

The following analysis considers whether the proposed project would directly or indirectly cause geologic and soils impacts, taking into account state-mandated construction methods, as specified in the California Safety and Health Administration regulations (Title 8 of the California Code of Regulations) and in Chapter 33 of the California Building Code. Moreover, the analysis considers whether a unique paleontological resource, site, or unique geologic feature would be directly or indirectly destroyed as a results of the proposed project.

3.6.3.3 Project Impact Analysis

Areas of No Impact

The proposed project would have no impacts with respect to the following thresholds of significance as described below.

- **Earthquake Fault Rupture (Significance Standard a-i).** The proposed project would not have the potential to directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault because the site is not located within an Alquist-Priolo Earthquake Fault Zone or underlain by any Holocene-active or pre-Holocene faults (CGS 2023).
- **Septic Tanks/Alternative Wastewater Disposal (Significance Standard e).** The proposed project would continue to connect to existing sewer facilities in Graham Hill Road for disposal of staff and park visitor related wastewater. During construction, temporary portable toilets would be installed for construction

workers. Waste from the portable toilets would be transported off-site in vacuum trucks for disposal at the City's wastewater treatment facility. Therefore, the proposed project would have no impacts related to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.

- **Paleontological Resources (Significance Standard f).** As described in Section 3.6.1.7, the project site does not contain rock formations with potential for unique paleontological resources. Therefore, this topic is not considered further, and is found to have no impact.

Project Impacts

This section provides a detailed evaluation of geology and soils impacts associated with the proposed project. Construction-related impacts associated with soil erosion/loss of topsoil (Significance Standard B) and potential sedimentation of Deadman Creek is addressed in Section 3.10, Hydrology and Water Quality.

Impact GEO-1 The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

ii. Strong seismic ground shaking, or

iii. Seismic-related ground failure, including liquefaction.

As discussed above, the project site is not located in a very seismically active region of California with the closest Holocene-active fault located approximately 46 miles to the northeast. However, the effects from an earthquake have at times been observed at relatively far distances such that some level of ground shaking could be experienced at the Project site.

All proposed improvements, as required by the 2022 California Building Code, would be constructed in accordance with the recommendations of geotechnical engineering report. The 2022 CBC design parameters are specifically tailored to minimize the risk of structure failure due to seismic hazards and include a requirement for a standard, project-specific geotechnical (also known as a soils investigation) report, as part of the building permit process (CBC Chapter 18 and 18A). A project-specific geotechnical report was prepared for the project site and is included as Appendix E of this EIR. In accordance with the CBC, this geotechnical report provides specific recommendations related to soils and seismic engineering, including recommendations for remedial grading, foundation design, and retaining walls, thus minimizing the potential for structural distress as a result of seismically induced ground shaking. The geotechnical report concluded that site characteristics are such that the potential for liquefaction and seismic-related ground failure is negligible.

The CBC requires compliance with the geotechnical recommendations made in a final design level geotechnical report, thus minimizing the potential for structural damage during an earthquake. As with all development in the County, the County's plan check and building inspection procedures would ensure that the proposed project is constructed in accordance with CBC standards, including the seismic design recommendations provided in a final design-level geotechnical report that must be included into the final design plans of construction.

The project would be designed consistent with applicable CBC regulations and any applicable local amendments, with respect to seismic engineering and would therefore be considered seismically safe. Constructing new structures within an earthquake-prone area would not, in and of itself, increase seismic risks in the project area. Therefore, development of the proposed project would not directly or indirectly cause or exacerbate adverse effects

involving strong seismic ground shaking or seismic-related ground failure including liquefaction. Impacts would be **less than significant.**

iv. Landslides.

The project site is located in an area characterized by gently to steeply rolling hills that have slopes varying from relatively flat to a 2:1 (vertical:horizontal). In general, slopes with a 2:1 ratio are considered relatively stable, but other factors (e.g., presence of previous landslides, changes in moisture content, proximity to seismic sources, and type of subsurface materials) can contribute to slope instability. According to the geotechnical report prepared for the Project site, the lack of a permanent elevated groundwater table, relatively low seismic activity in the area, and shallow depth to bedrock all point to a very low probability of slope instability or landslide activity (Appendix E). In addition, all proposed improvements would be constructed in accordance with the recommendations the geotechnical engineering report, which includes recommendations pertaining to seismic and non-seismic related slope stability in accordance with provisions of the most recent California Building Code, under the supervision of a state licensed geotechnical engineer and/or certified Engineering Geologist. Any areas susceptible to slope failure would be engineered to minimize unstable slope impacts. In addition, construction and operation of proposed project facilities would not increase the potential for unstable slopes or landslides to occur. Temporary slopes created during grading and construction would be monitored by a California Certified Engineering Geologist for signs of potentially unstable conditions. Therefore, the proposed project would have a **less than significant** impact related to landslide hazards.

Impact GEO-2 The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

As described above for impact a-ii and a-iii, the proposed project would have a less-than-significant impact related to seismic hazards, including liquefaction and lateral spreading. In addition, as described above for Threshold a-iv, the proposed project would have a less-than-significant impact related to landslide hazards. The project site is not located in an area prone to subsidence due to groundwater withdrawal, oil and gas extraction, or peat deposits. Therefore, ground settlement and collapse associated with subsidence is not expected in association with the proposed project.

While no artificial fill materials were encountered during the geotechnical investigation, if any were to be discovered during grading activities, they would be over-excavated and replaced with engineered fill in accordance with industry standards and building code requirements, thus minimizing the potential for seismically-induced or non-seismically-induced differential settlement or soil collapse.

All proposed improvements would be constructed in accordance with provisions of the most recent California Building Code, under the supervision of a state licensed geotechnical engineer and/or certified engineering geologist. Areas susceptible to differential settlement and compressible/collapsible soils would be engineered to minimize unstable soil related impacts. In addition, construction and operation of proposed project facilities would not increase the potential for unstable soils or geologic materials to occur. Therefore, the proposed project would have **less than significant** impacts related to unstable geologic materials or soils.

Impact GEO-3 The project would not be located on expansive soil, as defined in the 2022 California Building Code, creating substantial direct or indirect risks to life or property.

Laboratory testing of soils from the project site indicated only one sample that contained a moderate expansion potential for a layer of clayey sand at a depth of between 0 and 5 feet below ground surface. According to the geotechnical report, the limited presence of these moderately expansive soils do not represent a significant challenge since under normal grading operations there would be sufficient blending of materials to reduce the potential hazard. Regardless, all site grading would be monitored and overseen by a state licensed geotechnical engineer and/or certified engineering geologist in accordance with building code requirements.

All of the proposed project improvements including infrastructure would be constructed in accordance with provisions of the most recent California Building Code, under the supervision of a state licensed geotechnical engineer and/or certified engineering geologist. Areas susceptible to soil expansion would be engineered to minimize expansive soil related impacts either through removal, treatment, or blending with soils that meet building code specifications. As a result, the project would not create substantial direct or indirect risks to life or property and impacts would be **less than significant**.

3.6.3.4 Cumulative Impacts Analysis

This section provides an evaluation of cumulative geology and soils impacts associated with the proposed project and past, present, and reasonably foreseeable future projects, as identified in Section 3.0, Introduction to Analysis, and as relevant to this topic. The geographic area considered in the cumulative analysis for geology and soils is generally the vicinity of the project site.

The proposed project would not contribute to cumulative impacts related to earthquake fault rupture (Significance Standard A-i) or septic tanks/alternative wastewater disposal (Significance Standard E) because it would have no impacts related to these standards as described above. Therefore, these significance standards are not further evaluated. Erosion-related cumulative impacts (Significance Standard B) are addressed in Section 3.9, Hydrology and Water Quality.

The proposed project, in combination with past, present, and reasonably foreseeable future development, would not result in a significant cumulative impact related to geology and soils (Significance Standards a-ii, a-iii, a-iv, c, and d).

Known cumulative projects planned within the vicinity of the project site include three other development projects, including a roadway improvement, a residential subdivision, and a multi-family residential project. Each of these cumulative projects would be subject to County approval; such projects that require discretionary approval are assumed to be designed or otherwise conditioned to avoid and minimize impacts to geology and soils. Furthermore, potential cumulative impacts on geological, seismic, and soil conditions would be reduced on a site-by-site basis by modern construction methods and compliance with California Building Code regulatory requirements that ensure building safety. Additionally, cumulative projects would be required to prepare and submit a final design-level site-specific geotechnical report for review and approval prior to the issuance of grading or building permits. As described in the analysis above, the proposed project would not result in construction (including grading/excavation) or design features which could directly or indirectly contribute to an increase in a cumulative geological hazard. The proposed project would not cumulatively alter geological conditions or features.

Therefore, the proposed project, in combination with the past, present, and reasonably foreseeable future projects in the project vicinity, would result in less than significant cumulative impacts related to geological hazards, and no further mitigation measures are required.

3.6.4 References

CGS (California Geological Survey). 2018. *Earthquake Fault Zones, A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California*. Special Publication 42, Revised 2018. Accessed June 2, 2023 at https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Publications/SP_042.pdf.

El Dorado County, 2018. Local Hazard Mitigation Plan, July 2018.

Society of Vertebrate Paleontology (SVP). 2010. *Standard Procedures for the assessment and mitigation of adverse impacts to paleontological resources.*

USGS. 2023a. Areas of Land Subsidence in California. Accessed June 2, 2023. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html.

3.7 Greenhouse Gas Emissions

This section describes the existing greenhouse gas (GHG) conditions, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant impacts related to implementation of the proposed Diamond Springs Community Park Project (project). The analysis is based on GHG modeling for the project, as part of the preparation of this environmental impact report (EIR). The results of the GHG modeling are summarized in this section and are included in Appendix B. No comments were received during the scoping period for this EIR that pertain to GHGs.

3.7.1 Existing Conditions

3.7.1.1 Climate Change Overview

Climate change refers to any significant change in measures of climate—such as temperature, precipitation, or wind patterns—lasting for an extended period (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching the Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017).

The greenhouse effect is the trapping and buildup of heat in the atmosphere near the Earth's surface (troposphere). The greenhouse effect traps heat in the troposphere through a threefold process, as follows: short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. However, recent climate changes, in particular the warming observed over the past century, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of warming since the mid-twentieth century and are the most significant driver of observed climate change (IPCC 2013; EPA 2017). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system.

3.7.1.2 Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g), for purposes of administering many of the State's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4),

nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (see also see also 14 California Code of Regulations [CCR] Section 15364.5).[1] Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are the predominant GHGs emitted from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.[2]

Carbon Dioxide

CO_2 is a naturally occurring gas and a by-product of human activities; it is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 include the combustion of fuels such as coal, oil, natural gas, and wood, and changes in land use.

Methane

CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. CH_4 is produced through anaerobic (i.e., without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide

N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (such as in rockets, racecars, and aerosol sprays).

Fluorinated Gases

Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone (O_3)-depleting substances (e.g., chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to O_3-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.

[1] Climate-forcing substances include GHGs and other substances such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in California Health and Safety Code, Section 38505. Impacts associated with other climate-forcing substances are not evaluated herein.

[2] The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007), The California Air Resources Board's (CARB's) Glossary of Terms Used in GHG Inventories (CARB 2020), and EPA's Glossary of Climate Change Terms (EPA 2017).

- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced, along with HFCs, as alternatives to the O3-depleting substances. The two main sources of PFCs are primarily aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride:** Nitrogen trifluoride is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Chlorofluorocarbons

CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere), and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3.

Hydrochlorofluorocarbons

HCFCs are a large group of compounds whose structure is very close to that of CFCs—containing fluorine, chlorine, and carbon atoms—but also including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

Black Carbon

Black carbon is a component of fine particulate matter ($PM_{2.5}$), which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation; influences cloud formation; and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived substance that varies spatially, which makes it difficult to quantify its global warming potential (GWP). Diesel particulate matter emissions are a major source of black carbon and are toxic air contaminants that have been regulated and controlled in California for several decades to protect public health.

Water Vapor

The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone

Tropospheric O_3, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen, plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3,

which occurs due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols

Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

3.7.1.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2017). The Intergovernmental Panel on Climate Change (IPCC) developed the GWP concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of CO_2 equivalent (MT CO_2e).

The current version of the California Emissions Estimator Model (CalEEMod) (Version 2022.1) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC's Fourth Assessment Report (IPCC 2007).

3.7.1.4 Greenhouse Gas Inventories and Climate Change Conditions

Contributions of Greenhouse Gas Emissions

Global Inventory

Anthropogenic GHG emissions worldwide in 2020 (the most recent year for which data is available) totaled approximately 49,800 million metric tons (MMT) of CO_2e, excluding land use change and forestry (PBL 2022). The top six GHG emitters include China, the United States, the Russian Federation, India, Japan, and the European Union, which accounted for approximately 60% of the total global emissions, or approximately 30,270 MMT CO_2e (PBL 2022). Table 3.7-1 presents the top GHG-emissions-producing countries.

Table 3.7-1. Six Top GHG Producer Countries

Emitting Countries	2020 GHG Emissions (MMT CO_2e)[a]
China	14,300
United States	5,640
European Union	3,440
India	3,520
Russian Federation	2,210
Japan	1,160
Total	**30,270**

Source: PBL 2022.
Notes: MMT CO_2e = million metric tons of carbon dioxide equivalent.
[a] Column may not add due to rounding.

National Inventory

Per the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2021, total United States GHG emissions were approximately 6,340.2 million MT CO_2e (MMT CO_2e) in 2021 (EPA 2023). Total U.S. emissions have decreased by 2.3 percent from 1990 to 2021, down from a high of 15.8 percent above 1990 levels in 2007. Emissions increased from 2020 to 2021 by 5.2 percent (314.3 MMT CO_2e). Net emissions (i.e., including sinks) were 5,586.0 MMT CO_2e in 2021. Overall, net emissions increased 6.4 percent from 2020 to 2021 and decreased 16.6 percent from 2005 levels Between 2020 and 2021, the increase in total GHG emissions was driven largely by an increase in CO_2 emissions from fossil fuel combustion due to economic activity rebounding after the height of the COVID-19 pandemic. The CO_2 emissions from fossil fuel combustion increased by 6.8 percent from 2020 to 2021, including a 11.4 percent increase in transportation sector emissions and a 7.0 percent increase in electric power sector emissions. The increase in electric power sector emissions was due in part to an increase in electricity demand of 2.4 percent since 2020. Overall, there has been a decrease in electric power sector emissions from 1990 through 2021, which reflects the combined impacts of long-term trends in many factors, including population, economic growth, energy markets, technological changes including energy efficiency, and the carbon intensity of energy fuel choices (EPA 2023).

State Inventory

According to California's 2000–2020 GHG emissions inventory (2022 edition), California emitted approximately 369.2 MMT CO_2e in 2020, including emissions resulting from out-of-state electrical generation (CARB 2022a). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high-GWP substances, and recycling and waste. Table 3.7-2 presents California GHG emission source categories and their relative contributions to the emissions inventory in 2020.

Table 3.7-2. GHG Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total*
Transportation	136.60	37%
Industrial uses	73.84	20%
Electricity generation[a]	59.07	16%
Residential and commercial uses	36.92	10%
Agriculture and Forestry	33.22	9%
High GWP substances	22.15	6%
Recycling and waste	7.38	2%
Totals	**369.2**	**100%**

Source: CARB 2022a.
Notes: GHG = greenhouse gas; GWP = global warming potential; MMT CO_2e = million metric tons of carbon dioxide equivalent. Emissions reflect 2020 California GHG inventory.
Totals may not sum due to rounding.
[a] Includes emissions associated with imported electricity, which account for 18.46 MMT CO_2e.

Per capita GHG emissions in California have dropped from a 2001 peak of 13.8 MT per person to 9.3 MT per person in 2020, a 33% decrease. In 2016, statewide GHG emissions dropped below the 2020 GHG limit of 431 MMT CO2e and have remained below that level since that time (CARB 2022a).

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 IPCC Synthesis Report (IPCC 2014) indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, rising sea levels, and ocean acidification (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, frequency of severe weather events, and electricity demand and supply. The primary effect of global climate change has been a rise in average global tropospheric temperature. Reflecting the long-term warming trend since pre-industrial times, observed global mean surface temperature for the decade 2006–2015 was 0.87°C (1.6°F) (likely between 0.75°C [1.4°F] and 0.99°C [1.8°F]) higher than the average over the 1850–1900 period (IPCC 2018). Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. Human activities are estimated to have caused approximately 1.0°C (1.8°F) of global warming above pre-industrial levels, with a likely range of 0.8°C to 1.2°C (1.4°F to 2.2°F) (IPCC 2018). Global warming is likely to reach 1.5°C (2.7°F) between 2030 and 2052 if it continues to increase at the current rate (IPCC 2018).

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment (OEHHA) identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernible evidence that climate change is occurring in California and is having significant, measurable impacts in the state. Changes in the state's climate have been observed including an increase in annual average air temperature, more frequent extreme heat events, more extreme drought, a decline in winter chill, an increase in cooling degree days and a decrease in heating degree days, and an increase in variability of statewide precipitation (OEHHA 2022).

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers and snowpack—upon which the state depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the state's annual water supply. Impacts of climate on physical systems have been observed such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in spring snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters (OEHHA 2022).

Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed including climate change impacts on terrestrial, marine, and freshwater ecosystems. As with global observations, species responses include those consistent with warming: elevational or latitudinal shifts in range, changes in the timing of key plant and animal life cycle events, and changes in the abundance of species and in community composition. Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses a threat to public health as warming temperatures and changes in precipitation can affect vector-borne pathogen transmission and disease patterns in California as well as the variability of heat-related deaths and illnesses. In addition, since 1950, the area burned by wildfires each year has been increasing.

The California Natural Resources Agency (CNRA) has released four California Climate Change Assessments (in 2006, 2009, 2012, and 2018), which have addressed the following: acceleration of warming across the state, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming. To address local and regional governments' need for information to support action in their communities, the Fourth Assessment includes reports for nine regions of the state. Key projected climate changes for the Sierra Nevada Region (which includes El Dorado County where the project is located) include the following (CNRA 2018):

> Climate change is already underway in the Sierra Nevada region, affecting heat and precipitation extremes, with long-term warming trends, declining snowpacks, and changes in streamflow timing. These ongoing trends foreshadow larger changes to come. By the end of the 21st century, temperatures in the Sierra Nevada are projected to warm by 6 to 9°F on average, enough to raise the transition from rain to snow during a storm by about 1,500 to 3,000 feet. In contrast, future precipitation is predicted to vary less than temperature; long-term changes may be no more than ±10-15% of current totals. However, precipitation extremes (both as deluge and drought) are expected to increase markedly under climate change. These climatic changes will depend on and reflect many factors, including elevation within the mountain range, with quicker warming trends and precipitation changes at highest elevations.
>
> As a result of projected warming, Sierra Nevada snowpacks will very likely be eradicated below about 6,000 feet elevation and will be much reduced by more than 60% across nearly all of the range. Notably, though, recent studies suggest that even these snowpack-loss projections may be underestimates, due to feedback loops with warming trends causing snow cover losses, and snow cover losses resulting in warmer land surfaces and thus enhanced warming trends in turn.
>
> The loss of snowpack will combine to dry soils 15% to 40% below historical norms, depending on elevations. The result will be reduced soil and vegetation moisture; changes in rivers and lakes; and ultimately stresses on fora and fauna. Loss of snowpack and overall drying will lead to increased winter stream flows and floods, and to (largely compensating) reductions in spring and summer stream flows.

3.7.2 Regulatory Framework

3.7.2.1 International

In 1992, numerous countries joined an international treaty—the United Nations Framework Convention on Climate Change (UNFCCC)—as a framework for international cooperation to combat climate change by limiting average global temperature increases and the resulting climate change and coping with associated impacts.

By 1995, countries launched negotiations to strengthen the global response to climate change, and, 2 years later, adopted the Kyoto Protocol, which was the first international agreement to regulate GHG emissions. The Kyoto Protocol legally binds developed country Parties to emission reduction targets. The Protocol's first commitment period started in 2008 and ended in 2012. The second commitment period began on January 1, 2013 and ended in 2020. In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended the United States' involvement in the Kyoto Protocol.

The 2015 Paris Agreement, adopted in Paris on December 12, 2015, marks the latest step in the evolution of the United Nations' climate change regime and builds on the work undertaken under the UNFCCC. The Paris Agreement charts a new course in the global effort to combat climate change. Its central aim is to keep global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C (UNFCCC 2019). The Paris Agreement also aims to strengthen the ability of countries to deal with the impacts of climate change.

The Paris Agreement entered into force on November 4, 2016, 30 days after the date on which at least 55 Parties to the UNFCCC (including the United States), accounting in total for at least an estimated 55% of the total global GHG emissions, deposited their instruments of ratification, acceptance, approval or accession with the Depositary (UNFCCC 2019). On November 4, 2019, the Trump Administration gave formal notice of the Unites States' intention to withdraw from the Paris Agreement, which was formally recognized on November 4, 2019. The Biden Administration re-joined the Paris Agreement on January 21, 2021, which was accepted by the United Nations, and the United States formally re-entered into the Paris Agreement on February 29, 2021.

3.7.2.2 Federal

Massachusetts v. U.S. Environmental Protection Agency

On April 2, 2007, in *Massachusetts v. EPA*, the U.S. Supreme Court ruled that CO_2 was a pollutant and directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The elevated concentrations of GHGs—CO_2, CH4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The combined emissions of GHGs—CO_2, CH_4, N_2O, and hydrofluorocarbons—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (Public Law 110-140), among other key measures, would do the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and direct National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.

- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy-efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standards

In 2007, in response to the *Massachusetts v. EPA* U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order (EO) 13432 directing EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 through 2016 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 FR 62624–63200). On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 through 2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6% to 23% over the 2010 baselines (76 FR 57106–57513).

In August 2016, EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

On April 2, 2018, EPA, under administrator Scott Pruitt, reconsidered the final determination for light-duty vehicles and withdrew its previous 2017 determination, stating that the current standards may be too stringent and therefore should be revised as appropriate (83 FR 16077–16087).

In August 2018, EPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards then in place, the 2018 proposal would increase U.S. fuel consumption by about half a million barrels per day (2% to 3% of total daily consumption, according to the Energy Information Administration) and would impact the global climate by 3/1000th of 1°C by 2100 (EPA and NHTSA 2018). California and other states have

stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives.

In 2019, the EPA and NHTSA published the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1) (84 FR 51310), which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California. In March 2020, Part Two was issued, which set CO_2 emissions standards and CAFE standards for passenger vehicles and light-duty trucks for model years 2021 through 2026.

In response to EO 13990, on December 21, 2021, NHTSA finalized the CAFE Preemption rulemaking to withdraw its portions of the Part One Rule. The final rule concluded that the Part One Rule overstepped the agency's legal authority and established overly broad prohibitions that did not account for a variety of important state and local interests.

Then, in March 2022, NHTSA established new fuel economy standards that would require an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8% annually for model years 2024 and 2025, and 10% annually for model year 2026.

The Inflation Reduction Act of 2022

The Inflation Reduction Act was signed into law by President Biden in August 2022. The bill includes specific investment in energy and climate reform and is projected to reduce GHG emissions within the United States by 40% as compared to 2005 levels by 2030. The bill allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of electric vehicles, and includes measures that will make homes more energy efficient.

3.7.2.3 State

The statewide GHG emissions regulatory framework is summarized in this subsection by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, water, solid waste, and other state actions. The following text describes EOs, Assembly Bills (ABs), Senate Bills (SBs), and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

State Climate Change Targets

The state has taken a number of actions to address climate change. These actions are summarized below, and include EOs, legislation, and CARB plans and requirements.

Executive Order S-3-05

EO S-3-05 (June 2005) identified GHG emissions-reduction targets and laid out responsibilities among the state agencies for implementing the EO and for reporting on progress toward the targets. This EO identified the following targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

EO S-3-05 also directed the California Environmental Protection Agency to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry.

Assembly Bill 32

In furtherance of the goals identified in EO S-3-05, the Legislature enacted AB 32, the California Global Warming Solutions Act of 2006 (California Health and Safety Code Sections 38500–38599). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020, and initiate the transformations required to achieve the state's long-range climate objectives.

Executive Order B-30-15

EO B-30-15 (April 2015) identified an interim GHG-reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050, as set forth in S-3-05. To facilitate achieving this goal, EO B-30-15 called for CARB to update the Climate Change Scoping Plan (Scoping Plan) to express the 2030 target in terms of MMT CO_2e. The EO also called for state agencies to continue to develop and implement GHG emission-reduction programs in support of the reduction targets.

Senate Bill 32 and Assembly Bill 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions-reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to the Board as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions-reduction measures when updating the Scoping Plan.

Executive Order B-55-18

EO B-55-18 (September 2018) identified a policy for the state to achieve carbon neutrality as soon as possible (no later than 2045) and achieve and maintain net negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the state's GHG emissions. CARB will work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Assembly Bill 1279

The Legislature enacted AB 1279, the California Climate Crisis Act, in September 2022. The bill declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. Additionally, the bill requires that by 2045, statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels.

Although AB 1279 establishes an overall policy to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, recognizing the need to implement CO_2 removal and carbon capture, utilization and storage

technologies, the Legislature established a specific target of 85% below 1990 levels by 2045 for anthropogenic GHG emissions. Therefore, the net zero target does not directly apply to development projects, but the 2045 target of 85% below 1990 levels represents the reductions required to contribute to accomplishing the State's overall net zero policy.

California Air Resources Board's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (California Health and Safety Code Section 38561[a]), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan: The Climate Change Proposed Scoping Plan: A Framework for Change (Scoping Plan) (CARB 2008). The Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission-reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives.

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (2014 Scoping Plan) defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012 (CARB 2014). The 2014 Scoping Plan concluded that California was on track to meet the 2020 target, but recommended that a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions. The 2014 Scoping Plan recommended a mix of technologies in key economic sectors to reduce emissions through 2050 including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies.

In December 2017, CARB released the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan) for public review and comment (CARB 2017a). The 2017 Scoping Plan built on the successful framework established in the initial Scoping Plan and 2014 Scoping Plan, while identifying new technologically feasible and cost-effective strategies to serve as the framework to achieve the 2030 GHG target and define the state's climate change priorities to 2030 and beyond. The strategies' known commitments include implementing renewable energy and energy efficiency (including the mandates of SB 350), increased stringency of the Low Carbon Fuel Standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant (SLCP) Plan, and increased stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, the 2017 Scoping Plan recommended continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20%. The 2017 Scoping Plan was approved by CARB's Governing Board on December 14, 2017.

The Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) was issued on November 16, 2022 (CARB 2022b) and approved on December 15, 2022. The 2022 Scoping Plan lays out a path not just to carbon neutrality by 2045 but also to the 2030 GHG emissions reduction target. The 2022 Scoping Plan analyzed four scenarios, with the objective of informing the most viable path to remain on track to achieve the 2030 GHG reduction target. The scenario modeling indicates that, if the plan described in the Proposed Scenario is fully implemented, and done so on schedule, the State would cut GHG emissions by 85% below 1990 levels, result in a 71% reduction in smog-forming air pollution, reduce fossil fuel consumption by 94%, create 4 million new jobs, among other benefits (CARB 2022b).

The 2022 Scoping Plan details "Local Actions" in Appendix D. The Local Actions includes recommendations intended to build momentum for local government actions that align with the State's climate goals, with a focus on local GHG reduction strategies (commonly referred to as climate action planning) and approval of new land use development projects, including through environmental review under CEQA. The recommendations provided in Appendix D are non-binding and should not be interpreted as a directive to local governments, but rather as evidence-based analytical tools to assist local governments with their role as essential partners in achieving California's climate goals.[3] Appendix D recognizes consistency with a CEQA-qualified GHG reduction plan such as a Climate Action Plan as a preferred option for evaluating potential GHG emission impacts under CEQA. Absent a qualified GHG reduction plan, Appendix D provides recommendations for key attributes that residential and mixed-use projects should achieve that would align with the State's climate goals (CARB 2022b). Projects that achieve all key attributes are considered clearly consistent with the State's climate and housing goals and would have a less-than-significant GHG impact under CEQA (CARB 2022b). However, projects that do not achieve all attributes are not considered to result in a potentially significant GHG emission impact. Additional potential threshold options identified when a CEQA-qualified GHG reduction plan is not available included a net-zero threshold and use of air district recommended thresholds of significance.

The 2022 Scoping Plan also emphasizes that there is no realistic path to carbon neutrality without carbon removal and sequestration, and to achieve the state's carbon neutrality goal, carbon reduction programs must be supplemented by strategies to remove and sequester carbon. Strategies for carbon removal and sequestration include carbon capture and storage (CCS) from anthropogenic point sources, where CO_2 is captured as it leaves a facility's smokestack and is injected into geologic formations or used in industrial materials (e.g., concrete); and carbon dioxide removal (CDR) from ambient air, through mechanical (e.g., direct air capture with sequestration [DACS]) or nature-based (e.g., management of natural and working lands) applications.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32, and the EOs; it also establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and EOs if it would meet the general policies in reducing GHG emissions to facilitate the achievement of the state's goals and would not impede attainment of those goals.

California Air Resources Board's Regulations for the Mandatory Reporting of GHG Emissions

CARB's Regulation for the Mandatory Reporting of GHG Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that EPA promulgated in its Final Rule on Mandatory Reporting of GHGs (40 CFR, Section 98). Specifically, Section 95100(c) of the Mandatory Reporting Regulation incorporated those requirements that EPA promulgated in the Federal Register on October 30, 2009; July 12, 2010; September 22, 2010; October 28, 2010; November 30, 2010; December 17, 2010; and April 25, 2011. In general, entities subject to the Mandatory Reporting Regulation that emit over 10,000 MT CO_2e per year are required to report annual GHG emissions through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 MT CO_2e per year threshold are required to have their GHG emissions report verified by a CARB-accredited third party.

[3] The threshold approaches outlined in the 2022 Scoping Plan, Appendix D, are recommendations only and are not requirements; they do not supplant lead agencies' discretion to develop their own evidence-based approaches for determining whether a project would have a potentially significant impact on GHG emissions.

Executive Order B-18-12

EO B-18-12 (April 2012) directed state agencies, departments, and other entities under the Governor's executive authority to take action to reduce entity-wide GHG emissions by at least 10% by 2015 and 20% by 2020, as measured against a 2010 baseline. EO B-18-12 also identified goals for existing state buildings for reducing grid-based energy purchases and water use.

Senate Bill 605 and Senate Bill 1383

SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of SLCPs in the state (California Health and Safety Code Section 39730) and SB 1383 (2016) requires CARB to approve and implement that strategy by January 1, 2018 (California Public Resources Code Sections 42652–43654). SB 1383 also establishes specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for CH_4 and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon) and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its SLCP Reduction Strategy in March 2017 (CARB 2017b). The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, methane, and fluorinated gases (CARB 2017b).

Assembly Bill 1757

AB 1757 (September 2022) requires the CNRA to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions that reduce GHG emissions for future years 2030, 2038, and 2045. These targets are to be determined by no later than January 1, 2024, and are established to support the state's goals to achieve carbon neutrality and foster climate adaptation and resilience.

Building Energy

The California Building Standards Code was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure that new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every 3 years by the Building Standards Commission and the California Energy Commission (CEC) and revised if necessary (California Public Resources Code Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, to "reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code Section 25402[d]) and cost effectiveness (California Public Resources Code Section 25402[b][2–3]). As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment. The current Title 24 standards are the 2022 Title 24 building energy efficiency standards, which became effective January 1, 2023. The 2022 Energy Code focuses on four key areas in newly constructed homes and businesses (CEC 2021):

- Encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units.
- Establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking, and electric vehicle (EV) charging options whenever they choose to adopt those technologies.

- Expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available on site and complement the state's progress toward a 100% clean electricity grid.
- Strengthening ventilation standards to improve indoor air quality.

In addition to CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24), which is commonly referred to as California's Green Building Standards (CALGreen), establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The 2022 CALGreen standards are the current applicable standards. For nonresidential projects, some of the key mandatory CALGreen 2022 standards involve requirements related to bicycle parking, designated parking for clean air vehicles, EV charging stations for passenger vehicles, medium heavy duty and heavy duty trucks , shade trees, water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, recycled water supply systems, construction waste management, excavated soil and land clearing debris, and commissioning (24 CCR, Part 11).

Renewable Energy and Energy Procurement

SB 1078 (2002) (California Public Utilities Code Section 399.11 et seq.) established the Renewables Portfolio Standard (RPS) program, which required an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010 (see SB 107, EO S-14-08, and EO S-21-09).

SB 1368 (2006), required CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities (California Public Utilities Code Section 8340–8341). These standards must be consistent with the standards adopted by the California Public Utilities Commission (CPUC).

EO S-14-08 (2008) focused on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. This EO required that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. Furthermore, the EO directed state agencies to take appropriate actions to facilitate reaching this target. CNRA, in collaboration with CEC and the California Department of Fish and Wildlife, was directed to lead this effort.

EO S-21-09 (2009) directed CARB to adopt a regulation consistent with the goal of EO S-14-08 by July 31, 2010. CARB was further directed to work with CPUC and CEC to ensure that the regulation builds upon the RPS program and was applicable to investor-owned utilities, publicly owned utilities, direct access providers, and community choice providers. Under this order, CARB was to give the highest priority to those renewable resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health, and those that can be developed the most quickly in support of reliable, efficient, cost-effective electricity system operations. On September 23, 2010, CARB initially approved regulations to implement a Renewable Electricity Standard; however, this regulation was not finalized because of subsequent legislation (SB X1-2) signed by Governor Brown in April 2011.

SB X1-2 expanded RPS by establishing a renewable energy target of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation (30 megawatts or less), digester gas,

municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. SB X1-2 applies to all electricity retailers in the state, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All these entities must meet the renewable energy goals listed above.

SB 350 (2015) further expanded the RPS program by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 included the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires CPUC, in consultation with CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

SB 100 (2018) increased the standards set forth in SB 350, establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035; 95% by December 31, 2040; and 100% by December 31, 2045.

Mobile Sources

State Vehicle Standards (Assembly Bill 1493 and Executive Order B-16-12)

AB 1493 (July 2002) was enacted in a response to the transportation sector accounting for more than half of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. EO B-16-12 (March 2012) required that state entities under the governor's direction and control support and facilitate the rapid commercialization of ZEVs. It ordered CARB, CEC, CPUC, and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve benchmark goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 identified a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050. This directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare. As explained under the "Federal Vehicle Standards" description in Section 3.7.2.2, Federal Regulations, EPA and NHTSA approved the SAFE Vehicles Rule Part One and Two, which revoked California's authority to set its own GHG emissions standards and set ZEV mandates in California. As also explained in Section 3.7.2.2, in March 2022, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate. EPA's action concludes its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and are now entirely rescinded.

Heavy-Duty Diesel

CARB adopted the final Heavy-Duty Truck and Bus Regulation on December 31, 2014, to reduce DPM, a major source of black carbon, and NO_x emissions from heavy-duty diesel vehicles (13 CCR, Part 2025). The rule requires that DPM filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule will require nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an Airborne Toxics Control Measure to limit idling of diesel-fueled commercial vehicles on December 12, 2013. This rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than 5 minutes at any location (13 CCR, Part 2485).

Executive Order S-1-07

EO S-1-07 (January 2007, implementing regulation adopted in April 2009) sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020 (17 CCR 95480 et seq.). The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel—including extraction/feedstock production, processing, transportation, and final consumption—per unit of energy delivered.

Senate Bill 375

SB 375 (California Government Code Section 65080) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG-reduction targets for the automobile and light-truck sector for 2020 and 2035, and to update those targets every 8 years. SB 375 requires the state's 18 regional metropolitan planning organizations (MPOs) to prepare a sustainable communities strategy (SCS) as part of their Regional Transportation Plan that will achieve the GHG-reduction targets set by CARB. If an MPO is unable to devise an SCS to achieve the GHG-reduction target, the MPO must prepare an alternative planning strategy demonstrating how the GHG-reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

An SCS does not: (1) regulate the use of land; (2) supersede the land use authority of cities and counties; or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it (California Government Code Section 65080[b][2][K]). Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars (ACC) I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle (LEV) regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for ZEVs that contributes to both types of emission reductions (CARB 2023). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused

technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program, which was adopted in August 2022, established the next set of LEV and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2023). The main objectives of ACC II are as follows:

- Maximize criteria air pollutant and GHG emission reductions through increased stringency and real-world reductions.
- Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

The ACC II rulemaking package also considers technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts.

Executive Order N-79-20

EO N-79-20 (September 2020) requires CARB to develop regulations as follows: (1) Passenger vehicle and truck regulations requiring increasing volumes of new ZEVs sold in the state towards the target of 100% of in-state sales by 2035; (2) medium- and heavy-duty vehicle regulations requiring increasing volumes of new zero-emission trucks and buses sold and operated in the state towards the target of 100% of the fleet transitioning to ZEVs by 2045 everywhere feasible and for all drayage trucks to be zero emission by 2035; and (3) strategies, in coordination with other state agencies, the EPA, and local air districts, to achieve 100% zero emissions from off-road vehicles and equipment operations in the state by 2035. EO N-79-20 called for the development of a ZEV Market Development Strategy, which was released February 2021, to be updated every 3 years, that ensures coordination and implementation of the EO and outlines actions to support new and used ZEV markets. In addition, the EO specifies identification of near-term actions, and investment strategies, to improve clean transportation, sustainable freight, and transit options; and calls for development of strategies, recommendations, and actions by July 15, 2021, to manage and expedite the responsible closure and remediation of former oil extraction sites as the state transitions to a carbon-neutral economy.

Advanced Clean Trucks Regulation

The Advanced Clean Trucks (ACT) Regulation was also approved by CARB in 2020. The purpose of the ACT Regulation is to accelerate the market for ZEVs in the medium- and heavy-duty truck sector and to reduce air pollutant emissions generated from on-road mobile sources (CARB 2021). The regulation has two components, (1) a manufacturer sales requirement and (2) a reporting requirement:

- **Zero-emission truck sales:** Manufacturers who certify Class 2b–8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b–3 truck sales, 75% of Class 4–8 straight truck sales, and 40% of truck tractor sales.
- **Company and fleet reporting:** Large employers including retailers, manufacturers, brokers, and others will be required to report information about shipments and shuttle services. Fleet owners with 50 or more trucks will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Water

Senate Bill X7-7, Executive Order B-29-15, and Executive Order N-10-21

SB X7-7, or the Water Conservation Act of 2009, required that all water suppliers increase their water use efficiency with an overall goal of reducing per capita urban water use by 20% by December 31, 2020. Each urban water supplier was required to develop water use targets to meet this goal.

In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

In response to a state of emergency due to severe drought conditions, EO N-10-21 (July 2021) called on all Californians to voluntarily reduce their water use by 15% from their 2020 levels. Actions suggested in EO N-10-21 include reducing landscape irrigation, running dishwashers and washing machines only when full, finding and fixing leaks, installing water-efficient showerheads, taking shorter showers, using a shut-off nozzle on hoses, and taking cars to commercial car washes that use recycled water.

Solid Waste

Assembly Bill 939, Assembly Bill 341, Assembly Bill 1826, and Senate Bill 1383

In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code Section 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board (replaced in 2010 by the California Department of Resources Recycling and Recovery, or CalRecycle), which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required CalRecycle to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that it believes would assist the state in reaching the 75% goal by 2020.

AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. This law also requires local jurisdictions across the state to implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. The minimum threshold of organic waste generation by businesses decreases over time, which means an increasingly greater proportion of the commercial sector will be required to comply.

SB 1383 (2016) requires a 50% reduction in organic waste disposal from 2014 levels by 2020 and a 75% reduction by 2025—essentially requiring the diversion of up to 27 million tons of organic waste—to reduce GHG emissions. SB 1383 also requires that not less than 20% of edible food that is currently disposed be recovered for human consumption by 2025.

Other State Actions

Senate Bill 97

SB 97 (2007) directed the Governor's Office of Planning and Research and CNRA to develop guidelines under CEQA for the mitigation of GHG emissions. CNRA adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures (14 CCR 15126.4[c]). The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. CNRA also acknowledged that a lead agency could consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009).

With respect to GHG emissions, CEQA Guidelines Section 15064.4(a), as subsequently amended in 2018, states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines now note that an agency "shall have discretion to determine, in the context of a particular project, whether to: (1) Quantify greenhouse gas emissions resulting from a project; and/or (2) Rely on a qualitative analysis or performance based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

Executive Order S-13-08

EO S-13-08 (November 2008) was intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009, and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014. To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of Safeguarding California: Implementation Action Plans followed in

March 2016. In January 2018, CNRA released the Safeguarding California Plan: 2018 Update, which communicates current and needed actions that state government should take to build climate change resiliency.

3.7.2.4 Local

Metropolitan Transportation Plan/ Sustainable Communities Strategy

The El Dorado County Transportation Commission (EDCTC) is the Regional Transportation Planning Agency (RPTA) for El Dorado County, except for that portion of the County within the Tahoe Basin, which is under the jurisdiction of the Tahoe Regional Planning Agency (TRPA). One of the fundamental responsibilities which results from this designation, is the preparation of the County's Regional Transportation Plan. Under the terms of a Memorandum of Understanding (MOU) between the EDCTC and the Sacramento Area Council of Governments (SACOG), EDCTC submits the Regional Transportation Plan for inclusion into the SACOG Metropolitan Transportation Plan (MTP) and SCS. This process is important to both the SACOG MTP and the EDCTC RTP, as it allows for a locally developed RTP to be included in the regional air quality conformity process. The MOU also stipulates that EDCTC shall utilize data and data analysis methodologies which are consistent with that developed by SACOG. This data includes existing and projected travel data, socio-economic data, and travel demand forecasts and assumptions. However, this data is integrated into this locally developed RTP process focused around local consensus of policies, projects, programs, and funding decisions. The El Dorado County 2020-2040 RTP, pending review by SACOG, will become the El Dorado County portion of the SACOG MTP (EDCTC 2020).

SACOG is designated by the state and federal governments as the MPO and is responsible for developing the MTP)/SCS in coordination with Sacramento, Yolo, Yuba, Sutter, El Dorado and Placer counties and the 22 cities within those counties (excluding the Tahoe Basin). In November 2019, SACOG adopted the 2020 MTP/SCS, which lays out a path for improving our air quality, preserving open space and natural resources, and helping California achieve its goal to reduce GHG that contribute to climate change (SACOG 2019). For the 2020 MTP/SCS, CARB assigned SACOG a GHG reduction target from passenger vehicles of 19% below 2005 levels per capita by 2035.

El Dorado County Air Quality Management District

California has 35 Air Pollution Control Districts and Air Quality Management Districts, many of which are currently addressing climate change issues by developing significance thresholds, performance standards, and mitigation measures. The El Dorado County Air Quality Management District (EDCAQMD) is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in El Dorado County, where the project is located. The EDCAQMD has not established plans or thresholds for GHGs.

Environmental Vision for El Dorado County Resolution No. 29-2008

On March 25, 2008, the El Dorado County Board of Supervisors adopted the "Environmental Vision for El Dorado County" Resolution No. 29-2008, brought forward by the Youth Commission. The Resolution sets forth goals and calls for implementation of positive environmental changes to reduce global impact, improve air quality and reduce dependence on landfills, promote alternative energies, increase recycling, and encourage local governments to adopt green and sustainable practices (El Dorado County 2008).

El Dorado County General Plan

The El Dorado County General Plan does not specifically include policies to reduce GHG emissions, however, it does include strategies that could indirectly reduce GHG emissions. The Public Services and Utilities and Public Health, Safety, and Noise elements of the El Dorado General Plan include the following goals and policies would apply to GHGs (El Dorado County 2019):

Public Services and Utilities Element

Goal 5.6. Gas, Electric, and Other Utility Services. Sufficient utility service availability consistent with the needs of a growing community.

Objective 5.6.2. Encourage Energy Efficient Development. Encourage development of energy-efficient buildings, subdivisions, development, and landscape designs.

Policy 5.6.2.1. Require energy conserving landscaping plans for all projects requiring design review or other discretionary approval.

Public Health, Safety, and Noise Element

Goal 6.7. Air Quality Maintenance. Strive to achieve and maintain ambient air quality standards established by the EPA and CARB and minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors.

Objective 6.7.2. Reduce motor vehicle air pollution by developing programs aimed at minimizing congestion and reducing the number of vehicle trips made in the County and encouraging the use of clean fuels.

Policy 6.7.2.2. Encourage, both through County policy and discretionary project review, the use of staggered work schedules, flexible work hours, compressed work weeks, teleconferencing, telecommuting, and carpool/van pool matching as ways to reduce peak-hour vehicle trips.

Policy 6.7.2.3. To improve traffic flow, synchronization of signalized intersections shall be encouraged as a means to reduce congestion, conserve energy, and improve air quality.

Policy 6.7.2.5. Upon reviewing projects, the County shall support and encourage the use of, and facilities for, alternative-fuel vehicles to the extent feasible. The County shall develop language to be included in County contract procedures to give preference to contractors that utilize low-emission heavy-duty vehicles.

Policy 6.7.2.6. The County shall investigate the replacement of its fleet vehicles with more fuel-efficient alternative fuel vehicles (e.g., liquid natural gas, fuel cell vehicles).

3.7.3 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts of the project related to GHG emissions. The section identifies the thresholds of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the project's impacts and contribution to significant cumulative impacts, if

any are identified. Mitigation measures are presented for identified significant or potentially significant impacts, and the level of significance with mitigation also is identified.

3.7.3.1 Thresholds of Significance

The thresholds of significance used to evaluate the impacts of the project related to GHG emissions are based on Appendix G of the CEQA Guidelines. A significant impact would occur if the project would:

A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
B. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project, such as the proposed project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated on a project-level under CEQA.

With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or performance-based standards" (14 CCR 15064.4[a]). A lead agency may use a "model or methodology" to estimate greenhouse gas emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change" (14 CCR 15064.4[c]). The CEQA Guidelines provide that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment (14 CCR 15064.4[b]):

The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.

1. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
2. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

In addition, the CEQA Guidelines specify that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7[c]).

The extent to which a project increases or decreases GHG emissions in the existing environmental setting should be estimated in accordance with Section 15064.4, Determining the Significance of Impacts from Greenhouse Gas Emissions, of the State CEQA Guidelines. The State CEQA Guidelines indicate that when calculating GHG emissions resulting from a project, lead agencies shall make a good-faith effort based on scientific and factual data (Section

15064.4 (a)), and lead agencies have discretion to select the model or methodology deemed most appropriate for enabling decision makers to intelligently assess the project's incremental contribution to climate change (Section 15064.4 (c)).

Governor's Office of Planning and Research Guidance

The Governor's Office of Planning and Research (OPR) technical advisory titled, CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review, states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2018). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2008).

Approach to Determining Significance

The EDCAQMD has not adopted a numerical threshold of significance for GHG emissions within the region. Per its discretion, the County has decided to evaluate the project's impacts related to GHG emissions on compliance with applicable plans, policies, or regulations adopted for the purposed of reducing the emissions of GHGs. The compliance evaluation is the sole basis for determining the significance of the project's GHG-related impacts on the environment.

Nevertheless, and in accordance with Section 15064.4 of the State CEQA Guidelines, GHG emissions resulting from construction and operation of the project were quantitatively estimated. The GHG emissions associated with implementation of the project were estimated using industry standard and accepted software tools, techniques, and emissions factors, as described below for construction and operation under Section 3.7.3.2. Estimation of emissions is for informational purposes only, for comparison with existing environmental conditions. The significance of the project's GHG impacts is based on the project's compliance with local and statewide GHG reduction regulations and requirements. At the state level, guidance on reduction strategies for GHG emissions has been provided through the CARB Scoping Plans and at the local level, through the SACOG 2020 MTP/SCS.

Statewide, the Scoping Plan (approved by CARB in 2008 and updated in 2014, 2017, and 2022) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations.[4] Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard [LCFS]), among others.

[4] The Final Statement of Reasons for the amendments to the State CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

CARB's 2017 Scoping Plan specifically emphasizes the importance of reducing VMT of on-road vehicles to lower mobile-source GHG emissions to achieve statewide reduction targets. The 2017 Scoping Plan recommends a 15% reduction in total light-duty VMT from the business-as-usual scenario in 2050 in alignment with the Mobile Source Strategy (CARB 2017). CARB assessed the relationship of VMT reductions to state climate goals and found that certain land use development projects that have total VMT per capita of 14.3% lower than existing conditions, and light-duty VMT per capita of 16.8% lower than existing conditions could be considered consistent with transportation assumptions assumed for the 2017 Scoping Plan and with the state's long-term (i.e., 2050) GHG reduction goals (CARB 2017). Per Section 15064.3 of the revised (2022) CEQA Guidelines, VMT is the most appropriate measure of transportation impacts, and is defined as the amount and distance of automobile traffic attributable to a project. This methodology is consistent with the guidance provided in OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA, which assists with making significance determinations for transportation impacts in accordance with SB 743. CARB adopted the *2022 Scoping Plan Update* in December 2022 to discuss progress toward reaching the 2030 target and to address how the state will achieve carbon neutrality by 2045, as required by AB 1279. In the 2022 Scoping Plan, CARB builds on and accelerates programs already in place to reduce anthropogenic sources of GHG emissions and introduces new strategies to capture and store carbon. *Appendix D: Local Actions* of the 2022 Scoping Plan Update outlines local actions that residential and mixed-use projects can implement to address their largest sources of emissions including transportation electrification, VMT reduction, and building decarbonization. CARB identifies these three sources as "Priority Areas" given that they represent those with the highest GHG reduction potential and GHG reduction opportunities for which local governments and agencies have the most authority (CARB 2022b).

Importantly, the 2022 Scoping Plan Update emphasizes that there is no realistic path to reaching the 2045 goal of carbon neutrality without removing and sequestering carbon from the atmosphere. So, in addition to programs that aim to reduce GHG emissions, the 2022 Scoping Plan Update proposes strategies to capture and store carbon, highlighting the importance of nature-based solutions through preservation and climate smart management of the state's natural and working lands (NWLs). Modeling conducted for the 2022 Scoping Plan Update shows that California's NWLs are projected to be a net source of emissions (i.e., releasing more CO_2 emissions than they store) through 2045, which is historically due to human activities, such as land use change, and natural disturbances, such as wildfire. Therefore, the ability of the state's NWLs to act as a net sink (i.e., sequester and store more atmospheric CO_2 than they release) to help support the state's carbon neutrality goals is dependent on climate smart land management.

At the regional level, the SACOG 2020 MTP/SCS is a growth management strategy that targets per capita GHG reduction from passenger vehicles and light trucks in the region pursuant to SB 375 (SACOG 2019). In addition to demonstrating the region's ability to attain the GHG emission-reduction targets set forth by CARB, the 2020 MTP/SCS is a multimodal transportation plan that is required to be financially feasible, achieve health standards for clean air, and address statewide climate goals. It is guided by four priority policy areas: build vibrant places for today's and tomorrow's residents; foster the next generation of mobility solutions; modernize the way we pay for transportation infrastructure; and build and maintain a safe, reliable, and multimodal transportation system (SACOG 2019). The MTP/SCS includes a regional growth forecast and projected land use pattern (residential and employment) to accommodate estimated increases in population, employment, and housing.

Overall, if the project does not conflict with the regulations and actions outlined in the applicable state plans (i.e., 2022 Scoping Plan) and local plans (i.e., SACOG 2020 MTP/SCS), the project could appropriately rely on their use as showing compliance with performance-based standards adopted to fulfill the statewide goal for reducing GHG

emissions. The project's compliance with regulatory programs adopted by CARB, and other state and local agencies is therefore used to evaluate the significance of the project's GHG emissions.

3.7.3.2 Analytical Methods

Potential impacts related to GHG emissions were identified using modeling. Specifically, GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1[5]. Input parameters, including the project land use type and size and construction schedule, were based on information provided by the County, or default model assumptions if project specifics were unavailable. All assumptions and results are included in Appendix B. Impacts have been evaluated with respect to the thresholds of significance, as described above. In the event adverse environmental impacts would occur even with consideration of applicable policies and regulations, impacts would be potentially significant, and mitigation measures are provided to reduce impacts to less than significant. Additional information on how impacts were analyzed is provided below.

Construction

Emissions from the construction phase of the project were estimated using CalEEMod. Construction of the project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road trucks, and worker vehicles. The analysis of GHG emissions used the same methodology and modeling inputs assumptions as the analysis of air quality impacts in Section 3.2, Air Quality. All details for construction criteria air pollutants discussed in Section 3.2.3.2, Analytical Methods, are also applicable for the estimation of construction-related GHG emissions. See Section 3.2.3.2for a discussion of construction emissions calculation methodology and modeling inputs assumptions used in the GHG emissions analysis.

Operation

Mobile Sources

The project would generate criteria pollutant emissions from mobile sources (vehicular traffic) as a result of park operations. Motor vehicles may be fueled with gasoline, diesel, or alternative fuels. The default vehicle mix provided in CalEEMod 2022.1, which is based on CARB's Mobile Source Emissions Inventory model (EMFAC) version 2021, was applied for the project. Trip generation rates for the project (weekdays and Saturdays) are based on the traffic data provided in Chapter 3.12, Transportation, of this EIR. Notably, Saturday trip rates were also input for Sundays to provide a conservative analysis.

Regulatory measures related to mobile sources include AB 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles that are primarily used for noncommercial personal transportation in the state. In addition, the NHTSA and EPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the project's motor vehicles. The effectiveness of fuel economy improvements was evaluated using the default emission factors for motor vehicles to the extent it was captured in CalEEMod.

[5] CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with the construction and operational activities from a variety of land use projects, such as residential, commercial, and industrial facilities.

Area Sources

CalEEMod was used to estimate GHG emissions from the project's area sources, which include operation of gasoline-powered landscape maintenance equipment, which produce minimal GHG emissions. The emissions associated from landscape equipment use are estimated based on CalEEMod default values.

Energy Sources

Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. CalEEMod assumes compliance with the 2019 Title 24 code by default, which is conservative as the 2022 Title 24 code is currently applicable. Notably, the project would be all-electric and would not require natural gas. GHGs associated with electricity generation for the project were estimated using CalEEMod and assume the default 2019 reported GHG intensity values (i.e., pounds per megawatt-hour) for Pacific Gas & Electric (PG&E).

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the project requires the use of electricity for conveyance and treatment, and GHG emissions will be generated during wastewater treatment. Water consumption estimates for indoor water use were based on CalEEMod defaults and outdoor water use was adjusted based on input from the County. The electricity use for water supply, treatment, distribution, and wastewater treatment are based on the default electricity intensity factors from CalEEMod for El Dorado County.

Solid Waste

The project would generate solid waste, and therefore, result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste for the project.

Refrigerants

Refrigerants are substances used in equipment for air conditioning (A/C) and refrigeration. Most of the refrigerants used today are hydrofluorocarbons or blends thereof, which can have high GWP values. All equipment that uses refrigerants has a charge size (i.e., quantity of refrigerant the equipment contains), and an operational refrigerant leak rate, and each refrigerant has a GWP that is specific to that refrigerant. CalEEMod default values were applied, which quantify refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime, and then derives average annual emissions from the lifetime estimate (CAPCOA 2022).

Stationary

The project would include a small diesel-fueled 158-horsepower generator, which was assumed to operate one-hour a day for up to 50-hours a year for routine testing and maintenance.

3.7.3.3 Project Impact Analysis

Impact GHG-1 The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and the project would not conflict with an

applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Potential to Conflict with State Reduction Targets and CARB's Scoping Plan

The California State Legislature passed the Global Warming Solutions Act of 2006 (AB 32) to provide initial direction to limit California's GHG emissions to 1990 levels by 2020 and initiate the state's long-range climate objectives. Since the passage of AB 32, the State has adopted GHG emissions reduction targets for future years beyond the initial 2020 horizon year. For the project, the relevant GHG emissions reduction targets include those established by SB 32 and AB 1279, which require GHG emissions be reduced to 40% below 1990 levels by 2030, and 85% below 1990 levels by 2045, respectively. In addition, AB 1279 requires the state achieve net zero GHG emissions by no later than 2045 and achieve and maintain net negative GHG emissions thereafter.

As defined by AB 32, CARB is required to develop The Scoping Plan, which provides the framework for actions to achieve the State's GHG emission targets. The Scoping Plan is required to be updated every five years and requires CARB and other state agencies to adopt regulations and initiatives that will reduce GHG emissions statewide. As discussed in Section 3.7.2.3, the first Scoping Plan was adopted in 2008, and was updated in 2014, 2017, and most recently in 2022. While the Scoping Plan is not directly applicable to specific projects, nor is it intended to be used as the sole basis for project-level evaluations, it is the official framework for the measures and regulations that will be implemented to reduce California's GHG emissions in alignment with the adopted targets. Therefore, a project would be found to not conflict with the statutes if it would meet the Scoping Plan policies and would not impede attainment of the goals therein.

CARB's 2017 Climate Change Scoping Plan update was the first to address the state's strategy for achieving the 2030 GHG reduction target set forth in SB 32 (CARB 2017), and the most recent CARB 2022 Scoping Plan for Achieving Carbon Neutrality update outlines the state's plan to reduce emissions and achieve carbon neutrality by 2045 in alignment with AB 1279 and assesses progress is making toward the 2030 SB 32 target (CARB 2022b). As such, given that SB 32 and AB 1279 are the relevant GHG emission targets, the 2017 and 2022 Scoping Plan updates that outline the strategy to achieve those targets, are the most applicable to the project.

The 2017 Scoping Plan included measures to promote renewable energy and energy efficiency (including the mandates of SB 350), increase stringency of the LCFS, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant Plan, and increase stringency of SB 375 targets. The 2022 Scoping Plan builds upon and accelerates programs currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; and displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines) (CARB 2022b). Many of the measures and programs included in the Scoping Plan would result in the reduction of project-related GHG emissions with no action required at the project-level, including GHG emission reductions through increased energy efficiency and renewable energy production (SB 350), reduction in carbon intensity of transportation fuels (LCFS), and the accelerated efficiency and electrification of the statewide vehicle fleet (Mobile Source Strategy).

Regarding VMT reduction efforts, as assessed in the *Transportation Impact Study* (Appendix H), the project would consist of a community park and will mainly be serving the immediate community of Diamond Springs, as well as other neighborhoods within the region. Many of the existing parks in the immediate vicinity of the area are either located within private or public school property and therefore are not accessible during school hours, or are located

within neighborhoods to provide a small recreational area only for the immediate needs of residents nearby. The project would involve at least six ball fields, for both baseball/softball, as well as other field sports, including an indoor recreational facility. The nearest park that would be a similar size and usefulness for the immediate Diamond Springs community is located in Folsom approximately 15-miles west of the proposed project. Therefore, the County would benefit from developing the site to serve the Diamond Springs community and provide for multiple uses to occur simultaneously between different sports and recreational opportunities. The location of the project site would reduce the need for those in the Placerville and Diamond Springs communities to travel along US-50 (the major east-west freeway in the area) and would further reduce longer trips to potentially even further urban areas in Sacramento or Lake Tahoe. During normal weekday and Saturday operations, the park would draw local traffic and would be utilized primarily by local residents. During tournaments or larger events that may occurring 8-10 times per year, the park can utilize its location and ability to provide potential overflow parking with Union Mine High School. Therefore, based on the project's configured uses, and its location in an area where similar uses are not provided, the project's potential to divert traffic from parks much further would support the 2017 and 2022 Scoping Plan Update's goals by resulting in a VMT reduction in the region.

Table 3.7-3 highlights measures that have been developed under the 2017 Scoping Plan and presents the project's consistency with the applicable 2017 Scoping Plan measures.

Table 3.7-3. Project Potential to Conflict with the 2017 Scoping Plan GHG Reduction Measures

Action	Potential to Conflict
Transportation Sector	
Advanced Clean Cars	**No conflict.** The project's employees and visitors would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Low Carbon Fuel Standard	**No conflict.** Motor vehicles driven by the project's employees and visitors would use compliant fuels.
Reduction in VMT	**No Conflict.** The project would not prevent CARB from implementing this measure. As discussed above, the project is anticipated to result in a reduction in the total regional VMT.
Electricity and Natural Gas Sector	
Energy Efficiency Measures (Electricity)	**No conflict.** The project would be constructed in accordance with CALGreen and Title 24 building standards. The project would include energy efficient lighting in the gym, sports fields, and parking lots, as well as rooftop solar panels on the gym.
Energy Efficiency (Natural Gas)	**No conflict.** The project would be all-electric and would not require natural gas.
Renewables Portfolio Standard (33% by 2020)	**No conflict.** The project would procure electricity from PG&E, which is in compliance with this measure.
Renewables Portfolio Standard (50% by 2050)	**No conflict.** The project would procure electricity from PG&E, which is on trajectory to be compliance with this measure.

Table 3.7-3. Project Potential to Conflict with the 2017 Scoping Plan GHG Reduction Measures

Action	Potential to Conflict
Water Sector	
Water Use Efficiency	**No conflict.** The project would be constructed in accordance with CALGreen and Title 24 building requirements, including water conservation measures.
Recycling and Waste Management Sector	
Mandatory Commercial Recycling	**No conflict.** The project would include recycling and solid waste diversion, pursuant to regulatory requirements.

Source: CARB 2014, 2017.
Notes: GHG = greenhouse gas; CARB = California Air Resources Board; VMT = vehicle miles traveled; SB = Senate Bill; PG&E = Pacific Gas and Electric.

Table 3.7-4 highlights the measures from the 2022 Scoping Plan that are relevant to the project.

Table 3.7-4. Project Potential to Conflict with 2022 Scoping Plan GHG Reduction Measures

Action	Potential to Conflict
GHG Emissions Reductions Relative to the SB 32 Target	
40% below 1990 levels by 2030	**No conflict.** While the SB 32 GHG emissions reduction target is not an Action that is analyzed independently, it is included in Table 2-1 of the 2022 Scoping Plan for reference. The project would not obstruct or interfere with agency efforts to meet the SB 32 reduction goal.
Smart Growth / VMT Sector	
VMT per capita reduced 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045	**No conflict.** The project would not obstruct or interfere with agency efforts to meet this regional VMT reduction goal, including through implementation of SB 375. As detailed below, the Project would be consistent with the SACOG 2020 MTP/SCS, which is the regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light trucks pursuant to SB 375.
Light-duty Vehicle (LDV) Zero Emission Vehicles (ZEVs) Sector	
100% of LDV sales are ZEV by 2035	**No conflict.** As this action pertains to LDV sales within California, the project would not obstruct or interfere with its implementation. Furthermore, the project would support the transition from fossil fuel LDV to ZEV through its provision of EV chargers.
Truck ZEVs Sector	
100% of medium-duty vehicle (MDV)/ heavy-duty vehicle (HDV) sales are ZEV by 2040	**No conflict.** As this action pertains to MDV and HDV sales within California, the project would not obstruct or interfere with its implementation.

Table 3.7-4. Project Potential to Conflict with 2022 Scoping Plan GHG Reduction Measures

Action	Potential to Conflict
Electricity Generation Sector	
Sector GHG target of 38 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) in 2030 and 30 $MMTCO_2e$ in 2035 Retail sales load coverage[1] 20 gigawatts (GW) of offshore wind by 2045 Meet increased demand for electrification without new fossil gas-fired resources	No conflict. As this Action pertains to the statewide procurement of renewably generated electricity, the project would not obstruct or interfere with its implementation. However, the project would support increased usage of renewable electricity through the installation of on-site solar panels on the gym.
New Residential and Commercial Buildings Sector	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030	No conflict. The project would not obstruct or interfere with agency efforts to meet the all-electric appliance and heat pump goals.
Construction Equipment Sector	
25% of energy demand electrified by 2030 and 75% electrified by 2045	No conflict. As this Action pertains to the electrification of off-road equipment across California, the project would not obstruct or interfere with its implementation.
Low Carbon Fuels for Transportation Sector	
Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen	No conflict. The project would not obstruct or interfere with agency efforts to increase the provision of low carbon fuels for transportation.
Low Carbon Fuels for Buildings and Industry Sector	
In 2030s biomethane blended in pipeline Renewable hydrogen blended in fossil gas pipeline at 7% energy (~20% by volume), ramping up between 2030 and 2040 In 2030s, dedicated hydrogen pipelines constructed to serve certain industrial clusters	No conflict. The project would not obstruct or interfere with agency efforts to increase the provision of low carbon fuels for use in buildings and industry. Notably, however, the project would be all-electric and would not require natural gas.
High GWP Potential Emissions Sector	
Low GWP refrigerants introduced as building electrification increases, mitigating HFC emissions	No conflict. The project would not obstruct or interfere with agency efforts to introduce low GWP refrigerants.

Source: CARB 2022b.
Notes:
[1] As noted in Table 2-1 of the 2022 Scoping Plan, SB 100 speaks only to retail sales and state agency procurement of electricity (i.e., wholesale or non-retail sales and losses from storage and transmission and distribution lines are not subject to the law).

Based on the analysis in Table 3.7-3 and Table 3.7-4, the project would not conflict with the applicable strategies and measures in the 2017 Scoping Plan and 2022 Scoping Plan, respectively.

The 2045 carbon neutrality goal required CARB to expand proposed actions in the 2022 Scoping Plan to include those that capture and store carbon in addition to those that reduce only anthropogenic sources of GHG emissions. However, the 2022 Scoping Plan emphasizes that reliance on carbon sequestration in the state's natural and working lands will not be sufficient to address residual GHG emissions, and achieving carbon neutrality will require

research, development, and deployment of additional methods to capture atmospheric GHG emissions (e.g., mechanical direct air capture). Given that the specific path to neutrality will require development of technologies and programs that are not currently known or available, the project's role in supporting the statewide goal would be speculative and cannot be wholly identified at this time.

Overall, the project would comply will all regulations adopted in furtherance of the Scoping Plan to the extent applicable and required by law. As mentioned above, several Scoping Plan measures would result in reductions of project-related GHG emissions with no action required at the project-level, including those related to energy efficiency, reduced fossil fuel use, and renewable energy production by the utility. In addition, as identified previously, the project would result in reduction in regional VMT, as well as require on-site solar panels on the proposed gym, EV charging stations, a water efficient landscaping, and solid waste diversion. As demonstrated above, the project would not conflict with CARB's 2017 or 2022 Scoping Plan updates and with the state's ability to achieve the 2030 and 2045 GHG reduction and carbon neutrality goals.

Potential to Conflict with the Sacramento Area Council of Governments 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy

As discussed in Section 3.7.2.4, for the 2020 MTP/SCS, CARB assigned SACOG a GHG reduction target from passenger vehicles of 19% below 2005 levels per capita by 2035. There are many factors that influence the amount people drive and the emissions their vehicles generate. Two of these factors are largely outside of the region's control. First, changes in auto operating cost related to the cost of owning and driving a vehicle (e.g., maintenance, tires, insurance) and second, demographic factors like aging of the population (SACOG 2019). To achieve the GHG reduction target, SACOG identified five additional factors related to policies and actions in the 2020 MTP/SCS, which are outlined in Table 3.7-5 below.

Table 3.7-5. Project Potential to Conflict with 2020 MTP/SCS Policies and Actions

Action	Potential to Conflict
Shortened Vehicle Trips	
Reducing the average trip length of the vehicle trips that residents take daily. This is accomplished largely through a more compact development pattern with a greater density of uses.	No conflict. As described previously, the project would potentially result in reduced regional VMT based on diverting trips from parks that are further away.
Increased Transit, Bike, Walk Trips	
Shifting trips from vehicle travel (which generate passenger vehicle GHGs) to non-vehicle modes such as transit, biking, and walking.	No conflict. Based on the project's configured uses, and its location in an area where similar uses are not provided, the project would serve the local community by providing a park where visitors could walk, bike, or take the existing transit lines (Routes 30 or 35), rather than driving to parks that are further away.
Express Lanes and Pay-As-You-Go Fees	
Price signals are an important factor in predicting how people will travel. Transitioning away from the California fuel tax, which will diminish on a per-mile-traveled basis over time, to tolling and a pay-as-you-go or mileage-based fee, will not only help generate revenue to build and maintain the system, but help to better manage demand on that system.	No conflict. As this action pertains to shifting price signals in the region, the project would not obstruct or interfere with its implementation.

Table 3.7-5. Project Potential to Conflict with 2020 MTP/SCS Policies and Actions

Action	Potential to Conflict
ITS/TSM	
Implementing intelligent transportation systems (ITS) and transportation system management (TSM), will smooth traffic flows which have the benefits of making the system more reliable, making better use of existing travel lanes, and reducing emissions from vehicles.	**No conflict.** As this action pertains implementing ITS/TSM in the region, the project would not obstruct or interfere with its implementation.
Electric Vehicles	
Locally funded and implemented programs that incentivize the use of EVs and accelerate the penetration of these vehicles into the regional market.	**No conflict.** The project would support the transition from fossil fuel EVs through its provision of EV chargers.

Source: SACOG 2019.

Based on the analysis above, the project would be consistent with SACOG's 2020 MTP/SCS.

Quantification of Emissions

In accordance with CEQA Guidelines Section 15064.4(c), the project's construction and operational GHG emissions have been quantified for disclosure purposes only. The project's significance has been evaluated based on its potential to conflict with applicable GHG reduction plans.

Construction Emissions

Construction of the project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road trucks, and worker vehicles. GHG emissions generated by project construction are presented below in Table 3.7-6.

Table 3.7-6. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons				
2025	666.56	0.03	0.01	0.05	669.39
2026	1,496.32	0.06	0.02	0.11	1,503.08
2027	432.99	0.02	0.01	0.04	435.48
2028	430.72	0.02	0.01	0.04	433.19
2029	428.66	0.02	0.01	0.03	431.08
2030	427.83	0.02	0.01	0.03	430.20
2031	426.97	0.02	0.01	0.03	429.30
2032	427.27	0.02	0.01	0.02	429.45
2033	228.37	0.01	0.00	0.01	229.53
Total	**4,965.68**	**0.19**	**0.07**	**0.35**	**4,990.72**
			Amortized Construction Emissions (Over 30-Years)		*166.36*

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R = refrigerants; CO_2e = carbon dioxide equivalent.
Totals may not sum due to rounding.
See Appendix B for complete results.

As shown in Table 3.7-6, the estimated total GHG emissions during construction would be approximately 4,991 MT CO_2e. Estimated project-generated construction emissions amortized over 30 years would be approximately 166 MT CO_2e per year.

Operational Emissions

Following the completion of construction activities, the project would generate GHG emissions from mobile sources (vehicle trips), area sources (landscape equipment), energy sources (electricity), water supply and wastewater treatment, solid waste generation, refrigerants, and stationary (emergency generator testing). The estimated annual operational project GHG emissions from these sources are shown in Table 3.7-7.

Table 3.7-7. Estimated Annual Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	R	CO_2e
	metric tons per year				
Mobile	1,749.13	0.07	0.08	1.45	1,775.07
Area	0.22	0.00	0.00	--	0.22
Energy	23.13	<0.01	<0.01	--	23.36
Water/ Wastewater	3.04	0.03	<0.01	--	4.00
Solid Waste	7.91	0.79	0.00	--	27.68
Refrigerants	--	--	--	0.01	0.01
Stationary	4.12	0.00	<0.01	0.00	4.13
Total	**1,787.56**	**0.89**	**0.08**	**1.46**	**1,834.48**
				Amortized Construction Emissions	*166.36*
				Total Operational with Amortized Construction Emissions	**2,000.84**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R=refrigerants; CO_2e = carbon dioxide equivalent; GHG = greenhouse gas. See Attachment C for complete results. Totals may not sum due to rounding.

As shown in Table 3.7-7, the estimated GHG emissions from operation of the project would be approximately 2,001 MT CO_2e per year, including amortized construction emissions.

Summary

As shown above, the project would not conflict with CARB's 2017 or 2022 Scoping Plan updates and with the state's ability to achieve the 2030 and 2045 GHG reduction and carbon neutrality goals, or SACOG's 2020 MTP/SCS. Therefore, impacts related to the consistency with an appliable GHG reduction plan are considered to be **less than significant.**

3.7.3.4 Cumulative Impacts Analysis

This section provides an evaluation of cumulative GHG impacts associated with the project and past, present, and reasonably foreseeable future projects, as identified in in Section 3.0, Introduction to Analyses. GHG emissions are generally considered to be cumulative in nature.

Cumulative development throughout the Mountain Counties Air Basin region and beyond would generate GHG emissions that could have a significant impact on the environment. Accordingly, the analysis above takes into account the potential for the project to contribute to a cumulative impact of global climate change. As described in Impact GHG-1, the project would not conflict with an applicable plan, policy, or regulation adopted to reduce

GHG emissions. In addition, the project would develop a local serving community park, which would reduce regional VMT since visitors to the park facilities would travel shorter distances. Based on these considerations, the project's contribution to significant cumulative GHG impacts would not be cumulatively considerable and the impact would be less than significant.

3.7.3.5 Mitigation Measures

No mitigation measures are required.

3.7.4 References

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3.8 Hazards and Hazardous Materials

This section describes the hazards and hazardous materials[1] setting on and near the proposed project site; discusses the relevant federal, State, and regional regulatory considerations; and evaluates the potential impacts of the project related to hazards and hazardous materials (during both the construction phase and following project completion).

Public comments related to hazards and hazardous materials that were received in response to circulation of the Notice of Preparation (Appendix A) and the public scoping meeting for the proposed project included concerns for emergency access in the event of a fire emergency. A discussion of emergency response is provided in Section 3.11, Public Services, and additional discussion of Wildfire is provided in Section 3.14, Wildfire of this EIR. Analysis on impacts to emergency evacuation is also provided in Section 3.12, Transportation.

Information regarding hazardous materials in the project vicinity that may potentially affect the environment on the project site or the surrounding area is based on the Phase I Environmental Site Assessment (ESA) prepared for the project site by Dudek in 2022 (included in Appendix F of this EIR).

3.8.1 Existing Conditions

3.8.1.1 Phase I Environmental Site Assessment

The Phase I ESA for the project site (included in Appendix F of this EIR) did not identify the presence or likely presence of any hazardous materials on the project site. The review of topographic maps, aerial photographs, agency records, and the city directory report indicates that the site has not been commercially or agriculturally developed. A single residence was observed on the project site in the 1962 aerial photograph and 1973 topographic map; however, the residence was removed before 1975 and is no longer present on the project site. Currently, the site is vacant with the exception of a gated area containing a El Dorado Irrigation District lift station and backup generator and spill kit for diesel fuel, first observed in a 1993 aerial photograph.

While the Phase I ESA did not reveal evidence of recognized environmental conditions (RECs), historical recognized environmental conditions, conditional recognized environmental conditions, or vapor encroachment conditions in connection with the project site, one significant data gap was identified[2]. That is, during site reconnaissance, multiple drainage pipes from the northern adjoining property, Lake Oaks Senior Mobile Home Park, were observed aligned to discharge onto the project site. Dudek was not able to identify the source of the water discharging from the pipes, nor was able to determine if these pipes discharge, or have discharged, potentially hazardous materials or petroleum products. The run-off from adjacent property is addressed in Section 3.9, Hydrology and Water Quality.

1 The California Health and Safety Code defines a hazardous material as, "…any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety, or to the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, radioactive materials, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment" (California Health and Safety Code Section 25501).

2 As defined in American Society for Testing and Materials (ASTM) 1527-21, a data gap is the lack of or inability to obtain information required by this practice despite good faith efforts. A data gap is considered significant when it affects the ability of the environmental professional to identify RECs.

Public Agency Records Search

The project site itself is not identified in any of the regulatory database searches conducted by the Environmental Data Resources (EDR) for the Phase I ESA. However, the former Charles F. Brown Elementary School, adjacent to the project site to the west, is listed in EDR's historical underground storage tank (UST) database. The former Charles F. Brown Elementary School had an approximate 2,000-gallon diesel UST present for an unknown amount of time on the property. The UST was removed from the property in December of 1991; soil and water tests of the excavation area subsequently revealed that no potential contaminants were detected. As such, it was recommended that no further work be performed, and Environmental Management granted regulatory closure. The Phase I ESA concluded that the former Charles F. Brown Elementary School property did not impact the environmental conditions of the project site.

Union Mine High School, which adjoins the project site to the southwest, stores hazardous materials and waste related to science and photo development classes on the property. All storage is documented and permitted, and hazardous waste is disposed of offsite. There are no records of violations, and no evidence of releases of hazardous materials or wastes. The Phase I ESA concluded that the site does not impact the environmental condition of the proposed project site.

A total of eight listings were identified within the applicable search radii surrounding the project site. One site was identified as a site that has permitted storage of small quantities of hazardous wastes on site prior to permitted off-site disposal. The remaining seven sites are listed in databases that indicate a release or suspected release of hazardous materials or petroleum products has occurred. The databases include the EnviroStor Database, SEMS Database, and Toxic Pits Database. The Phase I ESA determined that it is unlikely that any of these sites have impacted the environmental conditions of the project site.

3.8.1.2 Surface Soil Sampling

During a public meeting, concerns were raised regarding past alleged use of hydrocarbon-based oil for dust suppression at the site. To address these concerns, surface soil sampling (included in Appendix F, after the Phase I ESA) was completed on April 20, 2023 by Dudek to evaluate the presence of Title 22 metals and petroleum hydrocarbons (gasoline, diesel, and motor oil range organics) in soils at the project site. The proposed project includes several indoor and outdoor recreational areas. Soil sampling was focused on the outdoor areas where park visitors would be in direct contact with the soil. These sampling areas included the proposed soccer fields, the proposed walking path in the northeast, the walking trails in the southeast, and the proposed baseball diamonds.

In consideration to the proposed use of the site, all soil samples were analyzed using residential environmental screening levels (ESL). Results of the sampling found that arsenic was detected in all samples above the ESL, but withing the range of background concentrations for El Dorado County. Thallium was detected in the sample taken in the area of the proposed baseball diamonds but was also within the range of accepted background concentrations for California soils, and similar to the maximum background concentration for El Dorado County. No total petroleum hydrocarbon analytes or other Title 22 metals were detected above associated screening levels at any sample location. Based on the sampling results, the Surface Soil Sampling Memorandum concluded that there is no risk to human health from the surface soils of the site.

3.8.1.3 Surrounding Land Uses

The project site is located in the western portion of Diamond Springs in El Dorado County. The subject property is adjoined by the Lake Oaks Senior Mobile Home Park to the north, which surrounds Patterson Lake. A clinical office, Snowline Hospice, adjoins the subject property to the northeast, along with two residential properties. The former Charles F. Brown Elementary School adjoins the project site to the west, in addition to residential properties. The Union Mine High School and Pacific Crest Academy adjoin the project site to the southwest. A single residence is located on the southern adjoining property, near the southwest corner of the project site; otherwise, the southern adjoining properties are undeveloped, as well as the eastern adjoining property.

Placerville Airport is the nearest airport to the project site, located approximately 4.8 miles northeast of the project site. The project is not located within the vicinity of an airport land use plan, nor is it within two miles of a public airport or public use airport. However, the project is located in the vicinity of the Pacific Gas & Electric (PG&E) Placerville Service Center Heliport (approximately 0.9 miles northeast). The heliport is not a public airport and is primarily used for patrolling during storms, Enhanced Powerline Safety Settings (EPSS) outages, Public Safety Power Shutoffs (PSPS), and inspection patrols.

As previously described, the closest schools to the project site are those located at the former Charles F. Brown Elementary School, which boarders the project site to the west, and Union Mine High School and Pacific Crest Academy, also adjoining the project site to the southwest.

3.8.1.4 Wildland Fire Conditions

Wildland fire is defined as “any non-structure fire that occurs in vegetation or natural fuels” (Fire Management Board 2019). Wildland fires may be started by natural processes (primarily lightning) or it may be started (intentionally and accidentally) by human activities, such as smoking, debris burning, and equipment operation. For this reason, the risk of fire increases where there is human access into wildland areas. Emergency fire access plays a major role in determining whether a fire can be quickly extinguished or whether it will spread. Topography is a primary factor for assessing the fire hazard of an area. As slopes increase, fires spread faster, and accessibility by fire crews and equipment often decreases.

The State Board of Forestry identifies those lands where the California Department of Forestry and Fire Protection (CAL FIRE) has the primary duty for wildland fire prevention and suppression; these lands are commonly known as state responsibility areas. CAL FIRE has mapped the fire hazard potential within state responsibility areas based on relevant factors such as fuels, terrain, and weather. The hazards are described according to their potential to cause ignition of buildings. The maps classify land into Fire Hazard Severity Zones of moderate, high, and very high. The maps are based on data and models describing development patterns, estimated fire behavior characteristics over a 30- to 50-year time horizon, and expected burn probabilities, to quantify the likelihood and nature of vegetation fire exposure to new construction. The project site and surrounding areas are mapped as a moderate fire hazard severity zone in a state responsibility area (CAL FIRE 2007).

3.8.1.5 Emergency Response and Evacuation

The El Dorado County Sherriff’s Office of Emergency Services (OES) is the emergency management agency for El Dorado County. The El Dorado County OES uses an alert notification system to alert county residents about public

health and public safety emergencies including evacuations due to wildland fires, hazardous material spills, and urgent law enforcement operations (El Dorado County 2023a).

3.8.2 Regulatory Framework

3.8.2.1 Federal

Toxic Substances Control Act (1976)

The Toxic Substances Control Act of 1976 provides the U.S. Environmental Protection Agency (EPA) with authority to require reporting, record-keeping, and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from the Toxic Substances Control Act, including food, drugs, cosmetics, and pesticides.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as "Superfund," was enacted by Congress in 1980. CERCLA provides a federal "Superfund" to clean up uncontrolled or abandoned hazardous waste sites, as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, EPA was given power to seek out those parties responsible for any release and ensure their cooperation in the cleanup.

Emergency Planning and Community Right-To-Know Act

Authorized by Title III of the Superfund Amendments and Reauthorization Act (SARA), the Emergency Planning and Community Right-to-Know Act (EPCRA) was enacted by Congress in 1986 as the national legislation on community safety. This law is designed to help local communities protect public health, safety, and the environment from chemical hazards. To implement EPCRA, Congress requires each state to appoint a State Emergency Response Commission (SERC). The SERCs are required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district. The project site is located in Administrative, Mutual Aid, and Local Emergency Planning Committee Region II, Coastal (California Governor's Office of Emergency Services 2014). Broad representation by fire fighters, health officials, government and media representatives, community groups, industrial facilities, and emergency managers ensures that all necessary elements of the planning process are represented.

Chemical Accident Prevention Provisions (Risk Management Plan)

Code of Federal Regulations Title 40 Part 68, Chemical Accident Prevention Provisions, outlines the rules and requirements for regulated substances and thresholds of those substances. Owners and operators of stationary source[3] facilities that store and handle over the threshold quantity of regulated substances, as identified in Table 1 of 40 CFR Section 68.130, List of Regulated Toxic Substances and Threshold Quantities for Accidental Release Prevention, are required to implement accidental release prevention measures. This includes preparation of a Risk Management Plan (RMP) as described in 40 CFR Sections 68.150 through 68.185. The RMP would include

[3] Stationary source is defined in 40 CFR 68.3, Definitions, as means any buildings, structures, equipment, installations, or substance emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur. See Chapter 4.3, Air Quality, for more information regarding stationary emission sources.

management systems, hazards assessments, prevention programs, and emergency response procedures associated with the applicable regulated substances.

Hazardous Materials Transportation Act

Transportation of hazardous materials is regulated by the U.S. Department of Transportation's Office of Hazardous Materials Safety. The office formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. The hazardous materials regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 Code of Federal Regulations (CFR) Parts 100–185.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections, use of vehicle controls and equipment including emergency equipment, procedures for safe operation of the transport vehicle, training on the properties of the hazardous material being transported, and loading and unloading procedures. All drivers must possess a commercial driver's license as required by 49 CFR Part 383. Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

Occupational and Safety Health Act

The Occupational Safety and Health Administration (OSHA) is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementing workplace training, exposure limits, and safety procedures for the handling of hazardous substances and hazardous materials (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program. Additional regulations have been developed regarding exposure to lead and asbestos to protect construction workers and are enforced through the California Division of OSHA, described below.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The Federal Hazardous and Solid Waste Amendments are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste, as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive UST program.

Universal Wastes

Title 40 USC, Chapter 1, Subchapter I, Part 273 governs the collection and management of widely generated waste, including batteries, pesticides, mercury-containing equipment, and bulbs. This regulation streamlines the hazardous waste management standards and ensures that such waste is diverted to the appropriate treatment or recycling facility.

U.S. Department of Transportation

In 1990 and 1994, the federal Hazardous Material Transportation Act was amended to improve the protection of life, property, and the environment from the inherent risks of transporting hazardous materials in all major modes of commerce. The United States Department of Transportation (DOT) developed hazardous materials regulations that govern the classification, packaging, communication, transportation, and handling of hazardous materials, as well as employee training and incident reporting. The transportation of hazardous materials is subject to both the Resource Conservation and Recovery Act and DOT regulations. The California Highway Patrol, California Department of Transportation (Caltrans), and the Department of Toxic Substances Control (DTSC) are responsible for enforcing federal and state regulations pertaining to the transportation of hazardous materials.

Federal Response Plan

The Federal Response Plan of 1999, as amended in 2003 (FEMA 2003) is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that (1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; (2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and (3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a presidential declaration of a major disaster or emergency.

International Fire Code

The International Fire Code (IFC), created by the International Code Council, is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the International Building Code use a hazard classification system to determine what measures are required to protect against structural fires. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, IFC employs a permit system based on hazard classification. The IFC is updated every 3 years.

National Emission Standard for Asbestos

Title 40 USC, Chapter 1, Subchapter C, Part 61 – National Emission Standards for Hazardous Air Pollutants, Subpart M established National Emission Standards for Hazardous Air Pollutants (NESHAP) and names asbestos-containing material (ACM) as one of these materials. ACM use, removal, and disposal are regulated by USEPA under this law. In addition, notification of friable ACM removal prior to a proposed demolition project is required by this law. (Note that naturally occurring asbestos is discussed in Section 3.2, Air Quality.)

3.8.2.2 State

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) implements and enforces environmental laws that regulate air, water and soil quality, pesticide use and waste recycling and reduction. Departments within CalEPA include DTSC, State Water Board, and California Air Resources Board.

Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other state agencies set the standards for their programs, while a Certified Unified Program Agency (CUPA) designated by the local government and approved by CalEPA implements the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of USTs and ASTs;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

California Office of Emergency Services

The California Office of Emergency Services State Warning Point acts as the Governor's 911 Dispatch Center. The State Warning Point, under federal SARA Title III requirements, must be notified as soon as possible of spills and releases of hazardous substances exceeding Emergency Planning and Community Right-to-Know Act minimal reportable quantities. The California Office of Emergency Services compiles Statewide statistics on spills and releases, and will dispatch other regional, State, and federal agencies to the scene, if necessary.

Hazardous Materials Business Plans

A Hazardous Materials Business Plan is required for any business that handles hazardous materials in quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet (cf) of compressed gas, hazardous waste, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355) (Cal OES 2015; El Dorado County 2023b). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees (Cal OES 2015). In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups) (Cal OES 2015).

California Occupational Safety and Health Administration

Worker health and safety is regulated at the federal level by the OSHA. The Federal Occupational Safety and Health Act of 1970 authorizes the states to establish their own safety and health programs with OSHA approval. In California, worker health and safety protections are regulated by the California Occupational Safety and Health Administration (Cal/OSHA), which also provides consultant assistance to employers. California standards for workers dealing with hazardous materials are contained in Title 8 of the CCR and include practices for all industries (General Industrial Safety Orders), with specific practices for construction and other industries. Workers at hazardous waste sites (or workers who may be exposed to hazardous wastes that might be encountered during

excavation of contaminated soils) must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response regulations (8 CCR Section 5192). Additional regulations have been developed for construction workers potentially exposed to lead (8 CCR Section 1532.1) and asbestos (8 CCR Section 1529). Cal/OSHA enforcement units conduct on-site evaluations and issue notices of violation to enforce necessary improvements to health and safety practices.

California Department of Forestry and Fire Protection Wildland Fire Management

The Office of the State Fire Marshal and the CAL FIRE administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline fueled internal combustion engines must not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Highway Patrol

The California Highway Patrol (CHP), along with Caltrans and DTSC, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

California Forestry and Fire Protection

Public Resources Code (PRC) Sections 4114 and 4130 authorize the State Board of Forestry to establish a fire plan (The 2018 Strategic Fire Plan for California) that establishes the levels of statewide fire protection services. These levels of service recognize other fire protection resources at the federal and local level that collectively provide a regional and statewide emergency response capability. In addition, California's integrated mutual aid fire protection system provides fire protection services through automatic and mutual aid agreements for fire incidents across all ownerships. The California Fire Plan is the state's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and to contribute to ecosystem health.

PRC Section 4291 requires the creation of a 100-foot fire break or fire protection area around and adjacent to habitable buildings or structures. These requirements indicate that a person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall maintain defensible space of 100 feet from each side and from the front and rear of the structure. The amount of fuel modification necessary

shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30 feet around the structure. "Fuel" means any combustible material, including petroleum-based products and wildland fuels.

3.8.2.3 Local

El Dorado County Department of Environmental Management

The El Dorado County Department of Environmental Management is the primary agency responsible for local enforcement of State and federal laws pertaining to hazardous materials and hazardous waste management (El Dorado County 2023b). The El Dorado County Department of Environmental Management is the local CUPA, responsible for coordination of the following programs: Hazardous Materials Business Plan Program, Hazardous Waste Generator Program and Onsite Hazardous Waste Treatment (tiered permitting) Programs, Underground Storage Tank Program, California Accidental Release Prevention Program, and Aboveground Petroleum Storage Act. The Solid Waste and Hazardous Material Division of the El Dorado County Department of Environmental Management leads the county's hazardous materials emergency response program.

The El Dorado County Department of Environmental Management is also responsible for implementing the El Dorado County Hazardous Waste Management Plan and the county and regional hazardous materials incident response plans (El Dorado County 2023c). The El Dorado County Hazardous Waste Management Plan was developed in 1990 in accordance with California Department of Environmental Health Guidelines and the majority of activities identified in the plan have since been implemented (El Dorado County 2023c). The El Dorado County Hazardous Materials Area Plan (El Dorado County 2009) describes the County's pre-incident planning and preparedness for hazardous materials releases. It clarifies the roles and responsibilities of federal, State, and local agencies during a hazardous materials incident. It describes the county's hazardous materials incident response program, training, communications, and post-incident recovery procedures. The Regional (11 County) Hazardous Materials Emergency Plan (Region IV Local Emergency Planning Committee 2011) builds on the county Hazardous Materials Area Plans and facility Hazardous Materials Business Plans located in the region's counties. It includes the identity, location and emergency contacts for facilities that handle threshold quantities of extremely hazardous substances. It also contains chemical release response procedures, public protective action notification information, county government emergency coordinators and plans for exercising the Hazardous Materials Emergency Plan.

El Dorado County Code

Chapter 8.08 (Fire Prevention) of the El Dorado County Code specifies limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments. Chapter 8.09 (Vegetation Management and Defensible Space) of Title 8 of the County Code requires the removal or abatement of all hazardous vegetation and

combustible material that constitutes a fire hazard which may endanger or damage neighboring property, and describes the means of enforcement. The following provisions are applicable to the proposed project:

Sec. 8.09.070. - Duty to remove and abate hazardous vegetation and combustible material.

A. It shall be the duty of every owner, occupant, and person in control of any parcel of land or interest therein, which is located within the County to remove, or abate, all hazardous vegetation and combustible material, which constitutes a fire hazard and may endanger or damage neighboring property.

B. The owner, lessee or occupant of buildings, grounds, or lots within the County shall remove from such property and adjacent streets all waste, garbage, rubbish, weeds, hazardous vegetation or other combustible materials growing or accumulated thereon in accordance with the procedures and methods prescribed in this chapter and by the Enforcement Official.

C. Any home owners association (HOA), lighting and landscape district, subdivision development, special district, or other entity that has a developed and approved Wildland Fire Safe Plan in accordance with the County's General Plan requirement and CFC Chapter 49, shall be granted a reasonable amount of time to comply with this ordinance not to exceed five years from the date which this ordinance was approved and ratified by the Board of Supervisors (May 30, 2019).

D. Prior to the close of any real estate sales transaction within the County, the requirements for property owners to comply with the Vegetation Management Ordinance shall be disclosed to all potential property owners.

E. All improved parcels, shall comply with the following requirements:

F. Maintain defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line except as provided in Paragraph 11. The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation.

    a. Consistent with fuels management treatment objectives, steps should be taken to minimize erosion. For the purposes of this paragraph, "fuel" means any combustible material, including petroleum-based products and wildland fuels.

    b. A greater distance than that required under Paragraph 1 may be required by State law, local ordinance, rule, or regulation. Clearance beyond the property line may only be required if the State law, local ordinance, rule, or regulation includes findings that the clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure.

    c. Clearance on adjacent property shall only be conducted following written consent by the adjacent landowner.

    d. Remove that portion of a tree that extends within ten feet of the outlet of a chimney or stovepipe.

    e. Maintain trees, shrubs, or other plants adjacent to or overhanging a building free of dead or dying wood.

    f. Maintain the roof of a structure free of leaves, needles, or other vegetative materials.

    g. A person is not required under this section to manage fuels on land if that person does not have the legal right to manage fuels, nor is a person required to enter upon or to alter property that is owned by any other person without the written consent of the owner of the property.

h. Cultivated and useful grasses and pastures shall not be considered a public nuisance. However, if the County's Enforcement Official determines it necessary to protect adjacent improved property from fire exposure, an adequate firebreak may be required.

i. The public and entities should be aware of rare plants areas, riparian areas, and raptor nesting trees on the property and try to avoid these sites.

j. Good neighbor and neighborhood protection policy including unimproved parcels. A 100-foot wide strip of land around structure(s) located on an adjacent improved parcel (some or all of this clearance may be required on the adjacent improved parcel or the adjacent unimproved parcel depending upon the location of the structure on the improved parcel). For example, a structure could be within 70 feet of its property line. The adjacent property owner shall assist its neighbor by completing fuels management on another 30 feet to create a 100-foot strip of treated land.

k. Improved and unimproved parcels adjacent to all roadways that have been designated by the County Enforcement Official (or designee) to be necessary for the safe ingress and egress to the area served by the roadway or fire access easement and the current condition of fuels on the improved or unimproved parcel is assessed by the County Enforcement Official as an extra hazardous fire condition which must be treated or abated.

El Dorado County Local Hazard Mitigation Plan

The El Dorado County Local Hazard Mitigation Plan (El Dorado County 2018) updates the El Dorado County Multi-Hazard Mitigation Plan. The purpose of the plan is to guide hazard mitigation planning to better protect the people and property of the county from the effects of hazard events. The plan serves as a tool to help decision makers direct mitigation activities and resources. It provides risk and vulnerability assessments for potential hazards (i.e., avalanche, dam failure, drought, earthquake, erosion, flood, seiche, severe weather/extreme temperatures, severe weather/thunderstorms, wildfire, and subsidence) and develops mitigation strategies to reduce potential hazards.

El Dorado County General Plan

The following goals, objectives, and policies related to hazards and hazardous materials are established in the Public Health, Safety, and Noise Element of the El Dorado County General Plan (El Dorado County 2019) and are applicable to the project.

Goal 6.1. A coordinated approach to hazard and disaster response planning

Objective 6.1.1. Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.

Policy 6.1.1.1. The El Dorado County Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) shall serve as the implementation program for the coordination hazard planning and disaster response efforts within the County and is incorporated by reference to this Element. The County will ensure that the LHMP is updated on a regular basis to keep pace with the growing population.

Goal 6.2. Minimize fire hazards and risks in both wildland and developed areas.

Objective 6.2.1. All new development and structures shall meet "defensible space" requirements and adhere to fire code building requirements to minimize wildland fire hazards.

Policy 6.2.1.1. Implement Fire Safe ordinance to attain and maintain defensible space through conditioning of tentative maps and in new development at the final map and/or building permit stage.

Objective 6.2.2. Regulate development in areas of high and very high fire hazard as designated by the California Department of Forestry and Fire Prevention Fire Hazard Severity Zone Maps.

Policy 6.2.2.1. Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.

Policy 6.2.2.2. The County shall preclude development in areas of high and very high wildland fire hazard or in areas identified as wildland-urban interface (WUI) communities within the vicinity of Federal lands that are a high risk for wildfire, as listed in the Federal Register Executive Order 13728 of May 18, 2016, unless such development can be adequately protected from wildland fire hazard, as demonstrated in a WUI Fire Safe Plan prepared by a qualified professional as approved by the El Dorado County Fire Prevention Officers Association. The WUI Fire Safe Plan shall be approved by the local Fire Protection District having jurisdiction and/or California Department of Forestry and Fire Protection. (Resolution 124- 2019, August 6, 2019)

Objective 6.2.3. Application of uniform fire protection standards to development projects by fire districts.

Policy 6.2.3.1. As a requirement for approving new development, the County must find, based on information provided by the applicant and the responsible fire protection district that, concurrent with development, adequate emergency water flow, fire access, and firefighting personnel and equipment will be available in accordance with applicable State and local fire district standards.

Policy 6.2.3.2. As a requirement of new development, the applicant must demonstrate that adequate access exists, or can be provided to ensure that emergency vehicles can access the site and private vehicles can evacuate the area.

Policy 6.2.3.4. All new development and public works projects shall be consistent with applicable State Wildland Fire Standards and other relevant State and federal fire requirements.

Objective 6.2.4. Reduce fire hazard through cooperative fuel management activities.

Policy 6.2.4.1. Discretionary development within high and very high fire hazard areas shall be conditioned to designate fuel break zones that comply with fire safe requirements to benefit the new and, where possible, existing development.

Policy 6.2.4.2. The County shall cooperate with the California Department of Forestry and Fire Protection and local fire protection districts to identify opportunities for fuel breaks in zones of high and very high fire hazard either prior to or as a component of project review.

Goal 6.6. Recognize and reduce the threats to public health and the environment posed by the use, storage, manufacture, transport, release, and disposal of hazardous materials.

Objective 6.6.1. Regulate the use, storage, manufacture, transport, and disposal of hazardous materials in accordance with State and Federal regulations.

3.8.3 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts associated with the Proposed Project related to hazards and hazardous materials. The section identifies the standards of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the Proposed Project's impacts and contribution to significant cumulative impacts, if any are identified.

3.8.3.1 Thresholds of Significance

The standards of significance used to evaluate the impacts of the Proposed Project related to hazards and hazardous materials are based on Appendix G of the CEQA Guidelines, as listed below. A significant impact would occur if the Proposed Project would:

A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school.
D. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
F. Impair implementation of or physically interfere with an adopted emergency evacuation plan.
G. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

3.8.3.2 Methodology

The Phase I ESA for the project site (included in Appendix F of this EIR), DTSC's Envirostor database, and the State Water Resources Control Board's GeoTracker database, were reviewed to determine if the project may have a significant impact related to hazards and hazardous materials. The evaluation also considers the potential transport, use, storage and disposal of hazardous materials associated with the construction and operation of the proposed project, and the wildfire risk of the project site and surrounding areas. In determining the level of significance, this analysis assumes that the proposed project would comply with relevant State and local ordinances and regulations, as well as the General Plan policies presented above. Note that, under CEQA, the effects of the

existing environment upon a proposed project is not a *project* impact. A project impact occurs when direct or indirect changes to the environment would occur as a result of implementation of the project.

3.8.3.3 Project Impact Analysis

Areas of No Impact

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

As described in Section 3.8.1.2, the project site is not located within an airport land use plan area or in the vicinity of a public airport. This topic is not discussed further in this EIR.

Project Impacts

This section provides a detailed evaluation of hazards and hazardous materials impacts associated with the proposed project.

Impact HAZ-1 The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or accidental release of hazardous materials.

Hazardous materials (e.g., fuel, oils, solvents, paints) would be routinely transported, stored, and used at the project site during construction. Because the project would result in soil disturbance greater than 1 acre, management of soil and hazardous materials during construction activities would be subject to the requirements of the Stormwater Construction General Permit (described in detail under Chapter 3.9, Hydrology and Water Quality, of this EIR), which requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes hazardous materials storage requirements. For example, construction site operators must store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).

Operation of the project may involve the routine storage and use of small quantities of commercially available hazardous materials for routine maintenance ((e.g., paint, cleaning supplies, and fuel). Any hazardous materials used during operation of the proposed project would be transported, used, stored, and disposed in accordance with existing regulations and product labeling, thereby minimizing the hazard to the public or to the environment. If storage of hazardous materials exceeding specific quantities (see subsection on State Regulations above) occurs during project operation, the project would be required to comply with existing hazardous materials regulations including preparation of an HMBP, as enforced by the El Dorado County Department of Environmental Management. The purpose of the HMBP is to ensure that employees are adequately trained to handle hazardous materials and provides information to the El Dorado County Fire District should emergency response be required.

The routine transportation, use, and disposal of hazardous materials during construction and operation may pose health and safety hazards to workers if the hazardous materials are improperly handled, or to nearby residents and the environment if the hazardous materials are accidentally released into the environment. The routine handling and use of hazardous materials by workers would be performed in accordance with OSHA regulations, which include training requirements for workers and a requirement that hazardous materials are accompanied by manufacturer's

Safety Data Sheets. Cal/OSHA regulations include requirements for protective clothing, training, and limits on exposure to hazardous materials. Compliance with these existing regulations would ensure that workers and nearby residents are protected from exposure to hazardous materials that may be transported, stored, or used on site.

Compliance with the existing regulations for hazardous materials discussed above would ensure that the potential impacts related to the routine transport, use, storage, or disposal of hazardous materials, or the accidental release of hazardous materials, would be **less than significant**.

Impact HAZ-2 The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school.

As discussed in the Existing Conditions above and in Section 2.0, Project Description, there are several schools located adjacent to the project site, those located at the former Charles F. Brown Elementary School and Union Mine High School and Virtual Academy. Construction of the proposed project would include the handling of hazardous materials. Additionally, the route to the project site would use Oak Dell Road and Snoopy Road, which would pass directly pass by the schools. The accidental release or spill of hazardous materials transported by the school could expose schoolchildren and workers to hazardous materials.

As discussed in Section 3.2, Air Quality, the project would not emit hazardous emissions. Construction activities may result in temporary increased risk from construction equipment emissions. These impacts would be mitigated, as described in Section 3.2.

As discussed in Impact HAZ-1 and the Regulatory Settings above, there are several regulations covering the transportation, use, storage, and disposal of hazardous materials during construction activities. Compliance with such regulations would ensure that the nearby schools would not be exposed to hazardous materials. Accordingly, impacts would be less than significant.

Also discussed in Impact HAZ-1, the operation of the project would result in the use of small quantities of commercially available hazardous materials for routine maintenance such as paint, cleaning supplies, and motor fuel for cars and lawnmowers. The anticipated volumes of hazardous materials would be small and few of the chemicals would be considered hazardous materials (e.g., bleach, diesel, etc.). Furthermore, the routine handling and use of hazardous materials by maintenance workers would be performed in accordance with OSHA regulations. The project would be required to ensure that any hazardous materials are transported, used, stored, and disposed handled in accordance with County, state, and federal regulations. For these reasons, the potential for the proposed project to create a hazard to schools through the handling of hazardous materials would be **less than significant.**

Impact HAZ-3 The project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

As discussed in the existing conditions above, the Phase I ESA (Appendix F) prepared for the project noted that the project site was not identified in any of the databases searched by EDR that return results of sites within up to a 1-mile radius of the project site that are known to be chemical handlers or hazardous waste generators or that have reported releases of hazardous substances or petroleum products.

Two sites adjacent to the project site, the former Charles F. Brown Elementary School and the Union Mine High School were identified in the search conducted by EDR. The former Charles F. Brown Elementary School is listed in

the historical UST database, however, after removal of a diesel UST in 1991, soil and groundwater samples did not detect contaminants and the Environmental Management granted closure. Additionally, the Union Mine High School is documented as a site that stores and disposes of hazardous materials off-site in accordance with all applicable regulations. The Phase I ESA determined that both of these sites have not impacted the environmental conditions of the project site.

A total of eight listings were identified in the 1-mile search radii surrounding the project site, all of which were determined to be unlikely to impact the environmental conditions of the proposed project site. Consequently, the proposed project is not included on list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would not create a significant hazard to the public or the environment, and there would be **no impact**.

Impact HAZ-3 The project would not impair implementation of or physically interfere with an adopted emergency response plan.

The development of the proposed community park and associated improvements would not physically interfere with or impair implementation of the El Dorado County Local Hazard Mitigation Plan. Most of the project is located on undeveloped lands east of Oak Dell Road. This portion of the construction would occur off public roads and would not require any road closures or restrictions. The project also includes road improvements for State Route (SR) 49 and Snoopy Road. SR 49 will be widened as necessary at Oak Dell Road and restriped to provide for a dedicated left turn lane on westbound SR 49. Oak Dell Road will have right and left turn lanes at SR 49. Snoopy Road is currently a dirt road and will become an aggregate base road for emergency access to the proposed park. No road closures are anticipated, and emergency access in the project area would be maintained at all times throughout project construction. Refer to Section 3.12, Transportation for the analysis of transportation impacts and Section 3.14, Wildfire for an analysis of Wildfire impacts. Therefore, the potential for the proposed project to impair implementation or physically interfere with an adopted emergency response or emergency evacuation plan would be **less than significant**.

Impact HAZ-4 The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

The project would not expose people or structures to a new or increased significant risk of loss, injury or death involving wildland fires. Section 3.14, Wildfire provides a more detailed discussion regarding wildfire. Impacts would be **less than significant**.

3.8.3.4 Cumulative Impacts Analysis

The project, in combination with past, present, and reasonably foreseeable future development, would not result in a significant cumulative impact related to routine transport, use, disposal, or accidental release of hazardous materials, or related to significant risk of loss, injury, or death involving wildland fires.

The geographic scope for hazards and hazardous materials is the project site and the three cumulative projects in the vicinity (Project 1, Project 2, and Project 3, as described in Section 3.0). Hazards and hazardous materials impacts are generally site-specific and/or have limited mobility. Project 1 involves the construction of a four-lane divided roadway connecting Missouri Flat Road to SR 49, located approximately 1.3 miles northeast of the project site. A portion of this project site is planned to be constructed on a site with known contamination. As such, the project has prepared a Remedial Action Plan (RAP) to adequately address the environmental conditions identified.

Project 2 involves the construction of a residential subdivision, off-site road improvements, and the provision of a public park, located .6 mile east of the proposed project site. A portion of Project 2's off-site is also located on a site with known contamination. However, project implementation of mitigation measures including a Health and Safety Plan and a Soil and Groundwater Management Plan would reduce any impacts to a less than significant level.

Project 3 involves the construction of an apartment complex, located just north of the proposed project site. The project is exempt from CEQA pursuant to Section 15268. The Phase I ESA conducted a 1-mile search of potential hazardous material sites surrounding the proposed project site. Due to the close proximity of Project 3's site to the proposed project, and absence of listing on hazardous databases searched by the Phase I ESA, it is unlikely that this project site would contribute to any cumulative hazardous materials impacts.

The cumulative projects would not affect the project site, either through disturbance of existing hazardous sites, or through the use of hazardous materials. All three projects may use hazardous materials in the construction phase, including fossil fuels, solvents, etc. However, these materials are generally limited in the amount, and not stored on site in substantial amounts. All cumulative projects must comply with regulations described in this section for the handling and storage of hazardous materials. The cumulative projects would not result in a cumulative hazards or hazardous materials impact.

3.8.3.5 Mitigation Measures

No mitigation measures are required.

3.8.4 References

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3.9 Hydrology and Water Quality

This section describes the existing hydrology and water quality conditions of the project site and vicinity, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant impacts related to the construction and operation of the Diamond Springs Community Park Project (proposed project or project). The analysis is based on review of relevant studies and reports regarding hydrology and water quality that have been prepared for the project, as well as existing regulatory requirements.

A complete list of comments is provided in Appendix A. A letter was received from the Regional Water Quality Control Board which raised general water quality concerns and permitting requirements. Other commenters noted the presence of Deadman Creek within the project area.

3.9.1 Existing Conditions

The project is located within Diamond Springs, a census-designated place in an unincorporated portion of the County. The two largely undeveloped, contiguous parcels that make up the 9.7 acre site consist of gently sloping topography that has an average elevation of 1,679 feet above mean sea level (amsl). An El Dorado Irrigation District (EID) lift station and access road is located on the southern end of the subject property, and Deadman Creek, a perennial stream, transects diagonally through the southeastern portion of the project site.

3.9.1.1 Surface Water Resources

Regional Watersheds

El Dorado County contains four major watersheds: the Tahoe Watershed, the Middle Fork American River, the South Fork American River, and the Cosumnes River (El Dorado County 2003). The project site is located along the northern boundary of the Upper Consumes River Watershed, which extends from just west of the Sacramento-El Dorado County line east to the higher reaches of the Sierra Nevada Mountains. According to the Central Valley Regional Water Quality Control Board (RWQCB) Basin Plan, the project site is located within the North Fork Cosumnes River Hydrologic Subarea (HAS 532.23.23) of the Middle Sierra Hydrologic Unit (RWQCB, 2018).

Upper Cosumnes River Watershed

The Cosumnes River watershed encompasses the southern region of El Dorado County and the northwestern region of Amador County. The watershed extends from the headwaters along the Iron Mountain Ridge west to where the Cosumnes River enters Sacramento County. The major tributaries flowing directly into the Cosumnes River are the South, Middle, and North Fork Cosumnes Rivers, and Canyon Creek. Both Deer Creek and Carson Creek are also tributaries to the Cosumnes. The creeks drain a significant portion of western El Dorado County in the Cameron Park and El Dorado Hill/Latrobe areas, respectively.

Overall surface drainage in the local area of the project site flows south to Deadman Creek which flows out of Patterson Lake. Deadman Creek drains into Martinez Creek, then south to the North Fork Cosumnes River, which then combines with the Middle and South Forks in the Cosumnes River (El Dorado County, 2003). Surface water flow at the project site is primarily seasonal overland stormwater runoff from rain and snowmelt. The peak runoff from the Cosumnes River, where precipitation occurs primarily as rainfall, is from January through April.

The RWQCB establishes beneficial uses and characterizes the water quality of surface water bodies based on watershed boundaries. A watershed identifies an area of land that contains a common set of streams and rivers that all drain into a single larger body of water, such as a larger creek, river, lake, or an ocean. Stormwater pollutants present in many urban areas include metals, solvents, paint, concrete, masonry products, detergents, vehicle fuels and fluids, oil and grease, pesticides and herbicides (organic compounds and nutrients), debris and litter, bacteria, pathogens and oxygen demanding compounds, and sediment and silt.

The Porter-Cologne Water Quality Control Act of 1969 is California's statutory authority for the protection of water quality. Under the Act, the State must adopt water quality policies, plans, and objectives that protect the State's waters for the use and enjoyment of the people. The Act sets forth the obligations of the SWRCB and RWQCBs to adopt and periodically update water quality control plans (Basin Plans) for all the waters of an area. The water quality control plan is defined as having three components: beneficial uses which are to be protected, water quality objectives which protect those uses, and an implementation plan which accomplishes those objectives. See Section 3.9.2.2 for additional information about the Porter-Cologne Water Quality Control Act.

The February 2019 Basin Plan for the Central Valley Basin is the current master water quality control planning document (CVRWQCB 2019). The Basin Plan establishes beneficial uses for each of the water bodies in the Central Valley Region. Table 3.9-1 lists the beneficial uses of the primary surface water features located within the project study area and include the proposed Nashville Reservoir, which is the nearest downstream water body with listed beneficial uses in the Cosumnes.

Table 3.9-1. Beneficial Uses

Beneficial Use Designation	Cosumnes - Nashville Reservoir
Municipal and Domestic Supply (MUN)	E and P
Irrigation (AGR)	E
Stock Watering (AGR)	E
Recreation – Contact (REC-1)	E and P
Canoeing and Rafting (REC-1)	E
Recreation – Non-contact (REC-2)	E and P
Warm Freshwater Habitat (WARM)	E and P
Cold Freshwater Habitat (COLD)	E and P
Warm Migration (MIGR)	E and P
Cold Migration (MIGR)	E
Warm Spawning (SPWN)	E and P
Cold Spawning (SPWN)	E and P
Wildlife Habitat (WILD)	E and P
Hydropower Generation (POW)	P

Source: CVRWQCB 2019.
Notes: E = existing, P = proposed

The Basin Plan includes numerous water quality objectives that apply to all inland surface waters. The primary objectives that would apply to the proposed project include those related to turbidity, suspended material, and sediment, as project-related construction could result in erosion and sedimentation of adjacent or downstream water bodies. While the Porter-Cologne Water Quality Control Act requires the State to adopt water quality policies, plans, and objectives that protect the State's waters, the federal CWA establishes basic guidelines for regulating

discharges of both point and non-point sources of pollutants into the waters of the United States.[1] The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

CWA Section 303(d) requires states to identify and prepare a list of water bodies that do not meet water quality objectives, and to establish Total Maximum Daily Loads (TMDLs) for each water body to ensure attainment of water quality objectives. These TMDLs are updated every two years in the SWRCB Integrated Report, also known as the Section 305(b) report, which assigns an Integrated Report Condition Category to all assessed water body segments. Water body segments that exceed protective water quality standards are placed on the 303(d) list of impaired waters. Water quality impairments for the water bodies potentially affected by the proposed project are identified in Table 3.9-2. These impaired bodies are listed as Category 5 in the SWRCB Integrated Report, which includes waters where at least one beneficial use is not supported, and a TMDL is required.

Table 3.9-2. Water Quality Impairments

Water Body	2020 303(d) List of Water Quality Impairments (Included under SWRCB Integrated Report Category 5)
Upper Cosumnes River (above Michigan Bar)	Dissolved Oxygen and Invasive Species.

Source: SWRCB 2022.
Notes: SWRCB = State Water Resources Control Board.

Site Drainage

Deadman Creek cuts across the southeast portion of the site in a northeast to southwest direction. All of the drainage from the site flows overland into Deadman Creek. The site is defined by four different drainage sheds on the west side of Deadman Creek. On the north side of the project site, piped stormwater from the mobile home park flows into the project site.

3.9.1.2 Groundwater Resources

The project site is located in an upland region with limited groundwater supplies and is not located within a groundwater basin identified in the Department of Water Resources DWR's Bulletin 118 (DWR, 2020). Consequently, the area is not subject to the Sustainable Groundwater Management Act, and does not have a Groundwater Sustainability Plan.

3.9.1.3 Flood Hazards

The Federal Emergency Management Agency (FEMA) provides flood hazard mapping through the Flood Insurance Rate Map program. Special Flood Hazards Areas (SFHA) are defined by FEMA as an area that would be inundated by a flood event that has a 1% chance of being equaled or exceeded in any given year, also known as the 100-year flood. According to the FIRM mapping tool, FEMA identifies the area of the project site as Zone X, which is an area of minimal flood hazard and not within a 100-year flood zone (FEMA, 2008).

[1] Point-source discharges are those emanating from a pipe or discrete location/process, such as an industrial process or wastewater discharge. Non-point source pollutants are those that originate from numerous diffuse sources and land uses, and which can accumulate in stormwater runoff or in groundwater.

Flood hazards can also be associated with inundation due to dam failure. The project site is located downstream of Patterson Lake which is a humanmade reservoir that was constructed in 1960 as part of the Lake Oaks Community (DSOD 2022). The reservoir is created by an earthen dam that is under the jurisdiction of the California Division of Safety of Dams (DSOD). According to the DSOD, the dam has been certified, is considered in satisfactory condition, but the downstream hazard is considered high (DSOD 2022).

Tsunami and Seiche

Tsunamis are ocean waves generated by vertical movement of the sea floor, normally associated with earthquakes or volcanic eruptions. Seiches are oscillations of enclosed or semi-enclosed bodies of water that result from seismic events, wind stress, volcanic eruptions, underwater landslides, and local basin reflections of tsunamis. The project site is not located in a coastal area subject to tsunami and while Patterson Lake is relatively close to the project site, the likelihood of experiencing seiche waves is relatively low.

3.9.2 Regulatory Framework

3.9.2.1 Federal

Clean Water Act

The CWA, as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality (33 United States Code Section 1251 et seq.). The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The CWA establishes basic guidelines for regulating discharges of both point and non-point sources of pollutants into the waters of the United States.[2] The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA. Commonly relevant sections of the act are as follows:

- **Sections 303 and 304** provide for water quality standards, criteria, and guidelines. Under Section 303(d) of the CWA, the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. California is required to establish TMDLs for each pollutant/stressor. A TMDL defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. Once a water body is placed on the Section 303(d) List of Water Quality Limited Segments, it remains on the list until a TMDL is adopted and the water quality standards are attained, or there is sufficient data to demonstrate that water quality standards have been met and delisting from the Section 303(d) list should take place. TMDLs applicable to the proposed project are listed in Table 4.9-3.
- **Section 401 (Water Quality Certification)** indicates that a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into waters of the United States unless a Section 401 water quality certification is issued, verifying compliance with water quality requirements, or waiving such a certification. States where the discharge would originate are generally responsible for issuing water quality certifications. CWA Section 404 permits (see description below) are subject to Section 401 certification.

[2] Point-source discharges are those emanating from a pipe or discrete location/process, such as an industrial process or wastewater discharge. Non-point source pollutants are those that originate from numerous diffuse sources and land uses, and which can accumulate in stormwater runoff or in groundwater.

- **Section 402 (National Pollutant Discharge Elimination System)** establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the SWRCB and the nine RWQCBs, who have several programs that implement individual and general permits related to construction activities, stormwater runoff quality, and various kinds of non-stormwater discharges. The NPDES General Construction Permit is discussed in Section 3.9.2.2 State. In general, in California, a NDPES permit also provides waste discharge requirements, although waste discharge requirements can be issued for discharges that are not within the coverage of the Section 402 NPDES program.

  The Municipal Stormwater Permitting Program under CWA Section 402 regulates stormwater discharges from municipal separate storm sewer systems (MS4s). MS4 permits are issued in two phases: Phase I, for medium and large municipalities, and Phase II for small municipalities. The Phase II Small MS4 General Permit requires the discharger to develop and implement best management practices (BMPs) through a coordinated storm water program with the goal of reducing the discharge of pollutants to the maximum extent practicable, which is the performance standard specified in Section 402(p) of the CWA. See Section 4.9.2.3, Local for the City's Stormwater Management Program.
- **Section 404 (Discharge of Dredged or Fill Material into Waters of the United States)** establishes a permit program for the discharge of dredged or fill material into waters of the United States. This permit program is jointly administered by the USACE and U.S. Environmental Protection Agency (EPA). Section 4.3, Biological Resources, addresses this requirement in greater detail. A Section 401 water quality certification generally is necessary for a Section 404 permit.

Numerous agencies have responsibilities for administration and enforcement of the CWA. At the federal level, this includes the EPA, USACE, and the major federal land management agencies such as the U.S. Forest Service and Bureau of Land Management. At the state level, with the exception of tribal lands, the California Environmental Protection Agency (CalEPA) and its sub-agencies, including the SWRCB and the nine RWQCBs, have been delegated primary responsibility for administering and enforcing certain provisions of the CWA. At the local level, the Central Coast RWQCB and the County both have enforcement and implementation responsibilities under the CWA.

Federal Antidegradation Policy

The federal Antidegradation Policy (40 Code of Federal Regulations 131.12), first included in EPA's regulations in 1983, is designed to protect water quality and water resources. The policy requires states to develop statewide antidegradation policies and identify methods for implementing those policies. State antidegradation policies and implementation measures must include the following provisions: (1) existing instream uses and the water quality necessary to protect those uses shall be maintained and protected; (2) where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development; and (3) where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected. State permitting actions must be consistent with the federal Antidegradation Policy.

3.9.2.2 State

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (first codified in the California Water Code Section 13000 et seq. in 1969) is the primary water quality control law for California. Whereas the CWA applies to all waters of the United States, the Porter–Cologne Act applies to waters of the state, which includes isolated wetlands and groundwater in addition to federal waters.[3] The act requires a Report of Waste Discharge for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. For discharges directly to surface water (waters of the United States) from a point source, an NPDES permit is required, which is issued under both state and federal law; for other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the state (e.g., groundwater and isolated wetlands), waste discharge requirements are issued exclusively under state law. Waste discharge requirements typically require many of the same BMPs and pollution control technologies as NPDES permits.

California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the SWRCB (State Board Resolution No. 68-16) in 1968. Unlike the federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the state, not just surface waters. The policy requires that, with limited exceptions, whenever the existing quality of a water body is better than the quality established in individual basin plans, such high-quality water must be maintained and discharges to that water body must not unreasonably affect any present or anticipated beneficial use of the water resource. As stated in the Central Coast RWQCB Basin Plan, "discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State."

Water Quality Control Plan for the Central Valley

The Porter–Cologne Water Quality Control Act sets forth the obligations of the SWRCB and RWQCBs to adopt and periodically update water quality control plans (Basin Plans), in which beneficial uses and water quality objectives are established, and which include implementation programs and policies to achieve those objectives (California Water Code Sections 13240 through 13247). Beneficial uses applicable to the proposed project are listed in Table 4.10-1.

The proposed project would be located within the area under the jurisdiction of the Central Valley RWQCB and its Basin Plan. The SWRCB and the Central Valley RWQCB share the responsibility, under the Porter-Cologne Act, to formulate and adopt water policies and plans and to adopt and implement measures to fulfill CWA requirements. The Central Valley Water Quality Control Plan (Basin Plan), last updated February 2019, identifies surface water and groundwater resources in the watershed and establishes beneficial uses and numeric water quality objectives for each resource. The beneficial uses of any specifically identified water body generally apply to its tributary streams.

[3] "Waters of the state" are defined in the Porter–Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050[e]).

Construction General Permit (SWRCB– Order No. 2022-0057-DWQ)

For stormwater discharges associated with construction activity in the State of California, the SWRCB has adopted and administers the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) to avoid and minimize water quality impacts attributable to such activities. The Construction General Permit applies to all projects in which construction activity disturbs 1 acre or more of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling and excavation. The Construction General Permit requires development and implementation of a stormwater pollution prevention plan (SWPPP), which would specify water quality BMPs designed to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site. Routine inspection of all BMPs is required under the provisions of the Construction General Permit, and the SWPPP must be prepared and implemented by qualified individuals as defined by the SWRCB.

To receive coverage under the Construction General Permit, the project proponent must submit a Notice of Intent and permit registration documents to the SWRCB and applicable RWQCB. Permit registration documents include completing a construction site risk assessment to determine appropriate coverage level; detailed site maps showing disturbance area, drainage area, and BMP types/locations; the SWPPP; and, where applicable, post-construction water balance calculations and active treatment systems design documentation.

Order WQ 2022-0057-DWQ supersedes Order 2009-0009-DWQ and becomes effective September 1, 2023.

3.9.2.3 Local

El Dorado County Grading, Erosion, and Sediment Control Ordinance

The County Grading, Erosion, and Sediment Control Ordinance (Grading Ordinance; Chapter 15.14 of the County Code) establishes provisions for public safety and environmental protection associated with grading activities on private property. The Grading Ordinance requires the intended land use be consistent with the El Dorado County General Plan, the adopted Stormwater Management Plan, California Fire Safe Standards, and applicable El Dorado County ordinances including the Zoning Ordinance and the California Building Code. The Grading Ordinance prohibits grading activities that would cause flooding where it would not otherwise occur or would aggravate existing flooding conditions and requires sites to implement erosion and sediment control measures throughout the construction of a project. The Grading Ordinance also requires all drainage facilities, aside from those in subdivisions that are regulated by the County's Subdivision Ordinance, be approved by the County Transportation Division. Pursuant to the ordinance, the design of the drainage facilities in the county must comply with the County of El Dorado Drainage Manual.

County of El Dorado Design and Improvement Standards Manual

The County's Design and Improvement Standards Manual was adopted in 1990 and revised through 2007. This Manual identifies required erosion and sediment control measures that are applicable to subdivisions, roadways, and other types of developments. The purpose of the Design and Improvement Standards Manual is to standardize development practices used in the hillside environment that is prevalent in El Dorado County and to minimize the environmental effects of construction.

Volume II of the manual includes drainage and design criteria for stormwater and Volume IV of the manual provides guidance on how to implement the erosion and sediment control standards in Chapter 15.14 of the El Dorado

County Code of Ordinances. Specifically, Volume III: Grading, Erosion and Sediment Control describes the criteria for determining whether an erosion and sediment control plan is required. When an erosion and sediment control plan is required, it must comply with the standards described in the Manual and with the adopted Western El Dorado County Stormwater Management Plan (County SWMP).

County of El Dorado Drainage Manual

The Drainage Manual, adopted in 1995 and revised in 2007, provides standard procedures for future designs of drainage improvements. The Drainage Manual supersedes the stormwater drainage system design standards in the County's Design Improvements Standards Manual. The Drainage Manual requires that a hydrologic and hydraulic analysis be submitted for all proposed drainage facilities. The analysis must include an introduction/background, location map/description, catchment description/delineation, hydrologic analysis, hydraulic and structural analysis, risk assessment/impacts discussion, unusual or special conditions, conclusions, and technical appendices. This analysis is usually required on projects undergoing discretionary review. However, under the Building Code and Grading Ordinance, the County also reviews ministerial development, including required drainage plans, to ensure that appropriate runoff design and controls are in place.

The final analysis would include an introduction/background, location map/description, catchment description/delineation, hydrologic analysis, hydraulic and structural analysis, risk assessment/impacts discussion, unusual or special conditions, conclusions, and technical appendices. The analysis would address the following topics.

A calculation of pre-development runoff conditions and post-development runoff scenarios using appropriate engineering methods. This analysis would evaluate potential changes to runoff through specific design criteria, and account for increased surface runoff. An assessment of existing drainage facilities within the project area, and an inventory of necessary upgrades, replacements, redesigns, and/or rehabilitation, including the sizing of onsite stormwater detention features and pump stations.

A description of the proposed maintenance program for the onsite drainage system. Standards for drainage systems to be installed on a project- or parcel-specific basis. Proposed design measures to ensure structures are not located within 100-year floodplain areas.

Drainage systems must be designed on a site-specific basis in accordance with the findings of the studies and County requirements. As a performance standard, measures to be implemented would provide for no net increase in peak stormwater discharge relative to current conditions to ensure that 100-year flooding and its potential impacts are maintained at or below current levels and that people and structures are not exposed to additional flood risk.

Stormwater Management Plan and Stormwater Quality Ordinance

The Western El Dorado County SWMP was adopted by the County in 2004 as a means of compliance with the then-applicable Small MS4 Permit. In May 2015, the County adopted a County-Wide Stormwater Ordinance (Ordinance No. 5022) to ensure compliance with the new Small MS4 permit requirements in the entire unincorporated County. Chapter 8.79 of the County Code contains the stormwater regulations, which establishes the County's authority to implement and enforce the SWMP and to ensure compliance with state and federal stormwater laws and regulations. It also sets forth requirements that development projects incorporate best management practices (BMPs) to control the volume, rate, and potential pollutant loading of stormwater runoff. As provided by Section 8.79.150.G, the required BMPs may be contained in any land use entitlement, conditions of approval, grading plans, improvement plans, or any

construction or building-related permit to be issued relative to such development. The requirements became effective in June 2015. The West Slope Development and Redevelopment Standards and Post Construction Stormwater Plan Requirements discussed below provide details of the applicability and requirements.

El Dorado County General Plan

The El Dorado County General Plan provides Countywide policies for regulating land use, development, and conservation in the County. Policies relevant to hydrology and water quality in the El Dorado County General Plan include:

Public Services and Utilities Element

Goal 5.4. Storm Drainage - Manage and control stormwater runoff to prevent flooding, protect soils from erosion, prevent contamination of surface waters, and minimize impacts to existing drainage infrastructure.

Objective 5.4.1. Drainage and Flood Management Program - Initiate a Countywide drainage and flood management program to prevent flooding, protect soils from erosion, and minimize impacts on existing drainage facilities.

Policy 5.4.1.1. Require storm drainage systems for discretionary development that protect public health and safety, preserve natural resources, prevent erosion of adjacent and downstream lands, prevent the increase in potential for flood hazard or damage on either adjacent, upstream or downstream properties, minimize impacts to existing facilities, meet the NPDES requirements, and preserve natural resources such as wetlands and riparian areas.

Policy 5.4.1.2. Discretionary development shall protect natural drainage patterns, minimize erosion, and ensure existing facilities are not adversely impacted while retaining the aesthetic qualities of the drainage way.

Conservation Element

Goal 7.1. Soil Conservation - Conserve and protect the County's soil resources.

Objective 7.1.2. Erosion/Sedimentation - Minimize soil erosion and sedimentation.

Policy 7.1.2.1. Development or disturbance of slopes over 30 percent shall be restricted. Standards for implementation of this policy, including but not limited to exceptions for access, reasonable use of the parcel, and agricultural uses shall be incorporated into the Zoning Ordinance.

Policy 7.1.2.2. Discretionary and ministerial projects that require earthwork and grading, including cut and fill for roads, shall be required to minimize erosion and sedimentation, conform to natural contours, maintain natural drainage patterns, minimize impervious surfaces, and maximize the retention of natural vegetation. Specific standards for minimizing erosion and sedimentation shall be incorporated into the Zoning Ordinance.

Policy 7.1.2.3. Enforce Grading Ordinance provisions for erosion control on all development projects and adopt provisions for ongoing, applicant-funded monitoring of project grading.

Goal 7.3. Water Quality and Quantity - Conserve, enhance, and manage water resources and protect their quality from degradation.

Objective 7.3.1. Water Resource Protection - Preserve and protect the supply and quality of the County's water resources including the protection of critical watersheds, riparian zones, and aquifers.

Policy 7.3.1.1. Encourage the use of BMPs, as identified by the Soil Conservation Service, in watershed lands as a means to prevent erosion, siltation, and flooding.

Policy 7.3.1.2. Establish water conservation programs that include both drought tolerant landscaping and efficient building design requirements as well as incentives for the conservation and wise use of water.

Objective 7.3.2. Water Quality - Maintenance of and, where possible, improvement of the quality of underground and surface water.

Policy 7.3.2.1. Stream and lake embankments shall be protected from erosion, and streams and lakes shall be protected from excessive turbidity, provided for horticultural and grazing activities on agriculturally zoned lands that utilize "best management practices (BMPs)" as recommended by the County Agricultural Commission and adopted by the Board of Supervisors. Until standards for buffers and special setbacks are established in the Zoning Ordinance, the County shall apply a minimum setback of 100 feet from all perennial streams, rivers, lakes, and 50 feet from intermittent streams and wetlands. These interim standards may be modified in a particular instance if more detailed information relating to slope, soil stability, vegetation, habitat, or other site- or project-specific conditions supplied as part of the review for a specific project demonstrates that a different setback is necessary or would be sufficient to protect the particular riparian area at issue. For projects where the County allows an exception to wetland and riparian buffers, development in or immediately adjacent to such features shall be planned so that impacts on the resources are minimized. If avoidance and minimization are not feasible, the County shall make findings, based on documentation provided by the project proponent, that avoidance and minimization are infeasible.

Policy 7.3.2.2. Projects requiring a grading permit shall have an erosion control program approved, where necessary.

Objective 7.3.3. Wetlands - Protection of natural and man-made wetlands, vernal pools, wet meadows, and riparian areas from impacts related to development for their importance to wildlife habitat, water purification, scenic values, and unique and sensitive plant life.

Policy 7.3.3.1. For projects that would result in the discharge of material to or that may affect the function and value of river, stream, lake, pond, or wetland features, the application shall include a delineation of all such features. For wetlands, the delineation shall be conducted using the U.S. Army Corps of Engineers' Wetland Delineation Manual.

Policy 7.3.3.4. The Zoning Ordinance shall be amended to provide buffers and special setbacks for the protection of riparian areas and wetlands. The County shall encourage the incorporation of protected areas into conservation easements or natural resource protection areas.

Policy 7.3.3.5. Rivers, streams, lakes and ponds, and wetlands shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site while disturbance to the resource is avoided or minimized and fragmentation is limited.

Objective 7.3.4. Drainage - Protection and utilization of natural drainage patterns.

Policy 7.3.4.1. Natural watercourses shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site without disturbance.

Policy 7.3.4.2. Modification of natural stream beds and flow shall be regulated to ensure that adequate mitigation measures are utilized.

3.9.3 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts associated with the proposed project related to hydrology and water quality. The section identifies the thresholds of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the proposed project's impacts and contribution to significant cumulative impacts, if any are identified. Mitigation measures are presented for identified significant or potentially significant impacts, and the level of significance with mitigation also is identified.

3.9.3.1 Thresholds of Significance

The thresholds of significance used to evaluate the impacts of the proposed project related to hydrology and water quality are based on Appendix G of the CEQA Guidelines. A significant impact would occur if the proposed project would:

A. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.
B. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
C. Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or through the addition of impervious surface, in a manner which would: (i) result in substantial erosion or siltation on or off site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows.
D. In flood hazards, tsunami, or seiche zones, risk release of pollutants due to project inundation.
E. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.9.3.2 Analytical Methods

The following analysis considers whether the proposed project would directly or indirectly cause hydrologic and water quality impacts, taking into account the existing conditions, the proposed project components, and the applicable regulatory requirements.

3.9.3.3 Project Impact Analysis

Impact HYD-1 The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

Adverse effects to water quality through exceedance of water quality standards, non-conformance with waste discharge requirements, or by other means can potentially result from the short-term effects of ground disturbances associated with construction activity (e.g., erosion and sedimentation due to land disturbances, uncontained material and equipment storage areas, and/or improper handling of hazardous materials) and the long-term effects of operation of the proposed facility improvements (e.g., alteration of drainage patterns, use/handling of hazardous materials, and/or increases in impervious surfaces).

Construction

Erosion and Construction-Related Pollutants. The proposed project would involve earthwork activities to prepare the site for the proposed construction. Excavated materials would be temporarily stockpiled in identified staging areas, and either reused onsite or hauled off site. The proposed project would include appropriate site restoration measures following completion of improvements, including stabilization of disturbed soils using erosion controls such as hydroseeding, hand-seeding, and/or restoration plantings, and maintaining pre-construction grading contours.

The primary potential pollutant of concern associated with construction activity is sediment (i.e., high turbidity) generated from site preparation, grading and excavation, and soil stockpile activities that expose soils to potential erosion from the effects of wind or rain. If not properly controlled, potential increases in sedimentation/siltation from construction activities on the site could adversely affect water quality of receiving surface waters. In addition to sediment, other pollutants associated with construction activity could include heavy metals, oil/grease, fuels, debris/trash from construction-related materials, and concrete curing compounds. Sediment can also be a carrier for these pollutants if they are released to soils.

The ground disturbing activities would include vegetation removal and soil disturbances in the proposed development areas, as well as excavation for infrastructure and foundation construction, trenching, and construction of associated utilities. If not managed appropriately, the excavated soils could be exposed to the effects of wind and water erosion. As part of the County's County Grading, Erosion, and Sediment Control Ordinance, consistent with the County's Design and Improvement Standards Manual, which is required as part of the development approval process, the contractor would be required to implement erosion control and water quality BMPs to avoid or substantially reduce the potential for pollutant contributions to Deadman's Creek, the closest water body to the project site. The measures address potential sediment transport, erosion and inadvertent release of petroleum products used for equipment.

Implementation of these measures would minimize the potential for indirect effects on water quality during construction caused by uncontrolled erosion and fugitive dust by installation of erosion BMPs (e.g., silt fences, fiber roles, covering stockpiles) and wind erosion controls (e.g., watering active construction areas, use of soil binders on exposed areas, covering haul trucks). Uncontrolled runoff and sedimentation in waterways would be minimized by providing runoff control devices along with the installation of erosion BMPs. Construction in or near streams would avoid the active channels. Unintended spills of hazardous materials or deposition of trash would be minimized by storing equipment at a distance from active channels, preventing equipment leaks, and implementing proper waste and trash management.

In addition, the construction contractors would be required to adhere to the NPDES Construction General Permit which mandates preparation and implementation of a SWPPP because the proposed project would disturb more than one acre of land. The SWPPP would include detailed BMPs to provide erosion control and hazardous materials measures for all construction activities. Coverage under the Construction General Permit requires a qualified individual (as defined by the SWRCB) to prepare the SWPPP that will address the potential for construction-related activities to contribute to pollutants to any receiving waterways. The SWPPP must describe the type, location, and function of stormwater BMPs to be implemented during construction and must demonstrate that the combination of BMPs selected is adequate to meet the discharge prohibitions, effluent standards, and receiving water limitations contained in the Construction General Permit.

Many of the construction water quality BMPs which are standard for most construction sites subject to the Construction General Permit, overlap with the County's requirements discussed above, but could include:

- Silt fences and/or fiber rolls installed along limits of work and/or the construction work area;
- Stockpile containment and exposed soil stabilization structures (e.g., Visqueen plastic sheeting, fiber rolls, gravel bags, and/or hydroseed);
- Runoff control devices (e.g., fiber rolls, gravel bag barriers/chevrons, etc.) used during construction phases conducted during the rainy season;
- Erosion control applications prior to rain events (e.g., hydroseed, straw mulch, blankets, etc.);
- Wind erosion (dust) controls, including use of a water truck;
- Prevention of fluid leaks (equipment inspections and use of drip pans) for construction vehicles;
- Dedicated refueling areas and dedicated storage of hazardous materials;
- Materials pollution management;
- Spill Response Control materials;
- Proper waste/trash management; and
- Regular inspections and maintenance of BMPs.

To obtain coverage under the Construction General Permit, the proposed project applicant would submit to the RWQCB a Notice of Intent and associated permit registration documents, including a SWPPP and site plan, and would obtain a Waste Discharge Identification Number. As part of the process, these BMPs would be refined and/or added to as necessary in the SWPPP to meet the performance standards in the Construction General Permit. In addition, the County developed a Storm Water Management Program (SWMP) to fulfill the requirements of the NPDES General Permit from Small Municipal Separate Storm Sewer Systems (MS4), which include requirements to reduce the amount of pollutants discharged during and after construction. The applicant's contractor would be required to use these BMPs for storm water discharge from construction work areas within the project site.

With implementation of the County's SWMP, the Construction General Permit, and applicable MS4 requirements pertaining to construction erosion control, hazardous materials management, and post-construction water quality requirements, the proposed project would have a less-than-significant impact related to water quality standards and waste discharge requirements and would not substantially degrade surface or groundwater quality due to erosion, release of construction-related pollutants, and urban pollutants from newly constructed impervious surfaces.

Operation and Maintenance

Construction of the proposed project would alter the existing drainage patterns through the construction of new impervious surfaces. New impervious surfaces would be created with construction of the basketball/tennis/sports courts, recreational/indoor gym, parking areas, and restrooms/concession facilities. Much of the site would remain pervious with the soccer and softball fields, play areas, and open turf. However, all proposed improvements would be subject to MS4 Permit requirements and require adherence to drainage control requirements. In general, this translates to the following: a) use of appropriate Low Impact Development (LID) Best Management Practices (BMPs) to reduce impacts to on- and off-site areas with drainage treatment control requirements for the collection and treatment of stormwater runoff.

The El Dorado County Code provides the requirements related to the management of stormwater control and discharge. The County Grading, Erosion, and Sediment Control Ordinance (Grading Ordinance) establishes provisions for public safety and environmental protection associated with grading activities on private property. The discharge of stormwater throughout the project site would be treated through onsite BMPs prior to its discharge offsite, in accordance with these County ordinance requirements and other regulations listed below. The Grading Ordinance also requires all drainage facilities, aside from those in subdivisions that are regulated by the County's Subdivision Ordinance, be approved by the County Department of Transportation. Pursuant to the ordinance, the design of the drainage facilities in the county must comply with the County of El Dorado Drainage Manual.

The County's Design and Improvement Standards Manual (DISM) identifies required erosion and sediment control measures that are applicable to subdivisions, roadways, and other types of developments. The purpose of the Design Manual is to standardize development practices used in the hillside environment that is prevalent in El Dorado County and to minimize the environmental effects of construction.

The Design Manual includes drainage and design criteria for stormwater and provides guidance on how to implement the erosion and sediment control standards in the El Dorado County Code of Ordinances. When an erosion and sediment control plan is required, it must comply with the adopted Stormwater Management Plan and Stormwater Quality Ordinance, and the West Slope Development and Redevelopment Standards and Post Construction Storm Water Plan Requirements.

The DISM provides standard procedures for future designs of drainage improvements. The Drainage Manual supersedes the stormwater drainage system design standards in the County's Design Improvements Standards Manual. The Drainage Manual requires that a hydrologic and hydraulic analysis be submitted for all proposed drainage facilities, including an introduction/background, location map/description, catchment description/delineation, hydrologic analysis, hydraulic and structural analysis, risk assessment/impacts discussion, unusual or special conditions, conclusions, and technical appendices.

Therefore, during operation, with implementation of the required LID and post-construction BMP features consistent with the County's drainage control requirements, the proposed project would have a less-than-significant impact with respect to water quality standards or waste discharge requirements and would not substantially degrade surface or groundwater quality.

Impacts to water quality would be **less than significant**.

Impact HYD-2 The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Water supply for the proposed project would be provided by the El Dorado Irrigation District (EID) which is the largest of five water purveyors in the County. Surface water is the primary water supply source for EID which is generally sourced from diversions of streams and reservoirs, treated at treatment plants, and then conveyed to water users through canals and pipelines in the County. In comparison to surface waters in the County, groundwater access is relatively limited due to the geologic conditions, and thus is not utilized by EID. The limited access of groundwater as well as the geology of the region makes it difficult to estimate the long-term reliability of groundwater with the same level of confidence as surface water (El Dorado County 2003). The Urban Water Management Plan for EID states that it is extremely unlikely that EID will ever utilize groundwater as a source of supply in the future as other water assets such as surface water has proved to be both sufficient and reliable (EID 2020).

The proposed project site would include new impervious surfaces along with keeping large areas of pervious areas in the sport fields and open space areas. Even though the new impervious surfaces could reduce areas of infiltration, the project would be required to meet the County's drainage control requirements as described above. These requirements include implementing LID features that encourage infiltration onsite that would minimize the amount of runoff that is discharged offsite. In addition, the project site is not located in an identified groundwater basin, and as a result is not required to be sustainably managed in accordance with the Sustainable Groundwater Management Act.

Therefore, considering the main source of water supply for the project being diverted surface water, the adherence to drainage control requirements, and the underlying hydrogeologic characteristics of the project site, the proposed project would have **less than significant** impacts related to groundwater supplies or interfering with groundwater recharge.

Impact HYD-3 The project would not substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river or through the addition of impervious surface, in a manner which would:

i) result in substantial erosion or siltation on or off site

As discussed above under Impact a), the proposed project would include construction of new improvements (e.g., sport courts, gym, restrooms/concessions) on the site that would alter existing drainage patterns, including drainage from the mobile home park north of the site. The highest potential for erosion or transport of silt would occur during construction, which as discussed above, would be addressed by implementation of the County's Grading Ordinance and the NPDES Construction General Permit requirements pertaining to construction erosion control BMPs that would be implemented during all phases of construction. Once construction is complete, disturbed areas would be restored and either covered in impervious surfaces with drainage control features to manage stormwater runoff, consistent with the County's DISM, or landscaped/vegetated which would reduce the erosion potential. The improvements that introduce new impervious surfaces would be required to include drainage control features consistent with County requirements that are designed to minimize the potential for erosion or siltation. Post-project, the west side of the site would three drainage sheds flowing to Deadman's Creek. The project will construct a piped drainage system that will convey the drainage to Deadman Creek from the new improvements. The drainage will enter Deadman Creek in similar locations to existing conditions. The outlet pipe will have rock rip rap at the outlets to dissipate the flows entering the creek. Detention will be provided onsite to ensure proposed 10 year flows do not exceed existing 10 year flows. Water quality features and/or devices will be provided to treat

storm water runoff from hard scape surfaces. The overland release path for approximately 5 acres of shed area east of the proposed soccer fields, at the northeast portion of the project, will be impeded. To mitigate this impediment, an oversized storm drain will be provided from the base of the slope at the east end of the soccer field to Deadman Creek Implementation of the proposed project would not, as a result, create a substantive potential for erosion and the project would have a **less-than-significant** impact with respect to alteration of drainage patterns.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site

Implementation of the proposed project would alter existing drainage patterns through the introduction of new impervious surfaces. As mentioned above, the project design would be consistent with the County's Drainage Manual which requires that all proposed drainage facilities are designed based on site specific hydrologic and hydraulic analysis. The analysis would provide the calculation of pre-development runoff conditions and post-development runoff scenarios using appropriate engineering methods. The sizing of onsite stormwater detention, retention or infiltration features would be sufficient to for the calculated flows from the site improvements. As a performance standard, drainage control measures to be implemented would provide for no net increase in peak stormwater discharge relative to current conditions to ensure that 100-year flooding and its potential impacts are maintained at or below current levels and that people and structures are not exposed to additional flood risk.

As discussed above, the project design and local regulations including the County SWMP and Design Manual standards, implemented to comply with the MS4 permit would require the implementation of LID measures to control stormwater runoff and ensure that no increases in offsite discharge would occur. With compliance with existing regulations, impacts associated with flooding during operations would be **less than significant**.

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff

The project site does not have an existing stormwater drainage system. As discussed above proposed improvements would be required to meet drainage control requirements set by the County which would result in no net increase in peak stormwater discharges. Therefore, considering that there are no existing onsite drainage systems and the proposed project would include drainage control features consistent with County requirements, there would be no exceedance of existing or planned capacities of drainage systems. The proposed project would not include any other source of polluted runoff that is not already discussed in Impact a), above. As a result, the impact to existing or planned stormwater drainage systems would be **less than significant**.

iv) impede or redirect flood flows

No Impact. According to flood hazard mapping compiled by FEMA, the project site is located in Zone X, which is an area of minimal flood hazard and not within a 100-year flood zone (FEMA, 2008). As discussed above, surface runoff at the site would be managed by the proposed stormwater drainage system to prevent flooding. In addition, the proposed project does not include substantive above ground structures and much of the site would consist of open space, sports fields, or sports courts. Therefore, relative to impeding or redirecting flood flows, the impact would be **less than significant**.

Impact HYD-4 The project would not risk release of pollutants due to project inundation associated with flood hazards, tsunami, or seiche zones.

The proposed project site is not within a Special Flood Hazard Area (100-year flood zone) (FEMA 2008). However, the site is immediately downstream of the Patterson Lake earthen dam and that could create flood hazards associated with inundation due to dam failure. The project site is located downstream of Patterson Lake which is a humanmade reservoir constructed by an earthen dam (DSOD 2022). The dam is under the jurisdiction of the DSOD and although considered in satisfactory condition, the downstream hazard is considered high (DSOD 2022). However, catastrophic failure of the dam has a relatively low likelihood of occurring due to routine inspections and maintenance requirements that are required by DSOD. In addition, the proposed project would not include the storage of substantive quantities of hazardous materials or other sources of potential pollutant release.

The project site is located far inland and outside of any tsunami hazard zones. Seiche waves, a hazard specific to enclosed or semi-enclosed bodies of water, such as Patterson Lake, however, seiche wave hazards are really highest for the immediate vicinity of an enclosed water body and the project site is located sufficiently far enough away such that the hazard is unlikely to adversely affect proposed improvements. Therefore, considering the site and project characteristics, the potential for release of pollutants due to project inundation associated with floods, tsunami or seiche waves is considered **less than significant**.

Impact HYD-5 The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Water Quality Control Plan

The Basin Plan for the Central Valley (RWQCB 2019) contains numerical objectives for surface waters and designated groundwater basins, such as bacteria, mineral quality, nitrogen, pesticides and various toxic chemical compounds, and contains qualitative objectives for taste and odor. Beneficial uses of surface water and groundwater are also included.

The proposed project would include drainage control features that are consistent with the County's requirements for the protection of water quality is offsite discharges. The LID water quality features, in combination with BMP requirements, would be protective of water quality that is consistent with Basin Plan policies and water quality objectives. Therefore, potential pollutants in stormwater runoff during construction and operation would not conflict with or obstruct implementation of a water quality control plan. Impacts would be **less than significant**, and no mitigation is required.

Groundwater Management Plan

Passage of SGMA in 2014 requires governments and water agencies overseeing groundwater basins and subbasins that DWR have classified as medium- or high-priority basins to prepare and implement a GSP that provides a pathway to sustainability. As discussed above, the project site is not located within a designated groundwater basin and there is no applicable sustainable groundwater management plan. Therefore, there would be no conflict with or obstruction to implementation of a groundwater management plan and the impact would be **less than significant**.

Cumulative Impacts Analysis

This section provides an evaluation of cumulative hydrology and water quality impacts associated with the proposed project and past, present, and reasonably foreseeable future projects, as identified in Section 3.0, Introduction to Analysis, and as relevant to this topic. The geographic area considered in the cumulative analysis for geology and soils is the Upper Cosumnes Watershed.

The proposed project would not contribute to cumulative impacts related to impeding or redirecting flood flows from changes to drainage patterns (Significance Standard c-iv) because it would have no impact related to this criterion as described above. Therefore, this cumulative significance standards is not further evaluated.

The proposed project, in combination with past, present, and reasonably foreseeable future development, would not result in a significant cumulative impact related to hydrology and water quality.

Each of these cumulative projects would be subject to County approval; such projects that require discretionary approval are assumed to be constructed and designed in accordance with regulatory requirements for drainage control. Furthermore, potential cumulative impacts on geological, seismic, and soil conditions would be reduced on a site-by-site basis by modern construction methods and compliance with California Building Code regulatory requirements that ensure building safety. Additionally, cumulative projects would be required to prepare and submit a final design-level site-specific geotechnical report for review and approval prior to the issuance of grading or building permits. As described in the analysis above, the proposed project would not result in construction (including grading/excavation) or design features which could directly or indirectly contribute to an increase in a cumulative geological hazard. The proposed project would not cumulatively alter geological conditions or features.

Therefore, the proposed project, in combination with the past, present, and reasonably foreseeable future projects in the project vicinity, would result in less than significant cumulative impacts related to geological hazards, and no further mitigation measures are required.

3.9.3.4 Mitigation Measures

No mitigation measures are required.

3.9.4 References

California Division of Safety of Dams (DSOD), 2022. Dams within Jurisdiction of the State of California, September 2022.

California Regional Water Quality Control Board, Central Valley Region (CVRWQCB), 2019. The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region, Fifth Edition, Revised February 2019.

State Water Resources Control Board, Central Valley Region (SWRCB), 2022. Final California 2020-2022 Integrated Report (303(d) List/305(b) Report). *https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html*.

El Dorado County, 2003. General Plan Draft EIR, May 2003.

FEMA (Federal Emergency Management Agency). 2008. "FEMA Flood Map Service Center: Search By Address." Flood Map Panel 06017C0775E, effective September 26, 2008.

3.10 Noise

3.10.1 Introduction

This section describes the existing ambient noise environment including relevant acoustic fundamentals, ambient noise conditions, summary of regulations applicable to construction and operational noise potentially associated with the Diamond Springs community park ("proposed project") and identifies noise-sensitive land uses proximate to the project site. An analysis of potential effects associated with development of the proposed project is provided including any required mitigation measures. Descriptions and analyses presented within this section are based on field surveys and noise modeling performed by Dudek.

The proposed project would construct and operate an approximate 40-acre community park with accessory facilities. The project site is located on two parcels, each of which would contain proposed development. The northern parcel (9.7-acres) is connected to Oak Dell Road and would include two soccer fields, a parking area, and a retaining wall. The southern parcel is much larger (29.8-acres), and would include play areas, tennis courts (which may be striped to allow pickleball), an indoor gym, picnic areas, softball and baseball fields, a basketball court, a sand volleyball court, pedestrian access paths, restrooms, and a parking area. The project will also have an backup generator for emergency power.

Comments received in response to the Notice of Preparation (NOP) from the public included concerns regarding general noise level increases at noise-sensitive land uses near the soccer fields and softball fields, and increased traffic noise associated with the project drive, and surface parking. A copy of the Notice of Preparation and comments received is included in Appendix A. The noise modeling assumptions and outputs are included in this EIR as Appendix G.

The primary sources referenced during preparation of this section include the Project Description, preliminary site diagrams, observations and sound pressure level measurement data collected during a project field survey, information and assumptions used for the Air Quality analysis (Appendix B), traffic counts and trip generation developed during the Transportation Impact Assessment memo/report (Appendix H). This information was used as inputs for assessment of project-related noise and vibration, using the methodologies discussed later in this section, along with additional guidance issues from the California Department of Transportation, the Federal Transit Administration, and the Federal Highway Administration.

3.10.2 Environmental Setting

This section provides background information and terminology relevant to the noise assessment and describes the existing ambient noise environment that characterizes the project area and immediately adjacent properties.

Acoustic Fundamentals

Acoustics is the scientific study that evaluates perception, propagation, absorption, and reflection of sound waves. Sound is a mechanical form of radiant energy, transmitted by a pressure wave through a solid, liquid, or gaseous medium. Sound that is loud, disagreeable, unexpected, or unwanted is generally defined as noise; consequently, the perception of sound is subjective in nature, and can vary substantially from person to person. Common sources of environmental noise and relative noise levels are shown in Table 3.10-1.

A sound wave is initiated in a medium by a vibrating object (e.g., vocal cords, the string of a guitar, the diaphragm of a radio speaker). The wave consists of minute variations in pressure, oscillating above and below the ambient atmospheric pressure. The number of pressure variation cycles occurring per second is referred to as the frequency of the sound wave and is expressed in hertz (Hz), which is equivalent to one complete cycle per second.

Directly measuring sound pressure fluctuations would require the use of a very large and cumbersome range of numbers. To avoid this and have a more useable numbering system, the decibel (dB) scale was introduced. Sound level expressed in decibels (dB) is the logarithmic ratio of two like pressure quantities, with one pressure quantity being a reference sound pressure and the second pressure being that of the sound source of concern. For sound pressure in air, the standard reference quantity is generally considered to be 20 micropascals, which directly corresponds to the threshold of human hearing. The use of the decibel is a convenient way to handle the million-fold range of sound pressures to which the human ear is sensitive. A decibel is logarithmic; it does not follow normal algebraic methods and cannot be directly added. For example, a 65 dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). A sound level increase of 10 dB corresponds to 10 times the acoustical energy, and an increase of 20 dB equates to a 100-fold increase in acoustical energy.

The loudness of sound perceived by the human ear depends primarily on the overall sound pressure level and frequency content of the sound source. The human ear is not equally sensitive to loudness at all frequencies in the audible spectrum. To better relate overall sound levels and loudness to human perception, frequency-dependent weighting networks were developed. The standard weighting networks are identified as A through E. There is a strong correlation between the way humans perceive sound and A-weighted sound levels (dBA). For this reason, the dBA can be used to predict community response to noise from the environment, including noise from transportation and stationary sources. Sound levels expressed as dB in this section are A-weighted sound levels, unless noted otherwise.

Table 3.10-1. Typical Noise Levels Associated with Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
—	110	Rock Band
Jet Flyover at 1,000 feet	—	—
—	100	—
Gas Lawn Mower at three feet	—	—
—	90	—
Diesel Truck at 50 feet, 50 mph	—	Food Blender at 3 feet
—	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		—
—	70	Vacuum Cleaner at 10 feet
Commercial Area	—	Normal speech at 3 feet
Heavy Traffic at 300 feet	60	—
—	—	Large Business Office
Quiet Urban Daytime	50	Dishwasher (in next room)
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime	—	—
—	30	Library

Table 3.10-1. Typical Noise Levels Associated with Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Quiet Rural Nighttime	—	Bedroom at Night, Concert Hall (background)
—	20	—
—	—	Broadcast/Recording Studio
—	10	—
Lowest Threshold of Human Hearing (Healthy)	0	Lowest Threshold of Human Hearing (Healthy)

Source: Caltrans 2013.

Noise can be generated by a number of sources, including mobile sources (transportation) such as automobiles, trucks, and airplanes and stationary sources (non-transportation) such as construction sites, machinery, and commercial and industrial operations. As acoustic energy spreads through the atmosphere from the source to the receiver, noise levels attenuate (decrease) depending on ground absorption characteristics, atmospheric conditions, and the presence of physical barriers (e.g., walls, building façades, berms). Noise generated from mobile sources generally attenuate at a rate of 3dBA (typical for hard surfaces, such as asphalt) to 4.5 dBA (typical for soft surfaces, such as grasslands) per doubling of distance, depending on the intervening ground type. Stationary noise sources spread with more spherical dispersion patterns that attenuate at a rate of 6 to 7.5 dBA per doubling of distance for hard and soft sites, respectively.

Atmospheric conditions such as wind speed, turbulence, temperature gradients, and humidity may additionally alter the propagation of noise and affect levels at a receiver. Furthermore, the presence of a large object (e.g., barrier, topographic features, and intervening building façades) between the source and the receptor can provide significant attenuation of noise levels at the receiver. The amount of noise level reduction or "shielding" provided by a barrier primarily depends on the size of the barrier, the location of the barrier in relation to the source and receivers, and the frequency spectra of the noise. Natural barriers such as earthen berms, hills, or dense woods as well as man-made features such as buildings, concrete berms and walls may be effective barriers for the reduction of source noise levels.

Noise Descriptors

The intensity of environmental noise levels can fluctuate greatly over time and as such, several different descriptors of time-averaged noise levels may be used to provide the most effective means of expressing the noise levels. The selection of a proper noise descriptor for a specific source depends on the spatial and temporal distribution, duration, and fluctuation of both the noise source and the environment near the receptor(s). Noise descriptors most often used to describe environmental noise are defined below.

L_{max} (Maximum Noise Level): The maximum instantaneous noise level during a specific period of time.

L_{min} (Minimum Noise Level): The minimum instantaneous noise level during a specific period of time.

L_x (Statistical Descriptor): The noise level exceeded *"X"* percent of a specific period of time. For example, L_{50} is the median noise level, or level exceeded 50% of the time.

L_{eq} (Equivalent Noise Level): The average noise level. The instantaneous noise levels during a specific period of time in dBA are converted to relative energy values. From the sum of the relative energy values, an average energy value is calculated, which is then converted back to dBA to determine the L_{eq}. In noise environments determined by major noise events, such as aircraft over-flights, the L_{eq} value is heavily influenced by the magnitude and number of single events that produce the high noise levels.

L_{dn} (Day-Night Average Noise Level): The 24-hour L_{eq} with a 10-dBA "penalty" for noise events that occur during the noise-sensitive hours between 10 p.m. and 7 a.m. In other words, 10 dBA is "added" to noise events that occur in the nighttime hours, and this generates a higher reported noise level when determining compliance with noise standards. The L_{dn} attempts to account for the fact that noise during this specific period of time is a potential source of disturbance with respect to normal sleeping hours.

CNEL (Community Noise Equivalent Level): The CNEL is similar to the L_{dn} described above, but with an additional 5-dBA "penalty" added to noise events that occur during the noise-sensitive hours between 7 p.m. and 10 p.m., which are typically reserved for relaxation, conversation, reading and television. When the same 24-hour noise data are used, the reported CNEL is typically approximately 0.5 dBA higher than the L_{dn}.

SEL (Sound Exposure Level): The cumulative exposure to sound energy over a stated period of time; typically, the energy of an event, summed into a 1-second period of time.

Community noise is commonly described in terms of the ambient noise level which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent sound level (L_{eq}), which corresponds to the steady-state A-weighted sound level containing the same total energy as the time-varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptors such as L_{dn} and CNEL, as defined above, and shows very good correlation with community response to noise. Use of these descriptors along with the maximum noise level occurring during a given time period provides a great deal of information about the ambient noise environment in an area.

Negative Effects of Noise on Humans

Excessive and chronic exposure to elevated noise levels can result in auditory and non-auditory effects on humans. Auditory effects of noise on people are those related to temporary or permanent hearing loss caused by loud noises. Non-auditory effects of exposure to elevated noise levels are those related to behavioral and physiological effects. The non-auditory behavioral effects of noise on humans are associated primarily with the subjective effects of annoyance, nuisance, and dissatisfaction that lead to interference with activities such as communications, sleep, and learning. The non-auditory physiological health effects of noise on humans have been the subject of considerable research attempting to discover correlations between exposure to elevated noise levels and health problems, such as hypertension and cardiovascular disease. The majority of research infers that noise-related health issues are predominantly the result of behavioral stressors and not a direct noise-induced response. The extent to which noise contributes to non-auditory health effects remains a subject of considerable research, with no definitive conclusions.

The degree to which noise results in annoyance and interference is highly subjective and may be influenced by several non-acoustic factors. The number and effect of these non-acoustic environmental and physical factors vary depending on individual receptor and characteristics of the noise environment such as sensitivity, level of activity, location, time of day, and length of exposure. One key aspect in the prediction of human response to new noise

environments is the individual level of adaptation to an existing noise environment. The greater the change in the noise levels that are attributed to a new noise source, relative to the environment an individual has become accustomed to, the less tolerable the new noise source will be to an individual.

Depending on whether a noise source is more sporadic/intermittent (e.g., aircraft overflights, train pass-by, etc.) or more continuous (e.g., busy vehicle traffic), the potential for noise sources to result in negative effects of noise on sleep may be accounted for through the use of average noise level descriptors (L_{eq}, L_{dn} and CNEL), or through energy-based exposure measures like the single event sound exposure level (SEL) or maximum noise level (Lmax). More consistently occurring sound sources can account for the potential for evening and nighttime noise levels through the application of penalties for noise occurring during the evening and nighttime periods (~5 dB penalty from 7:00 p.m. to 10:00 p.m. [CNEL], and a 10 dB penalty from 10:00 p.m. to 7:00 a.m. [L_{dn} and CNEL]). Historically, research into the correlation between L_{dn} /CNEL exposure levels has been adopted by the Federal Interagency Committee on Aviation Noise (FICAN/FICON); with more recent research looking to evaluate the correlation between annoyance and the potential for awakening with both average (L_{dn} /CNEL) and single event noise levels (SEL, SENEL, Lmax).

With respect to how humans perceive and react to changes in noise levels, a 1 dBA increase is generally imperceptible outside of a laboratory environment, a 3 dBA increase is barely perceptible, a 6 dBA increase is clearly noticeable, and a 10-dBA increase is subjectively perceived as approximately twice as loud (Egan 1988). These subjective reactions to changes in noise levels was developed on the basis of test subjects' reactions to changes in the levels of steady-state, pure tones or broad-band noise and to changes in levels of a given noise source. Perception and reaction to changes in noise levels in this manner is thought to be most applicable in the range of 50 to 70 dBA, as this is the usual range of voice and interior noise levels.

Vibration Fundamentals

Vibration is similar to noise in that it is a pressure wave traveling through an elastic medium involving a periodic oscillation relative to a reference point. Vibration is most commonly described in respect to the excitation of a structure or surface, such as in buildings or the ground. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Sources of vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, (e.g., operating factory machinery) or transient in nature (e.g., explosions, impacts). Vibration levels can be depicted in terms of amplitude and frequency; relative to displacement, velocity, or acceleration.

Vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal, or the quantity of displacement measured from peak to trough of the vibration wave. RMS is defined as the positive and negative statistical measure of the magnitude of a varying quantity. The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a period of one second. PPV is typically used in the monitoring of transient and impact vibration and has been found to correlate well to the stresses experienced by buildings (FTA 2018). PPV and RMS vibration velocity are nominally described in terms of inches per second (in/sec). However, as with airborne sound, vibration velocity can also be expressed using decibel notation as vibration decibels (VdB). The logarithmic nature of the decibel serves to compress the broad range of numbers required to describe vibration and allow for the presentation of vibration levels in familiar terms.

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. Human response to vibration has been found to correlate well to average vibration amplitude; therefore, vibration impacts on humans are evaluated in terms of RMS vibration velocity.

Typical outdoor sources of perceptible ground borne vibration comes from vehicles on the nearby highway and local street. Although the effects of vibration may be imperceptible at low levels, effects may result in detectable vibrations and slight damage to nearby structures at moderate and high levels, respectively. At the elevated levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely results in damage to structural components. The range of vibration relevant to this analysis occurs from approximately 60 VdB, which is the typical background vibration-velocity level; to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings (FTA 2018). Table 3.10-2 identifies some common sources of vibration, corresponding VdB levels, and associated human perception and potential for structural damage.

Table 3.10-2. Typical Levels of Ground-borne Vibration

Human/Structural Response	Velocity Level, VdB (re 1µinch/sec, RMS)	Typical Events (50-foot setback)
Threshold, minor cosmetic damage	100	Blasting, pile driving, vibratory compaction equipment
—	95	Heavy tracked vehicles (Bulldozers, cranes, drill rigs)
Difficulty with tasks such as reading a video or computer screen	90	Commuter rail, upper range
Residential annoyance, infrequent events	80	Rapid transit, upper range
Residential annoyance, occasional events	75	Commuter rail, typical bus or truck over bump or on rough roads
Residential annoyance, frequent events	72	Rapid transit, typical
Approximate human threshold of perception to vibration	65	Buses, trucks, and heavy street traffic
—	60	Background vibration in residential settings in the absence of activity
Lower limit for equipment ultra-sensitive to vibration	50	—

Source: FTA 2018.

Existing Noise Environment

The proposed project site is location in within the community of Diamond Springs (a.k.a., census designated place, CDP Diamond Springs), which is located in the southwestern portion of El Dorado County (County). The project site is generally bounded by the Lake Oaks Senior Mobile Home Park to the north, Pacific Crest Academy and Union Mines High School to the south and southwest respectively. The former Charles F. Brown Elementary School is adjacent to the project site, with the proposed project wrapping the former elementary school on the project boundary to the north, east and south.

Aside from the potential impact at the noise-sensitive land uses, adjacent to the proposed community park development, the area is generally surrounded by medium to low-density single resident housing.

There are a number of existing noise sources influencing the ambient noise environment. The most dominant noise source is transportation noise; primarily generated from vehicular traffic on the local roadway network. Additional noise sources experienced in the area include emergency service vehicles associated with the emergency vehicles accessing the campus, County Sheriff and fire departments.

The existing ambient noise environment was quantified through field surveys, sound level measurements and through the application of accepted reference data and noise prediction methodologies. Separate discussions of identified major noise sources and their respective effects are provided in the following subsections.

Existing Noise-Sensitive Land Uses

Noise-sensitive land uses generally include those uses where exposure to noise would result in adverse effects, as well as uses where quiet is an essential element of the intended purpose. The El Dorado County General Plan identifies residential, schools, health care facilities, libraries, and churches as existing land uses that are potentially noise sensitive. Residential dwellings and other facilities where people are sleeping are a primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels.

Existing noise-sensitive land uses nearest the project area include the former site of the Charles F. Brown Elementary School, which is now used for hybrid online/in-person educational programs, which is surrounded on the north, east and south by the proposed project. Other noise-sensitive land uses adjoining the boundaries of the proposed project include the Lake Oaks Mobile Home Community (LOMHC) to the north, and the Pacific Crest Academy and Union Mine High School to the southwest of the proposed project. Additional noise-sensitive land uses in the vicinity of the project site include single-family residences, generally located west of Farnsworth Lane (aka, Snoopy Road). The Snowline Hospice Medical Center could also be considered noise-sensitive, as a medical facility. Rooms for admitted patients within the Medical Center would be considered noise sensitive, during the daytime hours when the facility is occupied for medical treatment. Existing land uses in the project vicinity are further outlined within Section 2.2 in Chapter 2, Project Description.

Existing Ambient Noise Survey

Sound level measurements were conducted on May 8, 2023 to May 9, 2022, to document the existing noise environment adjacent to the project area to establish baseline noise conditions against which to compare proposed project noise levels. All noise measurements were performed in accordance with relevant American National Standards Institute (ANSI) and American Standards for Testing and Measurement (ASTM) guidelines, at three locations in proposed project area.

Noise measurements were performed using Larson Davis Laboratories Model 831, Type 1 precision integrating sound level meters (SLMs). Field calibrations were performed on the SLMs with an acoustic calibrator before and after the measurements. All instrumentation components, including microphones, preamplifiers and field calibrators have laboratory certified calibrations traceable to the National Institute of Standards and Technology (NIST). The equipment used meets all pertinent specifications of the ANSI for Type 1 SLMs (ANSI S1.4-1983 [R2006]). Meteorological conditions during the monitoring periods were consistent with seasonal expectations and appropriate for collection of usable noise level data.

Long-term noise monitoring (24-hour) was performed at two locations in the project area, with instruments configured to operate in a continuous manner, cataloging all noise metrics pertinent to identification and evaluation of noise levels (i.e., L_{eq}, Lmax, Lx, etc.) in the project vicinity. Ambient noise levels recorded at the long-term noise monitoring locations are presented in Table 3.10-3 and shown in Figure 3.10-1. More detailed information from these unattended long-term monitoring stations can be found in Appendix G.

Table 3.10-3. Summary of Long-Term Ambient Noise Measurements

Site	Location	L_{dn}	Average Noise Levels (dBA)							
			Daytime				Nighttime			
			L_{eq}	Lmax	L50	L90	L_{eq}	Lmax	L50	L90
LT-1	Northern portion of project site, adjacent to Lake Oaks Mobile Home Community (LOMHC)	45.3	42.2	56.7	38.4	36.0	37.9	50.3	33.5	32.3
		45.5	41.0	57.3	37.5	35.4	38.7	50.1	34.4	33.1
LT-2	Southwestern corner of elementary school	51.8	49.4	66.0	43.5	40.3	44.1	55.7	35.3	33.4
		57.9	59.3	71.5	46.5	42.6	43.5	55.8	36.9	34.7

Source: Dudek 2023, Appendix G.
Notes: dBA = A-weighted decibels; L_{dn} = Day Night noise level; L_{eq} = average equivalent noise level; Lmax = maximum noise level; L50 = sound level exceeded 50% of the period; L90 = sound level exceeded 90% of the period.

The primary noise source affecting the long-term noise monitoring locations was vehicular traffic on the local roadway network albeit, separated by a substantial distance. Additional noise sources experienced during noise-monitoring included emergency vehicles, pedestrians, general landscaping activities, aircraft overflights and a barking dog. Ambient noise level exposure at the long-term monitoring location was found to be dependent primarily on the relative distance from nearby roadways. During the long-term noise monitoring, average day-night (L_{dn}) noise levels ranged from approximately 45 to 58 dBA L_{dn} /CNEL.

Short-term noise monitoring was conducted at three locations, with summarized results presented in Table 3.10-4, to further quantify and characterize noise levels generated by the existing ambient noise environment, as shown on Figure 3.10-1, and those of the proposed operations. Site ST-1 was located approximately 25 feet east of the existing SR-49 and serves as an opportunity to calibrate the traffic noise prediction model (for further refinement of the traffic noise level associated with the project), along with further insight into the traffic patterns in the immediate vicinity of the project area. Site ST-2 represents the traffic noise level exposure at the residential land use located at the north-west corner of the intersection of Oak Dell Road and Farnsworth Lane. Site ST-3 represents the noise level exposure at the former Charles F. Brown Elementary School site, adjacent to the project site.

Table 3.10-4. Summary of Short-Term Ambient Noise Measurements

Site	Location	Date/Time	Average Noise Levels (dBA)			
			L_{eq}	Lmax	L50	L90
ST-1	Adjacent to SR-49, approximately 25-feet from roadway centerline.	5/10/23 1:18 PM	73.4	89.6	68.1	53.1
ST-2	Approximately 50-feet northeast of Oak Dell Rd., north of the elementary school.	5/10/23 1:39 PM	50.6	63.3	49.1	46.3
ST-3	Approximately 150-feet east of the elementary school turn-about.	5/10/23 1:50 PM	35.0	43.7	33.5	30.6

Source: Dudek 2023, Appendix G.
Notes: dBA = A-weighted decibels; L_{dn} = Day Night noise level; L_{eq} = average equivalent noise level; Lmax = maximum noise level; L50 = sound level exceeded 50 percent of the period; L90 = sound level exceeded 90% of the period.
1 The short-term measurement at ST-1 was performed to catalog noise levels adjacent to SR-49, for information on traffic noise levels at a known distance and for calibration of the traffic noise model.
2 Short-term measurements at ST-2 and ST-3 were performed to provide additional insight into the existing noise environment.
3 All measurement were performed for a duration of 15-minutes.

Existing Vibration

The existing vibration environment, similar to that of the noise environment, is dominated by transportation-related vibration from roadways adjacent to the proposed project area. Heavy truck traffic can generate groundborne vibration, which varies considerably depending on vehicle type, weight, and pavement conditions. However, groundborne vibration levels generated from vehicular traffic are not typically perceptible outside of the roadway right-of-way.

3.10.3 Regulatory Setting

Various private and public agencies have established noise guidelines and standards to protect the public from potential hearing damage and other adverse physiological and sociological effects associated with noise. Applicable standards and guidelines are described below.

Federal Regulations

Federal Noise Control Act of 1972

The U.S. Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. After its inception, the EPA's Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, establishing programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at more local levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to state and local governments. However, noise control guidelines and regulations contained in the EPA rulings in prior years are still adhered to by designated federal agencies where relevant. No federal noise regulations are applicable to the proposed project.

Federal Transit Administration

The FTA Transit Noise and Vibration Impact Assessment guidance manual recommends a daytime construction noise level threshold of 80 dBA L_{eq} over an 8-hour period (FTA 2018) when "detailed" construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project. Although this FTA guidance is not a regulation, it can serve as a quantified standard in the absence of such limits at the state and local jurisdictional levels.

State Regulations

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation.

California Code of Regulations, Title 24

Title 24, also known as the California Building Standards Code, establishes building standards applicable to all occupancies throughout the state. The current 2022 code provides acoustical regulations for both exterior-to-interior sound insulation as well as sound and impact isolation between adjacent spaces of various occupied units. Title 24 regulations state that interior noise levels generated by exterior noise sources shall not exceed 45 dBA L_{dn},

with windows closed, in any habitable room for general residential uses. These regulations are applicable to the proposed project.

Governor's Office of Planning and Research

The Governor's Office of Planning and Research published the State of California General Plan Guidelines (OPR 2003), which provides the most recent guidance for the acceptability of projects within specific day-night average noise level (L_{dn}) contours. Table summarizes acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to help craft noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

Generally, residential uses (e.g., single-family homes, mobile homes, etc.) are considered to be acceptable in areas where exterior noise levels do not exceed 60 dBA L_{dn}. Residential uses are normally unacceptable in areas exceeding 70 dBA L_{dn} and conditionally acceptable within 55 to 70 dBA L_{dn}. Schools are normally acceptable in areas up to 70 dBA L_{dn} and normally unacceptable in areas exceeding 70 dBA L_{dn}. Commercial uses are normally acceptable in areas up to 70 dBA L_{dn}. Between 67.5 and 77.5 dBA L_{dn}, commercial uses are conditionally acceptable, depending on the noise insulation features and the noise reduction requirements.

Table 3.10-5. Summary of Land-Use Noise Compatibility Guidelines

Land Use Category	Community Noise Exposure (dBA L_{dn})			
	Normally Acceptable[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Residential—Low-Density Single-Family, Duplex, Mobile Home	<60	55–70	70–75	75+
Residential—Multifamily	<65	60–70	70–75	75+
Transient Lodging—Motel, Hotel	<65	60–70	70–80	80+
Schools, Libraries, Churches, Hospitals, Nursing Homes	<70	60–70	70–80	80+
Auditoriums, Concert Halls, Amphitheaters	—	<70	65+	—
Sports Arena, Outdoor Spectator Sports	—	<75	70+	—
Playgrounds, Neighborhood Parks	<70	—	67.5–75	72.5+
Golf Courses, Riding Stables, Water Recreation, Cemeteries	<75	—	70–80	80+
Office Building, Business Commercial, and Professional	<70	67.5–77.5	75+	—
Industrial, Manufacturing, Utilities, Agriculture	<75	70–80	75+	—

Source: OPR 2017.
Notes: dBA = A-weighted decibels; L_{dn} = day-night average noise level
1 Specified land use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
2 New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

[3] New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor areas must be shielded.
[4] New construction or development should generally not be undertaken.

California Department of Transportation – Vibration

There are no state standards or regulations for vibration; however, the California Department of Transportation (Caltrans) has developed a compendium of research to use as the basis for recommendations that can serve as a quantified standard in the absence of such limits at the local jurisdictional level. In the Transportation and Construction Vibration Guidance Manual, Caltrans recommends a vibration velocity threshold of 0.2 in/sec PPV for assessing "annoying" vibration impacts to occupants of residential structures. For the protection from structural damage Caltrans recommends a threshold of 0.3 in/sec PPV for older residential structures and 0.25 in/sec PPV for historic building and some old buildings (Caltrans 2020).

Local Regulations

The El Dorado County Code of Ordinances includes Chapter 9.16, Noise. While making it "unlawful for any person to produce or emit any loud or raucous noise" (El Dorado County 2016), the County Code addresses un-muffled engines, saying that it is "unlawful for any person to operate an internal combustion engine in the unincorporated territory of the County that is not equipped with a muffler designed for use with the engine, which is in good operating condition and is not equipped with a cutout, bypass or similar device" (El Dorado County 2016).

The Public Health, Safety, and Noise Element of the El Dorado County General Plan includes objectives, goals, and policies related to acceptable noise levels (El Dorado County 2015). These Noise Element policies and guidance are also implemented as Performance Standards in Chapter 130.37 (Noise Standards) of the County code (El Dorado County 2016).

Furthermore, Section 130.37.020 of the El Dorado County Zoning Ordinance provides pertinent exemptions from the Chapter's noise standards as follows:

- Per 130.37.020.A – Activities conducted in public parks, public playgrounds, and public or private school grounds, including but not limited to school athletic and school entertainment events, providing an amplified sound system is not required or used.

- Per 130.37.020.D – Noise sources associated with property maintenance, such as lawn mowers, trimmers, snow blowers, power tools in good working order, and cutting of firewood for non-commercial personal use, provided that the activities take place between the hours of eight a.m. and nine p.m. on weekdays and nine a.m. to nine p.m. on weekends and federal holidays.

- Per 130.37.020.I – Construction performed during daylight hours, provided that all construction equipment are fitted with factory installed muffling devices and maintained in good working order (El Dorado County 2019). So while the 2004 version of the Noise Element includes Policy 6.5.1.11 and reference to construction noise limits at receiving types of land uses, such limits would not apply. It is anticipated that the project proposed construction schedule would comply with these limited construction work during daytime hours.

The Noise Element states that noise-sensitive developments include hospitals, schools, churches, and residential areas. These relevant policies are listed in the Noise Element are as follows:

Policy 6.5.1.2. Where proposed non-residential land uses are likely to produce noise levels exceeding the performance standards of Table 6-2 (as identified in the Noise Element) at existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.

These time-sensitive noise limits for noise-sensitive "Community" land uses are as follows: 55 dBA hourly L_{eq} during 7:00 a.m. to 7:00 p.m., 50 dBA hourly L_{eq} from 7:00 p.m. to 10:00 p.m., and 45 dBA hourly L_{eq} from 10:00 p.m. to 7:00 a.m. These limits may be lowered, at County discretion, by up to 5 dB depending on the existing outdoor ambient sound environment at a receptor (e.g., if noise levels already very low).

Policy 6.5.1.3. Where noise mitigation measures are required to achieve the standards of Tables 6-1 and 6-2 (as identified in the Noise Element), the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigations measures have been integrated into the project and the noise barriers are not incompatible with the surroundings.

In summary, the County expects outdoor activity areas of residential, transient lodging, hospitals and nursing homes, churches, meeting halls and schools to experience up to 60 dBA CNEL. Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} /CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} /CNEL may be allowed provided that available exterior noise level reduction measures have been implemented.

Policy 6.5.1.7. Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of [General Plan] Table 6-2 for noise-sensitive uses.

Policy 6.5.1.13. When determining the significance of impacts and appropriate mitigation to reduce those impacts for new development projects, including ministerial development, the following criteria shall be taken into consideration:

A. In areas which ambient noise levels are in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new non-transportation noise sources that exceed 5 dBA shall be considered significant; and
B. In areas in which ambient noise levels are not in accordance with the standards in Table 6-2, increases in ambient noise levels caused by new non-transportation noise sources that exceed 3 dBA shall be considered significant.

3.10.4 Impacts and Mitigation Measures

3.10.4.1 Thresholds of Significance

A significant impact would occur if development of the proposed project would do any of the following:

- Result in generation of a temporary or permanent increase in ambient noise levels in the vicinity of the project substantially above levels existing without the project or in excess of standards established in the County's general plan or noise ordinance, or applicable standards of other agencies.
- Result in generation of excessive groundborne vibration or groundborne noise levels.

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

For this analysis, short-term temporary noise levels generated by construction of the proposed project is evaluated against the FTA recommended daytime construction noise level thresholds, which establishes a sound level threshold of 80 dBA L_{eq8h} over an 8-hour period at the property line of nearby noise-sensitive land uses. Long-term or permanent noise levels are evaluated against the County's General Plan maximum allowable noise levels, as well as the Zoning Ordinance property line thresholds, including the General Plan policies regarding incremental noise increases.

Threshold Significance Criteria Not Applicable to the Proposed Project

Potential impacts associated with proximity to a public or private airport were analyzed in the Initial Study (IS) prepared for this project (Appendix B). A brief discussion of conclusions made in the IS follows below.

Private Airstrip or Public Airport

The nearest public or public-use airport is the El Dorado County Airport, located approximately 4.4 miles northeast of the project. At such distance from an airport handling civilian aviation traffic, there is no potential to expose people in the project area to excessive airport-related noise, and this issue is not considered further in this EIR.

As discussed in the project Initial Study, while the PG&E Placerville Service Center Heliport is within 2 miles of the project site, the heliport is not a public airport and its use is limited to specific purposes associated with PG&E emergency and maintenance activities. Thus, it is not discussed further for purposes of impact assessment herein.

3.10.4.2 Analytical Methodology

Potential noise impacts associated with the proposed project were calculated and analyzed based on project information; information contained in the traffic impact analysis prepared for the project in Section 3.11, Transportation and Circulation; and data obtained during on-site noise monitoring. Observations made during the site survey along with land-use information and aerial photography were used to determine potential locations of sensitive receptors in the project vicinity. The California Environmental Quality Act requires that the noise impacts *caused by* the project be considered; for proposed residential and commercial development, the principal source of project-generated noise is the addition of vehicle trips to area roadways. As a result, noise impacts resulting from increases in off-site traffic noise levels along roadways which would provide access to the project site must be evaluated.

Offsite Traffic Noise Impact Assessment

Existing and future roadway noise levels were predicted with algorithms based on the FHWA RD-77-108 report, with adjustments to reflect "Calveno" vehicle noise emission levels (Caltrans 1998) as adopted by Caltrans. From calculation worksheets appearing in Appendix G, key model inputs and assumptions are as follows:

- Existing, near-term (2033), cumulative (2040), existing-plus-project, 2033-plus-project, and 2040-plus-project traffic noise levels are calculated from average weekday traffic (AWT) and average Saturday traffic (AST) volumes on roadway segments defined by the Transportation Impact Study (TIS) prepared for the project and are listed as follows:
  - Oak Dell Road north (a.k.a., Dublin Road) of California State Route SR-49 (Pleasant Valley Road);
  - Oak Dell Road south of SR-49;

- SR-49 east of Oak Dell Road; and
- SR-49 west of Oak Dell Road.

Using Caltrans guidance, the AWT and AST for each of the above roadway segments was calculated from morning and midday peak hour (PH) traffic volumes, respectively, as appearing in the TIS. For purposes of this assessment, the proportions of automobile, medium truck, and heavy truck vehicle types of the forecasted traffic volumes on the studied roadway segments are expected to be comparable to those for SR-49 (Pleasant Valley Road) as provided by Caltrans (Caltrans 2019).

- Consistent with Caltrans guidance (Caltrans 2013), this analysis assumes 80% of the ADT occurs during daytime hours (7:00 a.m. to 7:00 p.m.), 10% during the evening (7:00 p.m. to 10:00 p.m.), and 10% during the nighttime (10:00 p.m. to 7:00 a.m.).

Offsite Non-Transportation Noise Impact Assessment

The project includes a variety of onsite noise emission sources associated with typical and expected operation during daytime and evening hours (e.g., 7:00 a.m. to 10:00 p.m.) that may either be steady-state or continuous in character and either stationary or limited in mobility to defined geographic boundaries within the project area. The types of sources include electro-mechanical systems, such as air-conditioning for the proposed Indoor Gym building, restroom exhaust fans, and an emergency generator rated for approximately 120 kilowatts (kW) that would require regular testing of, on average, one hour per week over the course of a year to ensure its performance capability during actual experienced emergencies. Onsite noise sources also include human speech at various levels of intensity and would be associated with sports participation, spectators, and recreationists that may use the afore-mentioned gym, picnic areas, or children's outdoor play area.

The combined noise emission encompassing such onsite project noise sources and propagating beyond the project boundary can be predicted with a three-dimensional (3-D) modeling technique that emulates International Organization of Standardization (ISO) 9613-2 algorithms and reference data (ISO 1996). Prediction results can be calculated at specific geographic locations, or visually represented across a horizontal plane as acoustical iso-pleths (a.k.a., noise contours) so that a reader may assess at a glance where certain offsite areas may be exposed to project operation noise levels that exceed applicable County noise thresholds.

While the predictive modeling technique applied herein for purposes of assessment does apply acoustical air absorption and ground absorption per ISO 9613-2, it does not consider potential noise-reducing occlusion along a direct sound path between a noise emitter and an offsite receiver. Such path-intervention could be natural, such as existing terrain features, or the result of site grading and/or application of other barriers. Such barriers may already exist along project property boundaries with adjoining offsite residential and commercial land uses. For this reason, the model output presented in the subsequent impact analysis discussion may be conservative (i.e., louder) by several decibels.

Construction Noise and Vibration

Construction-related noise effects were assessed with respect to nearby offsite noise-sensitive receptors and their received exposure to aggregate noise from project-attributed onsite construction activities, based on application of an FHWA Roadway Construction Noise Model (RCNM) emulator and corresponding reference noise level data and acoustical usage factors (AUF, the cumulative percentage of a defined time period where a mobile or stationary piece of construction equipment is operating at full load or exertion and thus exhibiting maximum noise levels

[L_{max}]). Reference L_{max} values at measurement distances of fifty feet from the source for various sample types of construction equipment are presented in Table 3.10-6. Construction noise emission levels for the project were predicted using applicable reference noise emission data and AUF values associated with project construction fleet assumptions defined in the air quality analysis of Section 3.2.

Table 3.10-6. Noise Levels from Construction Equipment

Equipment Type	Maximum Noise Levels, L_{max} (dBA) at 50 feet
Air Compressor	80
Asphalt Paver	80
Backhoe	80
Compactor	82
Concrete Pump	90
Concrete Saw	85
Crane, Mobile	85
Dozer	85
Forklift	85
Front-End Loader	80
Generator	82
Grader	85
Paver	85
Pneumatic Tools	85
Rock Drill	85
Roller	85
Scraper	85
Trucks	84
Water Pump	84
Welder	84

Source: DOT 2006, FHWA 2008, FTA 2018.
Notes: dBA = A-weighted decibels; Lmax = day-night average noise level.
All equipment fitted with a properly maintained and operational noise control device, per manufacturer specifications.

Ground borne vibration impacts were qualitatively assessed based on existing reference documentation (e.g., vibration levels produced by specific construction equipment operations), through the application of Caltrans methodology outlined within the Transportation- and Construction- Induced Vibration Guidance Manual and the relative distance to potentially sensitive receptors from a given vibration source. Table 3.10-7 provides an overview of representative vibration levels for construction equipment.

Table 3.10-7. Representative Vibration Levels for Construction Equipment

Equipment		PPV at 25 feet (in/sec)[1,3]	Approximate Lv (VdB) at 25 feet[2]
Pile Driver (impact)	Upper range	1.518	112
	Typical	0.644	104
Pile Driver (vibratory/ sonic)	Upper range	0.734	105
	Typical	0.170	93
Vibratory Roller		0.210	94
Hoe Ram		0.089	87

Table 3.10-7. Representative Vibration Levels for Construction Equipment

Equipment	PPV at 25 feet (in/sec)[1,3]	Approximate Lv (VdB) at 25 feet[2]
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Heavy-duty Trucks (Loaded)	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: FTA 2018.
Notes:
1 Where PPV is the peak particle velocity.
2 Where Lv is the RMS velocity expressed in vibration decibels (VdB), assuming a crest factor (difference between peak of signal and the RMS average) of 4.
3 Vibration levels can be approximated at other locations and distances using the above reference levels and the following equation: PPVequip = PPVref (25/D)1.5 (in/sec); where "PPV ref" is the given value in the above table, "D" is the distance for the equipment to the new receiver in feet.

3.10.4.3 Project Impacts

Impact NOI-1 The proposed project could result in generation of a temporary or permanent increase in ambient noise levels in the vicinity of the project substantially above levels without the project or in excess of standards established in the County's general plan or noise ordinance, or applicable standards of other agencies.

Construction Noise

The proposed project would generate noise associated with the operation of heavy construction equipment and construction related activities in the vicinity of the project area. Construction noise levels in the vicinity of the proposed project would fluctuate depending on the particular type, number, and duration of usage for the various pieces of equipment, as well as the relative exposure and distance between the source and receptors.

The effects of construction noise depend largely on the types of construction activities occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment in the vicinity of the receiver. Construction generally occurs in several discrete and sequential phases, with each phase varying the equipment mix and the associated noise. These phases of onsite project construction activities thus temporarily alter the characteristics of the outdoor ambient noise environment on the project site and in the surrounding community for the duration of construction progress.

The site preparation and grading stages typically generate the most substantial noise levels due to on-site equipment grading and excavating activities, which often uses the loudest mix of construction equipment. Specific site preparation equipment can include backhoes, bulldozers, loaders; excavation equipment such as graders and scrapers; and compaction equipment. Erection of larger structural elements and mechanical systems could require the use of a crane for placement and assembly tasks, which may also generate substantial noise levels. Table 3.10-9 above lists the maximum noise levels typically generated by various types of common heavy construction equipment.

To assess noise levels associated with the various equipment types and their operation, construction equipment can be considered to operate in two modes, mobile and stationary. Mobile equipment sources move around a construction site performing tasks in a recurring manner (e.g., loaders, graders, dozers). Stationary equipment

operates in a given location for an extended period of time to perform continuous or periodic operations (e.g., compressor or generator). Thus, it is necessary to determine the location of stationary sources during specific stages of construction, and the effective acoustical center of operations for mobile equipment during various stages of the construction process. The effective acoustical center is the idealized point from which the energy sum of all construction activity noise near and far would appear to originate. As one increases the distance between equipment and/or between areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of separate noise sources added together.

Operational characteristics of heavy construction equipment are additionally typified by short periods of full-power operation followed by periods of operation at lower power, idling, or powered-off conditions. These characteristics are accounted for through the application of typical usage factors (operational percentage) to the reference maximum noise levels presented in Table 3.10-9 above.

Although specific building design and construction requirements for buildout of the project are currently unknown, it is anticipated that development of the various project elements would incorporate the use of typical construction sources such as backhoes, compressors, bulldozers, excavators, loaders, and other related equipment based on the same default CalEEMod assumptions used for the air quality analysis. Based on the FHWA RCNM equipment reference L_{max} and AUF values, and operational characteristics discussed above, overall 8-hour noise levels attributable to project construction activities were predicted by construction phase for each of four nearest sample offsite noise-sensitive receptors (NSR) and presented in Table 3.10-8. These predictions assume project construction activities would be performed during allowable hours (i.e., 7 a.m. and 7 p.m. Monday through Friday and 8 a.m. and 5 p.m. on weekends) per County Noise Element Policy 6.5.1.11 as introduced in Section 3.10.3.

Table 3.10-8. Construction Noise Model Results Summary

Construction Phase	Predicted Construction Noise Level (8-hour L_{eq} [dBA]) at Indicated Offsite Noise-sensitive Receptor			
	6511 Oak Dell Road (ODR)	Pacific Crest Academy (PCA)	Lake Oaks Mobile Home Community (LOMHC)	Charles Brown Elementary School site (CBE)
Site Preparation	73.0	57.3	61.6	69.1
Grading	73.3	59.2	63.2	70.5
Building Construction	56.0	45.7	54.6	62.0
Paving	72.6	55.0	59.8	67.6
Architectural Coating	46.0	35.7	47.6	51.9

Source: Appendix G.
Notes: dBA = A-weighted decibels; L_{eq} = equivalent sound level

As appearing in Table 3.10-8, predicted construction noise levels are not anticipated to exceed 73 dBA 8-hour L_{eq}, which is less than the 80 dBA 8-hour L_{eq} FTA-based guidance threshold and on this basis would be considered a less than significant impact.

Outdoor ambient noise level measurement samples during daytime hours at survey position LT1 (adjoining LOMHC) ranged from 38 dBA to 48 dBA hourly L_{eq} on May 8, 2023 and 38 to 44 dBA on May 9, 2023. Ranges of measured hourly L_{eq} at LT2 (elementary school) were from 42 dBA to 55 dBA on May 8, 2023 and 44 dBA to 66 dBA on May 9, 2023. These ranges of existing hourly sound levels are either comparable to or less than the predicted construction

noise levels as appearing in Table 3.10-8; hence, there may be temporary periods of time where project construction-attributed changes to the existing outdoor sound environment may be audible.

Long-Term/Operational Noise

Offsite Traffic Noise

For anticipated *weekday* traffic conditions, the following three Tables 3.10-9 through 3.10-11 present the prediction results for three evaluated scenario contrasts as follows:

- **Existing plus Project –** a contrast of the predicted traffic noise levels at 50 feet from the listed studied roadway segment under existing conditions versus existing conditions that include traffic changes due to project build-out.
- **Near Term (2033) plus Project –** a contrast of the predicted traffic noise levels at 50 feet from the listed studied roadway segment under near-term (year 2033) conditions versus near-term conditions that include traffic changes due to project build-out.
- **Cumulative (2040) plus Project –** a contrast of the predicted traffic noise levels at 50 feet from the listed studied roadway segment under cumulative (year 2040) conditions versus cumulative conditions that include traffic changes due to project build-out.

Table 3.10-9. Predicted Weekday Roadway Noise Change – Existing plus Project

Modeled Roadway Segment	Existing CNEL at 50 feet (dBA)	Existing + Project CNEL at 50 feet (dBA)	Change in Traffic Noise Level (dB)	Compliant with County General Plan?
Oak Dell Road North of SR-49	38.3	38.3	0.0	yes
Oak Dell Road South of SR-49	56.3	56.9	0.6	yes
SR-49 West of Oak Dell Road	68.8	68.9	0.1	yes
SR-49 East of Oak Dell Road	68.8	68.9	0.1	yes

Source: Appendix G
Notes: dBA = A-weighted decibels, CNEL = community noise equivalent level.

Table 3.10-10. Predicted Weekday Roadway Noise Change – 2033 plus Project

Modeled Roadway Segment	Near Term CNEL at 50 feet (dBA)	Near Term + Project CNEL at 50 feet (dBA)	Change in Traffic Noise Level (dB)	Compliant with County General Plan?
Oak Dell Road North of SR-49	38.3	38.3	0.0	yes
Oak Dell Road South of SR-49	56.3	56.9	0.6	yes
SR-49 West of Oak Dell Road	69.4	69.5	0.1	yes
SR-49 East of Oak Dell Road	69.4	69.5	0.1	yes

Source: Appendix G
Notes: dBA = A-weighted decibels, CNEL = community noise equivalent level.

Table 3.10-11. Predicted Weekday Roadway Noise Change – 2040 plus Project

Modeled Roadway Segment	2040 CNEL at 50 feet (dBA)	2040 + Project CNEL at 50 feet (dBA)	Change in Traffic Noise Level (dB)	Compliant with County General Plan?
Oak Dell Road North of SR-49	38.3	38.3	0.0	yes
Oak Dell Road South of SR-49	56.3	56.9	0.6	yes
SR-49 West of Oak Dell Road	69.9	69.9	0.1	yes
SR-49 East of Oak Dell Road	69.8	69.9	0.1	yes

Source: Appendix G
Notes: dBA = A-weighted decibels, CNEL = community noise equivalent level.

For all three studied weekday traffic noise scenario contrasts that involve contribution from the project, changes to the traffic noise levels (expressed as a CNEL value) at outdoor activity areas of residential land uses along the SR-49 studied roadway segments would be less than 1.5 dB as required by Policy 6.5.1.12.C where the existing or projected future traffic noise levels are expected to be greater than 65 dBA L_{dn} (or comparably, CNEL). For studied Oak Dell Road studied segments, changes to the traffic noise levels (expressed as a CNEL value) at outdoor activity areas of residential land uses along the SR-49 studied roadway segments would be less than 5 dB as required by Policy 6.5.1.12.A where the existing or projected future traffic noise levels are expected to be less than 60 dBA L_{dn} (or comparably, CNEL). As such, these predictions indicate that project changes to community traffic noise levels would represent a less than significant impact.

For anticipated *Saturday* traffic conditions, the following three Tables 3.10-12 through 3.10-14 present the prediction results for the same three evaluated scenario contrasts as follows:

Table 3.10-12. Predicted Saturday Roadway Noise Change – Existing plus Project

Modeled Roadway Segment	Existing CNEL at 50 feet (dBA)	Existing + Project CNEL at 50 feet (dBA)	Change in Traffic Noise Level (dB)	Compliant with County General Plan?
Oak Dell Road North of SR-49	38.3	38.3	0.0	yes
Oak Dell Road South of SR-49	53.8	58.2	4.4	yes
SR-49 West of Oak Dell Road	65.8	66.7	0.9	yes
SR-49 East of Oak Dell Road	66.2	67.0	0.8	yes

Source: Appendix G
Notes: dBA = A-weighted decibels, CNEL = community noise equivalent level.

Table 3.10-13. Predicted Saturday Roadway Noise Change – 2033 plus Project

Modeled Roadway Segment	Near Term CNEL at 50 feet (dBA)	Near Term + Project CNEL at 50 feet (dBA)	Change in Traffic Noise Level (dB)	Compliant with County General Plan?
Oak Dell Road North of SR-49	38.3	38.3	0.0	yes
Oak Dell Road South of SR-49	53.8	58.2	4.4	yes
SR-49 West of Oak Dell Road	67.1	67.8	0.7	yes
SR-49 East of Oak Dell Road	67.4	68.1	0.7	yes

Source: Appendix G
Notes: dBA = A-weighted decibels, CNEL = community noise equivalent level.

Table 3.10-14. Predicted Saturday Roadway Noise Change – 2040 plus Project

Modeled Roadway Segment	2040 CNEL at 50 feet (dBA)	2040 + Project CNEL at 50 feet (dBA)	Change in Traffic Noise Level (dB)	Compliant with County General Plan?
Oak Dell Road North of SR-49	38.3	38.3	0.0	yes
Oak Dell Road South of SR-49	53.8	58.2	4.4	yes
SR-49 West of Oak Dell Road	67.8	68.4	0.6	yes
SR-49 East of Oak Dell Road	68.1	68.7	0.6	yes

Source: Appendix G
Notes: dBA = A-weighted decibels, CNEL = community noise equivalent level.

For all three studied Saturday traffic noise scenario contrasts that involve contribution from the project, changes to the traffic noise levels (expressed as a CNEL value) at outdoor activity areas of residential land uses along the SR-49 studied roadway segments would be less than 1.5 dB as required by Policy 6.5.1.12.C where the existing or projected future traffic noise levels are expected to be greater than 65 dBA L_{dn} (or comparably, CNEL). For studied Oak Dell Road studied segments, changes to the traffic noise levels (expressed as a CNEL value) at outdoor activity areas of residential land uses along the SR-49 studied roadway segments would be less than 5 dB as required by Policy 6.5.1.12.A where the existing or projected future traffic noise levels are expected to be less than 60 dBA L_{dn} (or comparably, CNEL). As such, these predictions indicate that project changes to community traffic noise levels would represent a less than significant impact.

Non-Transportation / Long-term Operational Noise

Table 3.10-15 presents the predicted noise exposure levels (expressed as hourly L_{eq} values) attributed to project onsite stationary and mobile (albeit confined to assumed geographic zones or areas, such as loud spectators on bleachers, or idling vehicles on a parking lot) sources at the listed representative nearest offsite NSR for four operation scenarios as follows:

1. Daytime (7:00 a.m. to 7:00 p.m.) usage of project facilities and sports fields – all six fields (i.e., both lighted soccer areas, two lighted softball/baseball diamonds, and two unlighted softball/baseball diamonds) are assumed to have active games in progress with spectators nearby;

2. **Evening (7:00 p.m. to 10:00 p.m.) usage of project facilities and sports fields –** all four lighted fields (i.e., both lighted soccer areas and two lighted softball/baseball diamonds) are assumed to have active games in progress with spectators nearby;
3. **Daytime usage of project facilities and sports fields, plus emergency generator testing –** same as Scenario A above, but with added operation noise (71 dBA at 23 feet) from an assumed typical diesel-fueled trailer-mounted generator (e.g., Kohler Model 120REOZT4 or comparable) undergoing a 20-minute duration test at full load; and
4. **Emergency generator testing and HVAC only –** only Project HVAC sources and operation noise (71 dBA at 23 feet) from an assumed typical diesel-fueled trailer-mounted generator (e.g., Kohler Model 120REOZT4 or comparable) undergoing a 20-minute duration test at full load.

Figures G-1, G-2, G-3, and G-4 contained in Appendix G correspondingly illustrate (for these same above scenarios, respectively) predicted project stationary equipment operation sound levels across a horizontal plane approximately five feet above grade (i.e., a typical pedestrian listening elevation).

Table 3.10-15. Predicted Project Stationary Source Hourly Noise Levels at Offsite Receptors

Modeled Offsite Noise-Sensitive Receptor (Figure Tag)	Modeled Project Operational Noise (hourly L_{eq} [dBA]) per Scenario			
	1 – Daytime (7 a.m. to 7 p.m.)	2 -- Evening (7 p.m. to 10 p.m.)	3 -- Daytime plus Generator Test	4 -- Generator Test + Project HVAC
Lake Shore Drive (LSD1)	51.1	51.1	51.2	30.3
Lake Shore Drive (LSD2)	50.3	50.3	50.4	30.4
Lake Shore Drive (LSD3)	47.5	47.5	47.6	28.8
Lake Shore Drive (LSD4)	45.3	45.2	45.4	27.1
Snowline Hospice (SH1)	47.4	47.4	47.5	29.0
El Dorado Center for the Visually Impaired (EDCVI)	52.9	52.8	52.9	31.6
Oak Dell Road (ODR1)	47.6	47.4	47.7	32.7
Snoopy Road (SR2)	44.8	44.5	45.0	29.6
Snoopy Road (SR1)	49.9	43.3	49.9	27.9
Charles Brown Elementary School (CBE1)	51.6	51.5	51.9	39.9
Charles Brown Elementary School (CBE2)	54.5	54.4	55.4	47.8
Charles Brown Elementary School (CBE3)	49.6	49.1	49.8	36.6
Union Mine High School Pool (UMHSP)	44.1	41.6	44.1	25.6
Pacific Crest Academy (PCA1)	40.2	39.6	40.3	22.8

Source: Appendix G
Notes: dBA = A-weighted decibels.

As modeled herein for purposes of this assessment, all predicted daytime hourly noise levels at the fourteen nearest sample offsite receptor locations as presented in Table 3.10-18 are less than the County's 55 dBA hourly L_{eq} threshold. During evening hours (7:00 p.m. to 10:00 p.m.), when reduced activities are expected to occur, such as

lack of sport participation and spectators at the unlit softball/baseball fields, predicted overall levels are slightly lower and by a decibel quantity that reflects the proximity and magnitude of nearest onsite modeled noise emitters. At a few receptor positions, predicted overall hourly L_{eq} values during these evening hours slightly exceed the County's threshold of 50 dBA hourly L_{eq}; however, the predicted levels at the residential and thus noise-sensitive receptors among those listed are less than 50 dBA and would thus be compliant. At other locations, such as the El Dorado Center for the Visually Impaired and the former Charles F. Brown Elementary School site, there would be no occupants during evening hours at such non-residential land uses.

When the emergency generator may be tested (for up to twenty minutes at full power during a tested hour) during the daytime period, Table 3.10-15 shows that the closest former Charles F. Brown Elementary School receptor (CBE2) would see an aggregate noise level slightly higher (by less than a decibel) than the County's daytime standard of 55 dBA hourly L_{eq}. But because this predicted exceedance is due to the assumed generator position, and the Indoor Gym building has not been modeled as a sound-occluding structure, merely locating the generator (during testing) on a façade of the Indoor Gym building or behind a similar wall or a barrier would provide sufficient noise reduction to eliminate this predicted daytime exceedance at CBE2.

Furthermore, since park activities are exempt from County noise standards per Section 130.37.020.A, only emergency generator testing and onsite mechanical systems (i.e., HVAC equipment that includes modeled Indoor Gym air-conditioning and restroom exhaust fans) would be required to comply. This is Scenario 4, which Table 3.10-15 shows is less than 50 dBA hourly L_{eq} at all studied receptor positions, and would therefore be deemed compliant with either the daytime or evening County exterior noise standards.

On the above bases and with respect to County noise standard exemption for Project park activities and mechanical system operation compliance with County limits, non-transportation noise emission from the project to the surrounding community would be considered a less than significant impact.

As shown in detail with measurement histograms and summarized metrics and statistical values appearing in Appendix G, outdoor ambient noise level measurement samples during daytime hours at survey position LT1 (adjoining LOMHC) ranged from 38 dBA to 48 dBA hourly L_{eq} values on May 8, 2023 and 38 to 44 dBA on May 9, 2023. Ranges of measured hourly L_{eq} at LT2 (elementary school) were from 42 dBA to 55 dBA on May 8, 2023 and 44 dBA to 66 dBA on May 9, 2023. Given these sampled ranges of existing outdoor ambient sound level during daytime hours (7:00 a.m. to 7:00 p.m.) tend to be lower than 55 dBA hourly L_{eq} with few exceptions, either a 3 dB allowable increase or 5 dB allowable increase in the existing outdoor ambient environment would be considered acceptable per County NE Policy 6.5.1.13. While predicted aggregate operation noise levels appearing in Table 3.10-15 are compliant with the County's 55 dBA threshold, some nearest offsite receptor positions may experience—based on the predictive modeling performed and presented herein—increases in the outdoor ambient sound environment that exceed the 5 dB relative increase standard. For this reason, mitigation measure MM-NOI-1 would be implemented to help ensure project operation noise levels would consistently comply with County NE Policy 6.5.1.13.

Evening sound levels at LT1 ranged between 38 dBA and 40 dBA on both May 8th and May 9th. Evening sound levels at LT2 ranged between 42 dBA and 45 dBA on May 8, 2023 and 48 dBA to 62 dBA on May 9, 2023. Similar to the assessment for daytime hours in the preceding paragraph, these sampled ranges of existing outdoor ambient sound level during evening hours (7:00 p.m. to 10:00 p.m.) tend to be lower than 50 dBA hourly L_{eq} with few exceptions. Therefore, either a 3 dB allowable increase or 5 dB allowable increase in the existing outdoor ambient environment would be considered acceptable per County NE Policy 6.5.1.13. While predicted aggregate operation noise levels appearing in Table 3.10-15 are either compliant with the County's 50 dBA threshold or would be exempt, some

nearest offsite receptor positions may experience—based on the predictive modeling performed and presented herein—increases in the outdoor ambient sound environment that exceed the 5 dB relative increase standard. For this reason, mitigation measure MM-NOI-1 would be implemented to help ensure project operation noise levels would consistently comply with County NE Policy 6.5.1.13.

Summary of Impacts

Per available project information and predictive modeling outlined herein (and supported by reasonable assumptions with respect to input parameters) upon which the preceding impact analyses are based, implementation of the proposed project has the potential to result in long-term operational/stationary-source noise levels that exceed the noise level standards outlined in the County's code and NE policies and resulting in **potentially significant impacts** requiring mitigation measures.

Impact NOI-2 The proposed project would not result in the generation of excessive groundborne vibration or groundborne noise levels during construction.

Construction activities on the project site may result in varying degrees of temporary groundborne vibration or groundborne noise, depending on the specific construction equipment used and operations involved. Representative groundborne vibration levels for various types of construction equipment, developed by FTA, are summarized in Table 3.10-7. As shown in Table 3.10-7, most heavier pieces of engine-drive construction equipment, such as a bulldozer that may be used on the project site, have been documented to generate peak particle velocities of approximately 0.089 in/sec PPV or less at a reference distance of 25 feet (DOT 2006).

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in FTA and Caltrans guidance. Using standard FTA vibration attenuation formulae, anticipated project construction activities (excluding pile driving, which is not expected onsite) would exceed the FTA/Caltrans recommended building occupant annoyance threshold of significance of 0.2 in/sec PPV at a distance of 15 feet or less. It is unlikely that project heavy construction equipment would operate within 15 feet of any noise-sensitive receptor, as offsite occupied buildings associated with these existing sensitive receptors are located further away; hence, groundborne construction vibration propagation would be considered a less than significant impact.

It is notable that ground-borne vibrations from construction activities do not often reach the levels that can damage structures or affect activities that are not vibration sensitive, although the vibrations may be felt by nearby persons in close proximity and result in annoyance (FTA 2018). Additionally, the proposed project does not include elements that would generate ground-borne vibration associated with the long-term operation. As such, no vibration-related impacts are identified at any of the nearest sensitive receptors to the project site during project construction and impacts are considered **less than significant**.

3.10.4.4 Cumulative Impacts

The proposed project and nearby anticipated commercial and residential development projects within its vicinity would all be subject to applicable County noise standards as described in Section 3.10.3 and likely incorporate comparable mitigation measures presented and discussed herein. The project would incorporate its mitigation measures as identified in the preceding section to help ensure project-specific compliance with applicable County noise standards during expected daytime and evening usage of the project facilities. On this basis, the project would

not contribute to cumulative exceedances of noise standards, and its incremental effect is considered a less than significant impact. No mitigation is required.

The project would result in temporary noise increases during construction of its on-site structures (e.g., the Indoor Gym) and associated on-site improvements, as discussed under Impact NOI-1. The construction periods for these project-related activities have the potential to overlap with the construction of other projects in the vicinity. However, due to the decrease in noise levels with propagated distance and the presence of physical barriers (i.e., intervening buildings and topography), noise due to construction of other projects would not meaningfully combine with development of the project to produce a cumulative noise effect during construction. By way of illustration, if there are two concurrent construction projects of comparable sound emission intensity, and the activity nearest to the studied noise-sensitive receptor is compliant with applicable decibel standards, the other activity could be no closer than three times the distance of the receptor to the nearest activity and not make a cumulatively measurable contribution to the total noise exposure level. If two concurrent projects were close to a receptor, the cumulative noise would be one of the following:

- The louder (in dBA) of the two concurrent activities; or
- A logarithmic sum of the two activity noise levels that, per acoustic principles, cannot be more than 3 dBA greater than the louder of the two individual noise-producing activities.

In sum, cumulative construction noise is likely to be dominated by the closest or loudest activity to the receptor, and the combination will be no more than a barely perceptible difference (i.e., up to a 3 dBA change).

Construction-related vibration from development of the project is discussed under Impact NOI-2. Other foreseeable projects within the vicinity of the project area would not be close enough to create a combined excessive generation of ground-borne vibration. And akin to the preceding discussion of cumulative construction noise, concurrent development would need to comply with comparable standards and guidance with respect to building damage risk and occupant annoyance attributed to transient and continuous/intermittent sources of ground-borne vibration. Thus, cumulative impacts associated with excessive ground-borne vibration would be considered less than significant. No mitigation is required.

3.10.4.5 Mitigation Measures

MM NOI-1 Operation Noise

Operation of the proposed project shall be limited to daytime (7:00 a.m. to 7:00 p.m.) and evening hours (7:00 p.m. to 10:00 p.m.). Respecting the measurable pre-existing outdoor ambient sound environment at nearest occupied offsite homes and other noise-sensitive land uses may be comparable to or quieter than the County's hourly L_{eq} fixed thresholds of 55 dBA and 50 dBA for daytime and evening, respectively, the following shall be implemented:

- Restrict testing of the project emergency generator to daytime hours, and position the operating generator during such times so that the direct sound path between it and the nearest noise-sensitive land use is occluded by the proposed Indoor Gym building or an alternate solid barrier (either a fixed sound-blocking project feature; or a temporary/portable shell, shroud, or acoustical curtain that can be taken out of storage an installed as part of the emergency generator testing procedure).

- Consistent with project design information, and to satisfy County Code Section Section 130.37.020.A, no speech amplification or other sound reinforcement systems shall be installed and operating, excluding for purposes of public address or emergency response as the County may require.
- Clear and conspicuous informational signage shall be located at spectator seating and other assembly areas to enforce applicable County noise nuisance regulations and policies with respect to operation of visitor portable sound systems, musical instruments, and other noise makers.
- The project grading and layout of fields and facilities shall include, to the extent practical, features that are advantageous for occluding direct sound paths between areas of expected noise-producing activities (e.g., active sports play and engaged spectators) and nearest offsite noise-sensitive land uses such as residences.
- The project shall include a community complaint management plan that will provide the County or its delegate a means to respond to received community noise complaints, investigate their validity and likely cause, and document any implementation of onsite noise-reducing means or the resolution of the complaint.

3.10.4.6 Significance After Mitigation

Compliance with Mitigation Measure NOI-1 would help ensure that existing and future noise-sensitive land uses in the project vicinity are not exposed to sound levels substantially higher than existing levels or in excess of County noise thresholds during project operation. Compliance with this mitigation measure would ensure Impact NOI-1 would be reduced to less than significant.

3.10.5 References

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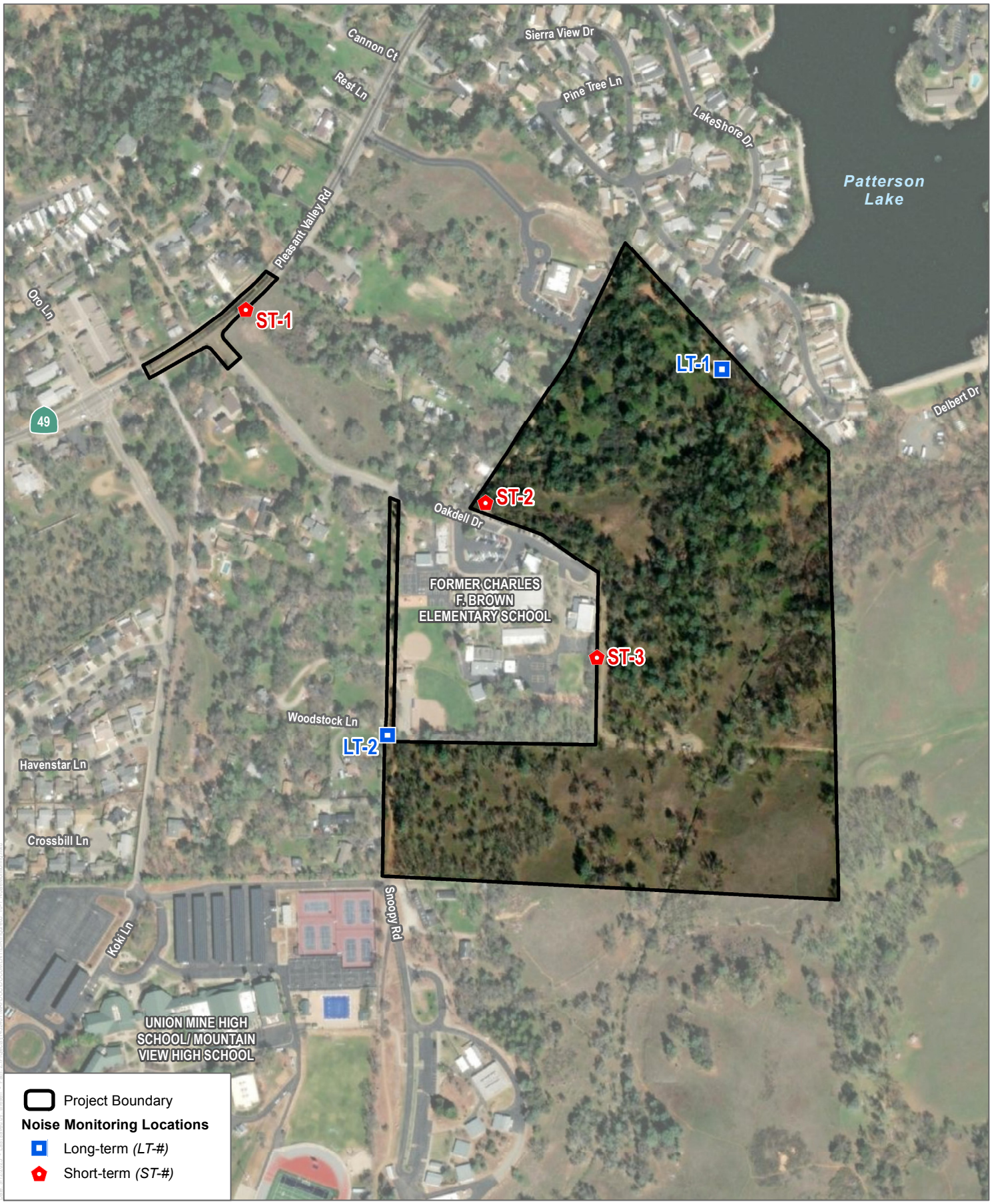

SOURCE: ESRI Imagery 2023, Open Street Map 2019

DUDEK

0 200 400 Feet

FIGURE 3.10-1

Noise Monitoring Locations

Diamond Springs Community Park Project

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3.11 Public Services and Recreation

This section describes the existing Public Services and Recreational conditions of the proposed Diamonds Springs Community Park Project (project) site and vicinity, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant impacts related to implementation of the project.

A summary of the comments received during the scoping period for this EIR is provided in Table 2-1, Scoping Comments Summary, in Chapter 2, Introduction, and a complete list of comments is provided in Appendix A. Comments related to public services were limited to comments about the proposed park itself and what kind of amenities the park should include.

3.11.1 Existing Conditions

3.11.1.1 Fire Protection

The project site is located within the Diamond Springs-El Dorado Fire Protection District (District), which provides services such as fire suppression, rescue, and emergency medical services to the communities of Diamond Springs, El Dorado, Sleepy Hollow, Logtown, Missouri Flat, Nashville, and Sandridge. The District serves approximately 35,000 residents and covers 95 square miles. The District has a total of five fire stations and one of them is staffed full time. Station 49, which is the District's main station and administrative headquarters, is located at 501 Pleasant Valley Road, approximately 1.30 miles northeast of 3447 Clemenger, where the project site is located. Station 49 is staffed 24 hours per day and located in Diamond Springs. The District also provides aid for fire and rescue emergencies to twelve other fire districts in the County that serve a much larger population and cover over 2,000 square miles (El Dorado County 2021).The El Dorado County Fire Protection District is governed by five elected board members that represent all of the areas and residents within the district. The fire district provides "all-risk" emergency services with 14 stations total within the district. There are 73 uniformed personnel and multiple fire engine vehicles and ambulances, as of 2020 (El Dorado County Fire Protection District 2020).

The California Department of Forestry and Fire Protection (CAL FIRE) designates the project site and area around the project site as having moderate fire hazard severity. The area is within the State Responsibility Area (SRA), meaning it is the State's responsibility to provide fire services (CAL FIRE 2007). For more information, refer to Section 3.14 Wildfire.

3.11.1.2 Police Protection

The proposed project would be served by the El Dorado County Sheriff's Office for police protection. The County Sheriff's Office has a force of 392, including 181 sworn officers, and provides service to approximately 1,700 square miles of unincorporated areas of El Dorado County, which encompasses a population of approximately 192,843. The El Dorado County Sheriff's Office is located at 200 Industrial Drive in Placerville, approximately 1.35 miles north of the project site (El Dorado County 2021). The Sheriff's Office Dispatch receives calls from anywhere within the 1,800 square miles of El Dorado County. They are considered the PSAP (Public Safety Answering Point) for the county and is also the backup PSAP for the Placerville and South Lake Tahoe Police offices. Via the annual 2021 report for the El Dorado County Sheriff's Office, they have served 3,472 customers, processed 2,615 report requests, issued 6,771 warrants, and completed 1,464 background checks. Within the Sheriff's Office they have a boating unit, OHV unit, canine unit, dive team, and an Explosive Ordinance Disposal unit

(EOD). They also have a gang enforcement unit (EDGE), homeless outreach team, SWAT team, a Psychiatric Emergency Response Team (PERT), a Crisis Negotiation Team (CNT), the Western El Dorado Narcotics Enforcement Team (WENET), Unmanned Aerial Systems unit (UAS), the EDSO Air Squadron, and search and rescue. There are four El Dorado County Sheriff's Offices including two in Placerville and two in South Lake Tahoe (El Dorado County Sheriff's Office 2021).

The Office of Emergency Services (OES) is incorporated within the El Dorado County Sheriff's office. The OES works alongside Fire services, Emergency Medical Services, hospitals, schools, and public and private agencies to implement preparedness programs, develop emergency response plans, and conduct training drills. The Community Emergency Response Team (CERT) Program within the Sherriff's office educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations (El Dorado County 2023).

3.11.1.3 Parks and Recreational Facilities

El Dorado County is responsible for managing and maintaining eight public recreational facilities, two of which are undergoing improvements. The County's existing parks and recreational space includes neighborhood, community, and regional parks. El Dorado County has approximately 166.5 acres of existing and approximately 40 acres of proposed park and recreational facilities with the proposed Diamond Springs Community Park project. El Dorado County uses a standard of 1.5 acres per 1,000 residents for regional and community parks, and a standard of 2 acres per 1,000 residents for the acquisition and development of neighborhood parks and facilities.

There are currently no County-operated parks or recreational facilities in the community of Diamond Springs or in the vicinity of the project site. The nearest parks are regional, community, and neighborhood parks located more than 4 miles north of the project site surrounding Placerville. Nearby existing parks include the El Dorado Trail, the Rubicon Trail, Henningsen Lotus Park, Pioneer Park, Bradford Park, Joe's Skate Park, Chili Bar, the El Dorado County fairgrounds, Cronan Ranch Regional Trails Park, Railhead Park, and Bass Lake Regional Park.

The El Dorado County Parks and Trails Master Plan includes recommendations for the County to assist with the establishment of neighborhood parks, implementing neighborhood park standards, and providing neighborhood park access. The recommendations direct the County to provide neighborhood parks in more densely populated areas of the County not served by a community services or other special district. The areas identified include Diamond Springs, El Dorado, Shingle Springs, Camino/Pollock Pines, and the areas surrounding the City of Placerville.

The National Park Service has designated two National Historic Trail (NHT) alignments that pass through El Dorado County. These are the California National Historic Trail and the Pony Express National Historic Trail. The California Historic Trail is a route of approximately 5,700 miles extending from Missouri and Iowa to various areas in California and Oregon. The Pony Express National Historic Trail route also extends from Missouri to California.

In western El Dorado County both trails generally follow routes adjacent to the U.S. Highway 50 corridor to Mother Lode Drive and Pleasant Valley Road to the community of Diamond Springs. The Pony Express NHT then veers north to Placerville and generally follows U.S. Highway 50 to the Echo Lake area, where it splits into several trails and heads north towards Highway 88. At Diamond Springs, the California NHT continues east following Pleasant Valley Road, Starkes Grade Road, and Sly Park Road to Gold Ridge (El Dorado County 2021) (El Dorado County Parks and Trails Master Plan 2012).

3.11.1.4 Schools

The nearest schools relative to the project site include those located at the former Charles F. Brown Elementary School and Union Mine High School, located in El Dorado, CA. The former Charles F. Brown Elementary School, is located less than a quarter mile from the project site and is an accelerated learning program for elementary level students. Union Mine High School is approximately 0.45 miles away from the project site and serves as a public high school with an enrollment of 1,084 as of 2019. The Charles Brown Accelerated Learning Academy, which is one of the schools located at the former Charles F. Brown Elementary School, is within the Mother Lode Union School District and serves grades K-8 (Mother Lode Union School District 2023). Union Mine High School is in the El Dorado Union High School District and serves grades 9-12 (El Dorado Union High School District 2023).

3.11.1.5 Public Library

There are eleven public libraries in Diamond Springs including: the El Dorado County Library, the El Dorado County Law Library, the El Dorado County Library - El Dorado Hills Branch, the El Dorado County Library - South Lake Tahoe Branch, Lake Tahoe Community College Library, Sacramento Public Library, Oakridge Library, Marshall Community Health Library, El Dorado County Library-Cameron Park Branch, the El Dorado County Library - Pollock Pines Branch, the Placerville Library, and the El Dorado Hills Library. The closest nearby public library to the project site is the El Dorado County Library, which is approximately 3.40 miles North.

3.11.2 Regulatory Setting

3.11.2.1 Federal

There are no applicable federal regulations regarding the provision of local services or recreational facilities.

3.11.2.2 State

Uniform Fire Code

The Uniform Fire Code (UFC) provides regulations relating to construction, maintenance, and use of buildings. Topics addressed in the UFC include fire department access, fire hydrants, automatic storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The code contains specialized technical regulations relation contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code. Specifically, regulations are for building standards as described in the California Building Code (CBC), fire protection and notification systems, fire protection devises (such as extinguishers and smoke alarms), high-rise buildings, childcare facility standards, and fire suppression training.

Division of Occupational Safety and Health

In accordance with California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Equipment, the Division of Occupational Safety and Health (DOSH) has established minimum standards

for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hosing sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

Quimby Act

The Quimby Act (California Government Code Section 66477) preserves open space and parkland in urbanizing areas of the state by authorizing local governments to establish ordinances requiring developers of new subdivisions to dedicate land for parks, pay an in-lieu fee, or perform a combination of the two. The Quimby Act provides two standards for the dedication of land for use as parkland. If the existing area of parkland in a community is 3 acres or more per 1,000 persons, then the community may require dedication based on a standard of 5 acres per 1,000 persons residing in the subdivision. If the existing amount of parkland in a community is less than 3 acres per 1,000 persons, then the community may require dedication based on a standard of only 3 acres per 1,000 persons residing in the subdivision. The Quimby Act requires a City or County to adopt standards for recreational facilities in its general plan recreation element if it is to adopt a parkland dedication/fee ordinance.

The amount of land dedicated, or fees paid shall be based upon the residential density, which shall be determined on the basis of the approved or conditionally approved tentative map or parcel map and the average number of persons per household. There shall be a rebuttable presumption that the average number of persons per household by units in a structure is the same as that disclosed by the most recent available federal census or a census taken pursuant to Chapter 17 (commencing with Section 40200) of Part 2 of Division 3 of Title 4.

California Code of Regulations

The California Code of Regulations, Title 5 Education Code, governs all aspects of education within the state.

Leroy F. Greene School Facilities Act of 1998

This bill, commonly known as “SB 50,” was passed in 1998 and placed limitations on cities and counties with respect to mitigation requirements for school facilities. SB 50 permits school districts to levy fees, based on justification studies, for the purposes of funding construction of school facilities, subject to established limits. The limits were set in 2000, can be adjusted annually for inflation, and can be leveed based on the square footage of residential (up to $1.93 per square foot in 2000) and commercial-industrial square footage (up to $0.31 per square foot in 2000).

3.11.2.3 Local

El Dorado County General Plan

The El Dorado County General Plan provides for long-range direction and policy for the use of land within El Dorado County. General Plan polices applicable to public services and recreation are addressed in the Public Facilities Element, the Economic Development Element, and the Parks and Recreation Element. Applicable goals and policies from these elements are listed below.

Public Services and Utilities Element

Goal 5.1. Provision of Public Services. Provide and maintain a system of safe, adequate, and cost- effective public utilities and services; maintain an adequate level of service to existing development while allowing for additional growth in an efficient manner; and, ensure a safe and adequate water supply, wastewater disposal, and appropriate public services for rural areas.

Policy 5.1.2.1. Prior to the approval of any discretionary development, the approving authority shall make a determination of the adequacy of the public services and utilities to be impacted by that development. Where, according to the purveyor responsible for the service or utility as provided in Table 5-1 [of the general plan], demand is determined to exceed capacity, the approval of the development shall be conditioned to require expansion of the impacted facility or service to be available concurrent with the demand, mitigated, or a finding made that a Capital Improvement Program project is funded and authorized which will increase service capacity.

Policy 5.1.2.2. Provision of public services to new discretionary development shall not result in a reduction of service below minimum established standards to current users, pursuant to Table 4.13-3. The following Levels of Service shall apply to the review of discretionary projects:

Table 3.11–1. (General Plan Table 5-1)
El Dorado County General Plan- Minimum Levels of Service

	Community Region	Rural Center and Rural Region
Schools	As determined appropriate by the school districts	As determined appropriate by the school districts
Parks	Specific plan for new communities or Quimby Fee/dedication program for tentative maps	Quimby Fee/dedication program for tentative maps
Fire district response	8-minute response to 80% of the population	15 to 45-minute response
Sheriff	8-minute response to 80% of the population	No standard
Ambulance	10-minute response to 80% of the population	20-minute response in Rural Regions and “as quickly as possible” in wilderness areas*

*In accordance with state standards

Policy 5.1.3.1. Growth and development and public facility expenditures shall be primarily directed to Community Regions and Rural Centers.

Policy 5.6.1.2. Reserve adequate rights-of-way to facilitate expansion of services in a timely manner.

Goal 5.7. Emergency Services. Adequate and comprehensive emergency services, including fire protection, law enforcement, and emergency medical services.

Policy 5.7.1.1. Prior to approval of new development, the applicant will be required to demonstrate that adequate emergency water supply, storage, conveyance facilities, and access for fire protection either are or will be provided concurrent with development.

Policy 5.7.3.1. Prior to approval of new development, the Sheriff's Department shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.

Policy 5.7.4.1. Prior to approval of new development, the applicant shall be required to demonstrate that adequate medical emergency services are available and that adequate emergency vehicle access will be provided concurrent with development.

Policy 5.7.4.2. Prior to approval of new development, the Emergency Medical Services Agency shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.

Policy 5.8.1.1. School districts affected by a proposed development shall be relied on to evaluate the development's adverse impacts on school facilities or the demand therefore. No development that will result in such impacts shall be approved unless:

- To the extent allowed by State law, the applicant, and the appropriate school district(s) have entered into a written agreement regarding the mitigation of impacts to school facilities; or
- The impacts to school facilities resulting from the development are mitigated, through conditions of approval, to the greatest extent allowed by State law

Policy 5.8.2.2. The affected school district shall be relied upon to review development applications to determine the ability of the district to serve the new development. The level of educational services shall not be reduced below acceptable levels as a consequence of new development to the extent permitted by State law.

Economic Development Element

Goal 10.2. Public Services and Infrastructure. Provide adequate levels of public services and infrastructure for existing residents and targeted industries and establish equitable methods to assure funding of needed improvements to existing infrastructure and services and new facilities to further economic development consistent with the County's custom, culture, and economic stability.

Policy 10.2.1.5. A public facilities and services financing plan that assures that costs burdens of any civic, public, and community facilities, infrastructure, ongoing services, including operations and maintenance necessitated by a development proposal, as defined below, are adequately financed to assure no net cost burden to existing residents shall be submitted with the following development applications:

A. Specific plans; and
B. All residential, commercial, and industrial projects located within a Community Region or Rural Center which exceed the following thresholds:
    a. Residential 50 units

b. Commercial 20 acres or 100,000 square feet

c. Industrial 20 acres or 250,000 square feet

Parks and Recreation Element

Goal 9.1. Parks and Recreation Facilities. Provide adequate recreation opportunities and facilities including developed regional and community parks, trails, and resource-based recreation areas for the health and welfare of all residents and visitors of El Dorado County.

Policy 9.1.1.1 The County shall assist in the development of regional, community, and neighborhood parks, ensure a diverse range of recreational opportunities at a regional, community, and neighborhood level, and provide park design guidelines and development standards for park development. The following national standards shall be used as guidelines for the acquisition and development of park facilities:

Table 3.11-2. (General Plan Policy 9.1.1.1)

Guidelines for Acquisition and Development of Park Facilities	
Park Types	**Developed**
Regional Parks	1.5 ac/1,000 population
Community Parks	1.5 ac/1,000 population
Neighborhood Parks	2.0 ac/1,000 population
Specific Standards (Neighborhood and Community Parks)	
Cameron Park Community Services District	5.0 ac/1,000 population
El Dorado Hills Community Services District	5.0 ac/1,000 population
Planned Communities	5.0 ac/1,000 population

The parkland dedication/in-lieu fees shall be directed towards the purchase and funding of neighborhood and community parks.

Policy 9.1.1.2. Neighborhood parks shall be primarily focused on serving walk-to or bike to recreation needs. When possible, neighborhood parks should be adjacent to schools. Neighborhood parks are generally 2 to 10 acres in size and may include a playground, tot lot, turf areas, and picnic facilities.

Policy 9.1.1.3. Community parks and recreation facilities shall provide a focal point and gathering place for the larger community. Community parks are generally 10 to 44 acres in size, are for use by all sectors and age groups, and may include multi-purpose fields, ball fields, group picnic areas, playground, tot lot, multi-purpose hardcourts, swimming pool, tennis courts, and a community center.

Goal 9.2. Funding. Secure an adequate and stable source of funding to implement a comprehensive County-wide parks and recreation plan.

Objective 9.2.2. Quimby Act. Land dedicated to the County under the Quimby Act and Quimby in-lieu fees shall continue to be used primarily to meet neighborhood park needs but may assist in meeting the community park standards as well.

Policy 9.2.2.1. The Parks and Recreation Commission shall review all tentative subdivision maps of 50 parcels or more outside community service districts and special recreation district boundaries and will provide recommendations to the Planning Commission for appropriate provision of recreation services.

Policy 9.2.2.2. New development projects creating community or neighborhood parks shall provide mechanisms (e.g., homeowners associations, or benefit assessment districts) for the ongoing development, operation, and maintenance needs of these facilities if annexation to an existing parks and recreation service district/provider is not possible.

Policy 9.2.2.5. The County shall establish a development fee program applicable to all new development to fund park and recreation improvements and acquisition of parklands such that minimum neighborhood, community, and regional park standards are achieved. This fee is in addition to Quimby Act requirements that address parkland acquisition only. The fee will be adjusted periodically to fully fund the improvements identified in the Parks and Capital Improvement Program concurrent with development over a five-year period.

3.11.3 Environmental Impacts and Mitigation Measures

3.11.3.1 Methodology

This impact evaluation for public services and recreation is based on a review of documents identifying current service levels and facilities, and review by relevant County departments. Impacts on public services that would result from the project were identified by comparing existing service capacity and facilities against future demand associated with project implementation. This impact evaluation assumes that the proposed project would comply with the relevant state and local ordinances and regulations, as well as the General Plan policies presented above in the regulatory setting.

3.11.3.2 Thresholds of Significance

The Thresholds of Significance criteria used to evaluate the project's impacts to Public Services and Recreation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to public services and recreation would occur if the project would:

A. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: Fire Protection, Police Protection, Schools, Parks, and Other Public Facilities.
B. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
C. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Regarding the last threshold, the proposed project is a community park consisting of multiple sport courts and fields with associated restrooms, picnic structures, play area, and lighting structures (see Chapter 2, Project Description).

The construction and operation of the proposed recreational facility is the topic of this EIR, and is addressed in each of the impact discussions.

3.11.3.3 Impact Discussion

The Proposed Project would have less than significant impacts with respect to the following thresholds of significance as described below.

Impact SER-1 The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services: Fire Protection, Police Protection, Schools, Parks, and Other Public Facilities.

The project involves the construction of the public park. No residential development would occur. There would be no permanent increase in residential population, therefore school enrollment and library usage would not increase as a result of the project. The presence of park users may increase demand for fire and police response. However, additional service calls would not be substantial and would be accommodated by existing facilities. Additionally, the proposed project and multi-use building may serve as a potential staging area and community center used in the event of emergencies, for resilience, and for evacuation or police/fire operations. If an emergency were to occur at the proposed project site, emergency personnel would have increased access to the park with the proposed emergency access road improvements.

The project would have a positive effect on park services, by providing a community park in an area that does not currently have such a facility. The impacts of constructing and operating the proposed park are the topic of this EIR and are addressed in other chapters.

Therefore, the impact of the proposed project on public services would be **less than significant.**

Impact SER-2 The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

The project would address existing demand for park usage in the project area. The project would therefore have a beneficial effect on other recreational facilities currently serving the Diamond Springs population. Therefore, the project would have **no impact**.

3.11.3.4 Cumulative Impacts

The cumulative projects, which mainly involve residential projects, would have a moderate effect on public services. The cumulative projects discussed in section 3.0 Intro to Analysis may increase the service population or generate additional visitors. The cumulative projects would require additional public services. The cumulative projects are consistent with the County General Plan and its expected growth. General Plan policies address future service needs. In addition, the proposed project addresses a need for park services, and would have minimal impact to other public services, including police and fire (which it would also benefit by providing a staging area for emergency services). Thus, cumulative impacts to public services would be less than significant.

3.11.3.5 Mitigation Measures

No mitigation measures are required.

3.11.4 References

California Department of Forestry and Fire Protection. 2007. Fire Hazard Severity Zones in State Responsibility Areas. Adopted November 7, 2007.

El Dorado County. 2021. *Dorado Oaks Draft EIR*. SCH# 2019071041. July 2021.

El Dorado County Fire Protection District. 2020. *2020 Annual Report:* https://www.eldoradocountyfire.com/files/6f64b43bd/2020-Annual-Report-Final.pdf

El Dorado County Office of Emergency Services. 2023. https://www.edcgov.us/Government/sheriff/Support/Pages/office_of_emergency_services_(oes).aspx Accessed April 26, 2023.

El Dorado County Sheriff's Office. 2021. *2021 Annual Report: Studio Report.*

El Dorado County. 2012. *Final Parks and Trails Master Plan*. March 27, 2012:

El Dorado Union High School District. 2023. Union Mine High School website. https://umhs.eduhsd.k12.ca.us/ Accessed April 26, 2023.

Mother Lode Union School District. 2023: Charles Brown Learning Academy website. https://www.mlusd.net/o/cbala Accessed April 26, 2023.

3.12 Transportation

This section describes the applicable federal, state, and local regulations and policies related to transportation and circulation; discusses the existing roadway network and transportation facilities in the County; and analyzes the potential impacts from implementation of the project on transportation and circulation. Information contained in this section is based on publicly available data as well as the Diamond Springs Community Park Project Transportation Impact Study, prepared by Dudek, August 2023 (Appendix H of this EIR).

Several scoping comments were received regarding concerns with increased traffic and access. Scoping letters are included in Appendix A of this EIR.

3.12.1 Existing Conditions

This section provides a summary of the existing street network, including the major roadways serving the Project site, the existing transit service, and bicycle and pedestrian facilities in the study area. Figure 3.12-1, Project Site Location and Study Area, provides a regional location map and the transportation study area.

3.12.1.1 Roadway Network

Community access to the site would be provided from US Highway 50 (US-50) and State Route 49 (SR-49). Characteristics of the primary roadways within the study area are described below.

State Route 49 (SR-49) – SR-49 (also called Golden Chain Highway) is an east-west highway located north of the Project site. According to the El Dorado County General Plan, it is classified as a Major Two-Lane Road. SR-49 provides community connections to other major roadways such as US-50, Pleasant Valley Road, Missouri Flat Road, and Mother Lode Drive. West of Missouri Flat Road, SR-49 is also co-named Pleasant Valley Road before the road diverges southward in the Diamond Springs community area. There are bicycle lanes as part of the shoulder of the road where sufficient width exists and pedestrian facilities are present for portions of the roadway length and near commercial areas. The posted speed limit is generally 45 miles per hour (MPH) with reductions near residential and commercial areas.

Pleasant Valley Road is an east-west, two-lane undivided arterial roadway located to the north of the project. Pleasant Valley Road transitions to SR-49 for approximately two miles, from Union Mine Road in the west, to Fowler Lane in the east. Pleasant Valley Road is designated as a Major Two-Lane Road according to the El Dorado County General Plan. The posted speed limit is generally 45 MPH with reductions near residential and commercial areas.

Oak Dell Road is a north-south, two-lane, undivided local roadway northwest of the Project site. Oak Dell Road provides direct access to the project, and connects the project to SR-49. Oak Dell Road is designated as a Local Road according to the El Dorado County General Plan. There are no specific bicycle or pedestrian facilities present. The posted speed limit is 20 MPH.

Koki Lane is a north-south, two-lane undivided local roadway west of the Project site. Koki Lane is designated as a Local Road according to the El Dorado County General Plan. There are no specific bicycle or pedestrian facilities present. The posted speed limit is 25 MPH.

El Dorado Road is a north-south, two-lane undivided local roadway located to the northwest of the Project site. El Dorado Road is currently designated as a major collector according to the El Dorado County General Plan. There are no specific bicycle or pedestrian facilities present. The posted speed limit is 40 MPH.

Forni Road is a north-south, two-lane undivided local roadway west of the Project site. Forni Road is currently designated as a major collector according to the El Dorado County General Plan. There are no specific bicycle or pedestrian facilities present. The posted speed limit is 35 MPH.

Patterson Drive is a north-south, two-lane undivided local roadway, located northeast of the Project site. Patterson Drive is designated as a Local Road according to the El Dorado County General Plan. There are no specific bicycle or pedestrian facilities present. The posted speed limit is 35 MPH.

Missouri Flat Road is a north-south collector roadway that provides local access to SR-49. It is a two-lane, undivided roadway located to the northeast of the project. It is currently a four-lane road north of Golden Center Drive (south) and a two-lane road from Golden Center (south) to SR-49/Pleasant Valley Road. Missouri Flat Road is currently designated as a minor arterial according to the El Dorado County General Plan, but will be updated to be a Four-Lane, Undivided Road for its entire length in the 2035 Circulation System. There are no specific bicycle or pedestrian facilities present. The posted speed limit is 45 MPH.

The proposed project includes road improvements for SR 49 and Snoopy Road. SR 49 will be widened as necessary at Oak Dell Road and restriped to provide for a dedicated left turn lane on westbound SR 49. Oak Dell Road will have right and left turn lanes at SR 49. Snoopy Road is currently a private dirt road and will be resurfaced with aggregate base for secondary emergency vehicle access to the proposed park. The proposed road improvements are presented in Figure 3.12-2.

3.12.1.3 Transit

El Dorado County is served by bus services provided by El Dorado Transit Authority, which provides community and local services throughout the County. The transit providers are described below. Figure 3.12-3 displays the existing transit facilities in the project vicinity.

El Dorado Transit Authority

El Dorado Transit Authority serves the Diamond Springs community, and the project is served by the coexisting bus lines: Route 30 and Route 35. Route 30 provides service Mondays through Friday from 7:00am to 7:00pm, and Route 35 provides service on Saturdays from 7:00 a.m. to 7:00 p.m., both provide headways of 60-minutes. The nearest bus stop to the project site is located approximately 0.25 miles away at Pleasant Valley Road and Oro Lane (El Dorado Transit 2023).

El Dorado Transit also offers three paratransit services for persons with special needs within the El Dorado and Sacramento counties. Dial-a-Ride is a curb-to-curb service available to seniors and persons with disabilities. This service can be reserved in advanced by passengers and is fulfilled on a first-come, first-serve basis. ADA Paratransit is an origin to destination service that operates during the same hours as the local fixed route services. Sac-Med is a shared-ride non-emergency medical appointment transportation service available to seniors and persons with disabilities who are registered in the El Dorado Transit system. This service operates on Tuesdays and Thursdays, between 10:00 a.m. and 2:00 p.m., and only for transportation to and from medical appointments (El Dorado Transit 2023).

3.12.1.2 Pedestrian and Bicycle Facilities

The project site is located in an area of the county with little to no-existing pedestrian or bicycle facilities in the immediate vicinity of the site. The El Dorado County Active Transportation Plan (ATP) (2020) has identified areas for improvement near the project site. It should be noted that the ATP has not been evaluated under CEQA nor considered by the Board of Supervisors. Figure 3.12-4 presents the existing and planned bicycle facilities.

As identified by the ATP, the following classes are used to identify bicycle facilities within the County:

> **Class I Bike Paths** are hard-surface routes within an exclusive right-of-way physically separated from vehicular roadways and intended specifically for non-motorized use.
>
> **Class II Bike Paths** are marked bicycle lanes within roadways adjacent to the curb lane, delineated by appropriate striping and signage.
>
> **Class III Bike Paths** are marked by a series of signs designating a preferred route between destinations such as residential neighborhoods and shopping areas. These routes share the right-of-way with on-road vehicles.

There are few bicycle facilities presently located near the project site, and the ATP has proposed plans to add a Class II Bicycle Lane to Pleasant Valley Road. SR-49/Pleasant Valley Road functions as a highway with designated bicycle lanes, however due to the roadway constraints the bicycle lanes along SR-49/Pleasant Valley Road are along the shoulder of the road and in some instances unprotected from traffic. There are plans provided in the ATP to provide formalized Class II bicycle lanes when construction is possible. There are few pedestrian facilities located near the project site, but the ATP has proposed plans to add and improve sidewalks along SR-49/Pleasant Valley Road and Oak Dell Road. Access for both pedestrians and bicyclists would be provided via the main entrance to the park along Oak Dell Road, as well as through pedestrian easements located along Snoopy Road, at the southwest corner of the site. Additional pedestrian and bicycle connectivity may be provided during certain times when Union Mine High School's parking gates are opened. There are also some existing, however limited areas of pedestrian facilities located along the perimeter of Charles F. Brown Elementary.

3.12.2 Regulatory Framework

3.12.2.1 Federal

There are no federal regulations related to transportation that are directly applicable to the proposed project.

3.12.2.2 State

California Department of Transportation

The California Department of Transportation (Caltrans) manages the state's highway facilities. Caltrans is responsible for constructing, enhancing, and maintaining the state highway and interstate freeway systems. Any change to the state roadway system requires an encroachment permit from Caltrans.

As stated in the Transportation and Circulation Element, the Route Concept Report, State Route 49 contains the 20-year improvement concept for SR 49. The route concept recognizes the unique nature of SR 49 in terms of historical and topographic constraints, which preclude the possibility of significantly improving the highway on its

existing alignment. As such, SR 49 would remain a two-lane conventional highway through El Dorado County. Some improvements, such as widening to the Caltrans 40-foot pavement standard, are identified to achieve the full concept facility. The concept LOS is F south of the community of El Dorado and through the city of Placerville. All other segments have a concept service level of LOS E. Ultimately, some segments would require widening to four lanes or spot improvements (i.e., passing lanes or improvements for bicycle and pedestrian travel).

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which created a process to change the way transportation impacts are analyzed under the California Environmental Quality Act (CEQA). SB 743 required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to level of service (LOS) as the metric for evaluating transportation/traffic impacts. Under the new transportation guidelines, LOS or vehicle delay, is no longer considered an environmental impact under CEQA. Amendments to the CEQA Guidelines required under SB 743 were approved on December 28, 2018, and the new section 15064.3 identifies vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts under CEQA and is currently being implemented as of July 1, 2020. Related legislation, SB 32 (2016) requires California to reduce greenhouse gas emissions 40% below 1990 levels by 2030. The California Air Resources Board has determined that it is not possible to achieve this goal without reducing VMT growth and specifically California needs to reduce per capita VMT across all economic sectors. SB 743 is primarily focused on passenger-cars and the reduction in per capita VMT as it relates to individual trips.

The OPR Technical Advisory (OPR 2018) provides guidance and tools to properly carry out the principles within SB 743 and how to evaluate transportation impacts in CEQA. The County of El Dorado has adopted VMT thresholds as described in Section 3.12.2.3.

3.12.2.3 Local

El Dorado County Resolution 141-2020

In accordance with SB 743 the El Dorado County Board of Supervisors adopted Resolution No 141-2020 which adopts thresholds of significance for land use projects for the purposes of analyzing transportation impacts under CEQA (El Dorado 2020); the VMT analysis prepared for the project follows these guidelines for SB 743 compliance. Per the County's guidelines, projects shall analyze VMT metrics when exemption criteria are not met. The County's guidelines and accompanying thresholds are consistent with and rely on the assumptions made within the OPR Technical Advisory guidelines.

CEQA Guidelines Section 15064.3 (b)(1) *Criteria for Analyzing Transportation Impacts* includes presumptions that certain projects (including residential, retail, office, and mixed-use projects) proposed within one-half mile of an existing major transit stop or along a high-quality transit corridor will have a less-than-significant impact on VMT. If the specified presumption does not apply, VMT should be analyzed through a qualitative or quantitative analysis. The Updated CEQA Guidelines are accompanied by the OPR Technical Advisory, which includes specifications for how to estimate and forecast VMT. Additionally, Section 15064.3 (b)(3) *Qualitative Analysis* mentions if existing models or methods are not available to estimate the VMT for the particular project being considered, a lead agency may analyze the project's vehicle miles qualitatively. Such qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. The following method, Assessing Change in Total VMT, from the Technical Advisory is the primary method used in the VMT analysis for the project:

Assessing Change in Total VMT

> "A third method, estimating the change in total VMT with and without the project, can evaluate whether a project is likely to divert existing trips, and what the effect of those diversions will be on total VMT. This method answers the question, "What is the net effect of the project on area VMT?" As an illustration, assessing the total change in VMT for a grocery store built in a food desert that diverts trips from more distant stores could reveal a net VMT reduction. The analysis should address the full area over which the project affects travel behavior, even if the effect on travel behavior crosses political boundaries".

OPR recommends using more location-specific information and local jurisdictions to develop their own more specific thresholds, which may include other land use types. In developing thresholds for other project types, or thresholds different from those recommended here, lead agencies should consider the purposes described in section 21099 of the Public Resources Code and regulations in the CEQA Guidelines on the development of thresholds of significance (e.g., CEQA Guidelines, § 15064.7). Strategies and projects that decrease local VMT but increase total VMT should be avoided. Agencies should also consider whether their actions encourage development in a less travel-efficient location by limiting development in travel-efficient locations.

El Dorado County General Plan

The Transportation and Circulation Element of the El Dorado County General Plan provides the framework for decisions in El Dorado County concerning the countywide transportation system. The system includes facilities for various transportation modes, including roads, transit, non-motorized, rail, and aviation. The Transportation and Circulation Element provides for coordination with the incorporated cities within the county, the El Dorado County Transportation Commission, the Sacramento Area Council of Governments, the Tahoe Regional Planning Agency, and state and federal agencies that fund and manage the county's transportation facilities. The Transportation and Circulation Element reflects the urban and rural diversity of the unincorporated areas of El Dorado County and establishes standards that guide development of the transportation system, including access to the road and highway system required by new development (El Dorado County 2019). Specific goals and policies identified in the Transportation and Circulation Element that are relevant to the proposed project are identified below.

Goal TC-1: To plan for and provide a unified, coordinated, and cost-efficient countywide road and highway system that ensures the safe, orderly, and efficient movement of people and goods.

Policy TC-1a: Road design standards for County-maintained roads shall be based on the American Association of State Highway and Transportation Officials (AASHTO) standards, and supplemented by California Department of Transportation (Caltrans) design standards and by County Department of Transportation standards.

Policy TC-1w: New streets and improvements to existing rural roads necessitated by new development shall be designed to minimize visual impacts, preserve rural character, and ensure neighborhood quality to the extent possible consistent with the needs of emergency access, on street parking, and vehicular and pedestrian safety.

Goal TC-2: To promote a safe and efficient transit system that provides service to all residents, including senior citizens, youths, the disabled, and those without access to automobiles that also helps to reduce congestion, and improves the environment.

Policy TC-3d: Signalized intersections shall be synchronized where possible as a means to reduce congestion, conserve energy, and improve air quality

Goal TC-4: To provide a safe, continuous, and easily accessible non-motorized transportation system that facilitates the use of the viable alternative transportation modes.

Policy TC-4i: Within Community Regions and Rural Centers, all development shall include pedestrian/bike paths connecting to adjacent development and to schools, parks, commercial areas and other facilities where feasible. In Rural Regions, pedestrian/bike paths shall be considered as appropriate.

Policy TC-4g: The County shall support development of facilities that help link bicycling with other modes of transportation.

Goal TC-5: To provide safe, continuous, and accessible sidewalks and pedestrian facilities as a viable alternative transportation mode.

Policy TC-5c: Roads adjacent to schools or parks shall have curbs and sidewalks

Goal TC-9: To support the development of complete streets where new or substantially improved roadways shall safely accommodate all users, including bicyclist, pedestrians, transit riders, children, older people, and disabled people, as well as motorist.

Policy TC-9a: Incorporate circulation concepts that accommodate all users in new developments as appropriate.

El Dorado County 2040 Regional Transportation Plan

The El Dorado County 2020-2040 Regional Transportation Plan (RTP) was developed under the direction of the El Dorado County Transportation Commission (EDCTC). The RTP is designed to be a guide for the systematic development of a balanced, comprehensive, multi-modal transportation system. This system includes but is not limited to: highways, streets and interregional roadways, public transit, aviation, freight/goods movement, active transportation (bikeways and pedestrian facilities), transportation systems management, and intelligent transportation systems. The RTP is action oriented and pragmatic, considering both the short-term (up to 10 years) and long-term (10 to 20 year) periods. The El Dorado County RTP also serves as the El Dorado County portion of the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan (MTP) (EDCTC 2020a).

The goals of the RTP embody a general set of strategies by which EDCTC, working as part of a regional context comprised of the interests of public citizens, local governments, non-profit organizations, and the business community, help the region achieve the desired future. The RTP includes the following relevant goals to the proposed project:

Goal 1: Integrated Land Use, Air Quality, And Transportation Planning. Integrate local and regional land use, air quality, and transportation planning to create a transportation system which supports the needs of the system user, enhances the economy, preserves the environment, and protects the community character.

Goal 2: Sustainability. Encourage sustainable transportation options, embrace new technologies and develop climate adaptation and resiliency strategies.

Goal 3: Highways, Streets, And Regional/Inter-Regional Roadways. Optimize the existing local, interregional and regionally significant roadway system to support improved maintenance, increased throughput, improved safety and multi-modal mobility.

Goal 4: Public Transit. Promote a convenient, desirable, and reliable regional and interregional public transit system for residents and visitors travelling within, to, and beyond El Dorado County.

Goal 6: Active Transportation. Promote a safe, convenient, and efficient active transportation system for all users.

El Dorado County Active Transportation Plan

The EDCTC, developed and adopted the El Dorado County Active Transportation Plan (ATP) on February 6, 2020 (EDCTC 2020b). Once adopted by the County Board of Supervisors, the plan will serve as the update to the County's Bicycle Transportation Plan. The ATP outlines the existing conditions and proposed development of a bicycle transportation system in El Dorado County, as well as improvements to pedestrian facilities. As previously noted, planned improvements in the project vicinity include adding a Class II Bicycle Lane to Pleasant Valley Road and plans to add and improve sidewalks along SR-49/Pleasant Valley Road and Oak Dell Road. The updated plan demonstrates compliance with the California Streets and Highway Code, enabling the County to be eligible for State Bicycle Transportation Account Funds.

El Dorado County Transportation Impact Fee (TIF) Program

The County utilizes its Capital Improvement Program (CIP) to identify and prioritize future transportation investments to meet the County's existing and future transportation needs. CIP projects can include roadways, intersections, sidewalks, bicycle lanes, traffic calming treatments, transit service improvement projects, and ongoing administrative costs for transportation monitoring programs, including traffic model update costs, traffic study guideline updates, and updates to the Transportation and Circulation Element to the County's General Plan. Funding for most CIP projects is provided from a variety of sources including state and/or federal grants, and the County's Traffic Impact Fee (TIF) Program. This program is required by General Plan Policy TC-Xb. The TIF Program is used to fund needed improvements including roadway widening, new roadways, roadway intersection improvements, and transit to deal with future growth during a defined period of time.

Major updates to the CIP and TIF Program are made by the County at least every five years as required by State law and General Plan policies. The most recent update to the Western Slope Roadway CIP and TIF Program was completed and certified by the County Board of Supervisors in 2020. The current TIF Program is based on 20 years of growth and TIF Program-funded improvements are part of the CIP

3.12.3 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts associated with the proposed project related to transportation. The section identifies the thresholds of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the proposed project's impacts and contribution to significant cumulative impacts, if any are identified. Mitigation measures are presented for identified significant or potentially significant impacts, and the level of significance with mitigation also is identified.

3.12.3.1 Thresholds of Significance

The thresholds of significance used to evaluate the impacts of the proposed project related to transportation are based on Public Resources Code Section 15064.3, Appendix G of the CEQA Guidelines and the VMT thresholds and Implementation Guidelines adopted by El Dorado County described in Section 3.12.2. A significant impact would occur if the proposed project would:

A. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
B. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Specifically, cause an increase in VMT which is greater than 15% below the existing VMT per capita.
C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
D. Result in inadequate emergency access.

3.12.3.2 Analytical Methods

Transportation information and data for this analysis was primarily obtained from the Diamond Springs Community Park Project Transportation Impact Study, prepared by Dudek, August 2023 (Appendix H). In addition, the programs, plans, ordinances, and policies listed in Section 3.12.2, were analyzed for their applicability to the proposed project.

3.12.3.3 Project Impact Analysis

Impact TRF-1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, as discussed further below.

El Dorado County General Plan and ATP

The proposed Project would not conflict with the circulation policies within the County's Transportation and Circulation Element of General Plan, or the County's ATP. The Transportation and Circulation Element includes goals to provide a unified, coordinated, and cost-efficient countywide road and highway system that ensures the safe, orderly, and efficient movement of people and goods; promote a safe and efficient transit system that provides service to all residents; and provide a safe, continuous, and easily accessible non-motorized transportation system (e.g. pedestrian and bicycle facilities).

The project is proposing to widen and restripe SR 49 as necessary at Oak Dell Road and to provide for a dedicated left turn lane on westbound SR 49. Oak Dell Road will have right and left turn lanes at SR 49. The improvements are intended to enhance vehicle circulation and site access and would not hinder the County's ability to provide a unified, coordinated, and cost-efficient countywide road and highway system. The Project would not include site improvements that would interfere with existing public transit, bicycle, or pedestrian facilities, or impede the construction of new or the expansion of such existing facilities in the future. Access for both pedestrians and bicyclists would be provided via the main entrance to the park along Oak Dell Road, as well as through pedestrian easements located along Snoopy Road, at the southwest corner of the site. Site improvements would also include

bike stalls and pedestrian pathways throughout the site. All pedestrian areas within the Project site would meet American Disability Act requirements and adhere to the County's design guidelines. Bicyclist and pedestrian safety would be maintained at existing levels in the area. Additionally, the Project would not conflict with or result in the change of bus routes in the study area; therefore, the Project would not severely delay, impact, or reduce the service level of transit in the area.

RTP Consistency Analysis

The overarching goals of the RTP are to create a transportation system which supports the needs of the system user, enhance the economy, preserve the environment, and protect the community character. Goals also include supporting sustainable transportation options, optimizing the existing local, interregional and regionally significant roadway system to support improved safety and multi-modal mobility, and to promote a convenient, desirable, and reliable public transit system and active transportation system for all users. As discussed above, the project would include roadway improvements to SR 49 and Oak Dell Road, thereby optimizing the existing roadway system while providing improved access to the site. The project also would not include site improvements that would interfere with existing infrastructure supporting multi-modal mobility or impede the construction of new or the expansion of such existing facilities in the future. For these reasons, proposed project would not conflict with the applicable goals in the RTP.

Therefore, the project would not adversely affect, in a manner that conflicts with, an applicable program, plan, ordinance, or policy addressing the performance of the circulation system, including public transit, roadway, bicycle or pedestrian facilities. Impacts would be **less than significant**.

Impact TRF-2: The project would not be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Operation of the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) or cause an increase in VMT that exceeds the County threshold (greater than 15% below the existing VMT per capita).

As described in Section 3.12.2.2, OPR allows for the estimating of the project to change total VMT based on whether the project is likely to divert existing trips. Additionally, Section 15064.3 (b)(3) allows for a Qualitative Analysis if existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, and the lead agency may analyze the project's vehicle miles qualitatively.

The project would consist of a community park and will mainly be serving the immediate community of Diamond Springs, as well as other neighborhoods within the region. Many of the existing parks in the immediate vicinity of the area are either located within private or public school property and therefore are not accessible during school hours, or are located within neighborhoods to provide a small recreational area only for the immediate needs of residents nearby. The proposed project would provide six ball fields, for both baseball/softball, as well as other field sports, including an indoor recreational facility. The nearest park that would be a similar size and usefulness for the immediate Diamond Springs community is located in Folsom approximately 15-miles west of the proposed project. Therefore, the County would benefit from developing the site to serve the Diamond Springs community and provide for multiple uses to occur simultaneously between different sports and recreational opportunities.

The location of the project site would reduce the need for those in the Placerville and Diamond Springs communities to travel along US-50 (the major east-west freeway in the area) and would further reduce longer trips to potentially even further urban areas in Sacramento or Lake Tahoe. During normal weekday and Saturday operations, the park

would draw local traffic and would be utilized primarily by local residents. During tournaments or larger events that may occurring 8-10 times per year, the park can utilize its location and ability to provide potential overflow parking with Union Mine High School.

Therefore, based on the project's configured uses, and its location in an area where similar uses are not provided, the project's potential to divert traffic from parks much further, the proposed project's impact to vehicle miles traveled would be **less than significant**.

Impact TRF-3: The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

The proposed project would not increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Access to the project site would be provided via an entrance from Oak Dell Road, utilizing the existing Oak Dell Road/Golden Chain Highway (SR-49) intersection. SR 49 will be widened and restriped as necessary at Oak Dell Road and to provide for a dedicated left turn lane on westbound SR 49. Oak Dell Road will have right and left turn lanes at SR 49. Paved passenger vehicle parking areas would be provided within areas in the middle of the buildable site area and predominantly on the western boundary of the overall site. Paved paths for pedestrians and bicyclists will be created for travel between fields, courts, and the recreational building. Turnaround areas would also be provided within the parking lot for each adjacent section of the park, and would allow for vehicles to turnaround, drop-off, load, and unload safely.

Due to the size and ability of the park to provide for multiple fields to be utilized simultaneously, the park may host larger events that require additional coordination and participation of the adjacent Union Mine High School. This coordination would be fully agreed upon prior to the operation of the site and would include the potential use of Union Mine High School's parking lots and areas where pedestrians would walk to and from the project site. This would likely occur approximately 8-10 times per year.

The proposed project completed circulation and sight distance analyses as part of the Diamond Springs Community Park Project Transportation Impact Study provided in Appendix H. All roadway improvements, whether located on or off site, would be designed and constructed in accordance with all applicable local, state, and federal roadway standards and practices. Snoopy Road, as well as Oak Dell Road will be improved to provide adequate and useable roadway for all vehicles including emergency access vehicles. There would no increase in hazards due to a geometric design feature.

The sight distance analysis (Appendix H) was conducted using the methodology from the Caltrans Highway Design Manual (HDM) (2020). The Caltrans HDM provides minimum sight distance standards for intersections, however at certain locations and instances, sight distance greater than stopping sight distance is desirable to allow time for decisions without making last minute erratic maneuvers. The Caltrans HDM refers to the American Association of State Highway Transportation Officials' (AASHTO, 2018) – Geometric Design of Highways and Streets ("Green Book") as a reference for such cases . Therefore, the AASHTO criteria used in these instances are more conservative than the sight distance standards listed in the Caltrans HDM. Stopping sight distance is the distance needed for a vehicle traveling at a specified design speed to react, assess, and then stop when an object crosses its path of travel. Sight distance for vehicles entering a major road from a driveway or minor road should exceed stopping sight distance to enhance traffic operations and provide sufficient sight distance to anticipate and avoid collisions. The intersection sight distance was calculated for both left turning and right turning vehicles from the existing Oak Dell

Road intersection with Golden Chain Highway (SR-49). For vehicles turning left or right from Oak Dell Road, the sight distance analysis shows various instances where line of sight may be interrupted by overhanging trees, brush, and/or vegetation. As stated in Chapter 2, Project Description, as part of the proposed offsite roadway improvements, vegetation shall be reviewed in the field and trimmed appropriately to provide the clear 480-foot sight distance required for right-turns, and the 650-feet sight distance required for left-turns.

Therefore, the proposed project's impacts associated with substantially increase of hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses would be **less than significant**. No hazardous design features would be part of the project's roadway improvements or site access.

Impact TRF-4: The project would not result in inadequate emergency access.

As previously discussed, access to the Project site would be provided via an entrance from Oak Dell Road, utilizing the existing Oak Dell Road/Golden Chain Highway (SR-49) intersection. All roadway, intersection, and project access improvements would be overseen by the applicable lead agency and their qualified traffic engineers. This approach would ensure compliance with all applicable roadway design requirements. In the event of an emergency, emergency vehicles would be able to access the site from Oak Dell Road, Snoopy Road, and from the south via a raised arm bar that separates the project site from Union Mine High School. All street improvements will be designed with adequate width, turning radius, and grade to facilitate access by County's firefighting apparatus, and to provide alternative emergency ingress and egress. The site plan would be subject to plan review by the County's Fire Department to ensure proper access for fire and emergency response is provided and required fire suppression features are included. Therefore, the project's impact due to inadequate emergency access would be **less than significant.**

3.12.3.4 Cumulative Impact Analysis

This section provides an evaluation of cumulative transportation impacts associated with the proposed project and past, present, and reasonably foreseeable future projects, as identified in Section 3.0, Introduction to Analyses, and as relevant to this topic. The geographic area for the analysis of cumulative impacts related to transportation consists of the proposed project sites along various public roadways that would support access to the site.

The proposed project, in combination with reasonably foreseeable future development, would not result in a significant cumulative impact related to transportation.

As described under the discussion for Threshold (a) and examined in Section 3.6, Greenhouse Gas Emissions, the proposed project is consistent with the following plans addressing the circulation system and would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities under cumulative conditions:

- El Dorado County General Plan– approval of the proposed Project would ensure the proposed uses for the Project site are consistent with the General Plan.
- El Dorado County 2040 Regional Transportation Plan- the proposed project in combination of other cumulative projects would not hinder the County's ability to implement the long-term RTP goals. The project is a community park which will enhance the community, and includes on and off-site improvements that will optimize the existing roadway system while providing improved vehicular, pedestrian, and bicycle access to the site.

Currently, there are no proposed developments south of the project site, however as future projects develop south of the project site, the County will consider providing pedestrian and bicycle access to the proposed park from those projects. Additionally, the provision of pedestrian and bicycle access to the proposed project site from development to the south and east would potentially reduce VMT in the project area.

Therefore, cumulative impacts related to a program, plan, ordinance, or policy related to addressing the circulation system would be less than significant. Impacts related to conflicts with transit, bicycle or pedestrian transportation would be identical to the impacts described in the Project-specific impacts section. The project would not make a cumulatively considerable contribution to transit, bicycle or pedestrian access; therefore, all impacts would be less than significant.

Per OPR guidelines, "…A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa…" Per the VMT analysis, based on the project's configured uses, and its location in an area where similar uses are not provided, the project's potential to divert traffic from parks much further, the proposed project would have a less than significant impact to vehicle miles traveled. Thus, the proposed Project would result in less-than-significant cumulative transportation impacts.

The proposed project completed circulation and sight distance analyses as provided in Appendix H. As discussed above, the Project's site access would not result in hazardous conditions into or out of the project site. As with the proposed project, driveways and/or circulation modifications proposed for other projects in the surrounding area would comply with applicable federal, state, regional, and/or local requirements. Therefore, the project would not contribute to cumulative impacts with respect to hazardous design features.

As analyzed in Section 3.13.3, the project would not result in inadequate emergency access, and project impacts to emergency access would be less than significant. As with the proposed project, driveways and/or circulation modifications proposed for other projects in the surrounding area would comply with applicable federal, state, regional, and/or local requirements related to emergency access and evacuation plans. Further, because modifications to access are largely confined to a project site, project-specific emergency access impacts would likely not impact other cumulative projects. Therefore, the project's contributions to cumulative impacts would be less than significant.

3.12.3.5 Mitigation Measures

No mitigation measures are required.

3.12.4 References

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El Dorado Transit. 2023. Schedules and Services. https://eldoradotransit.com/routes/diamond-springs/

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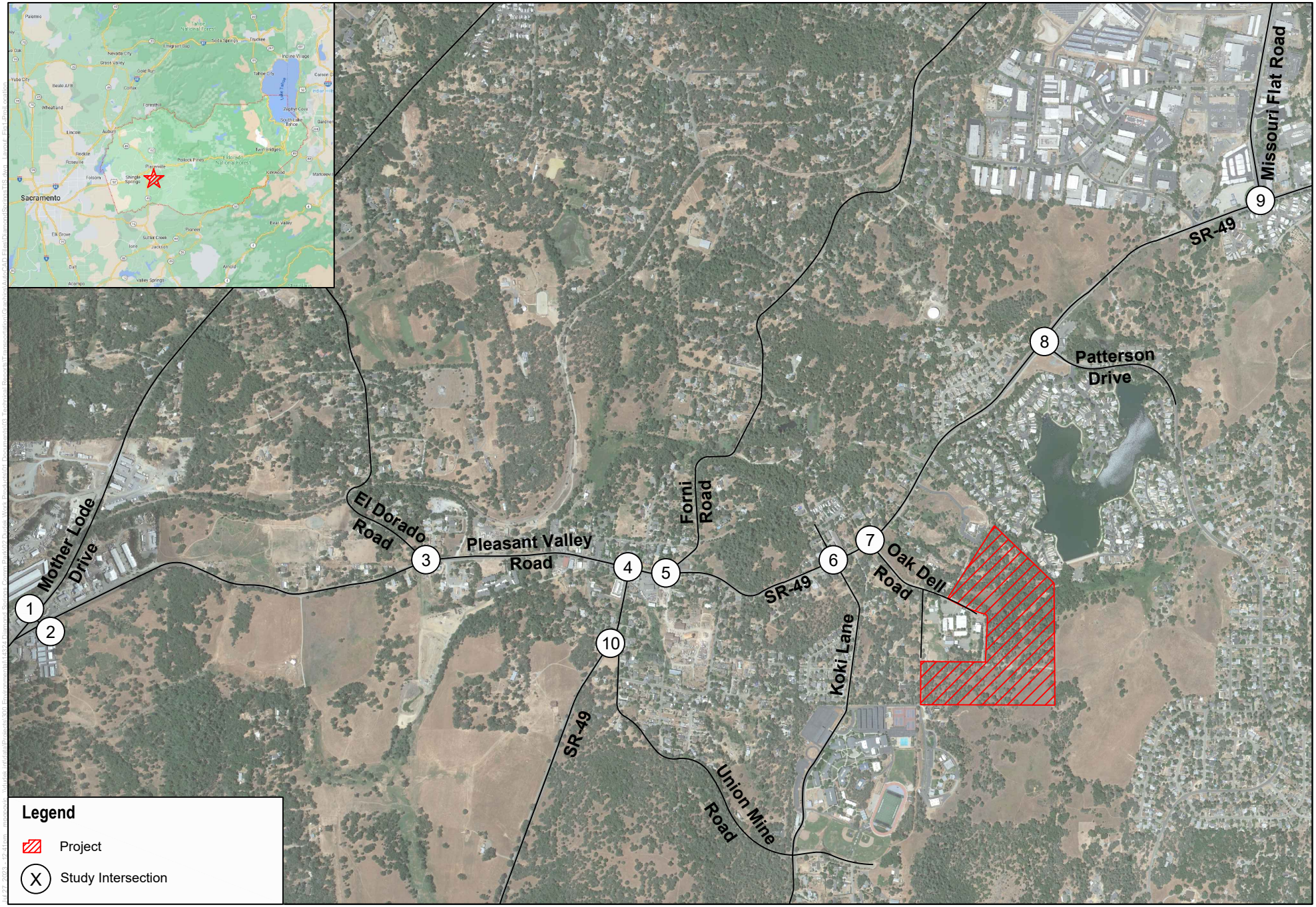

SOURCE: Google Earth 2021

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Not to Scale

FIGURE 3.12-**1**

Project Location and Study Area

Diamond Springs Community Park Project

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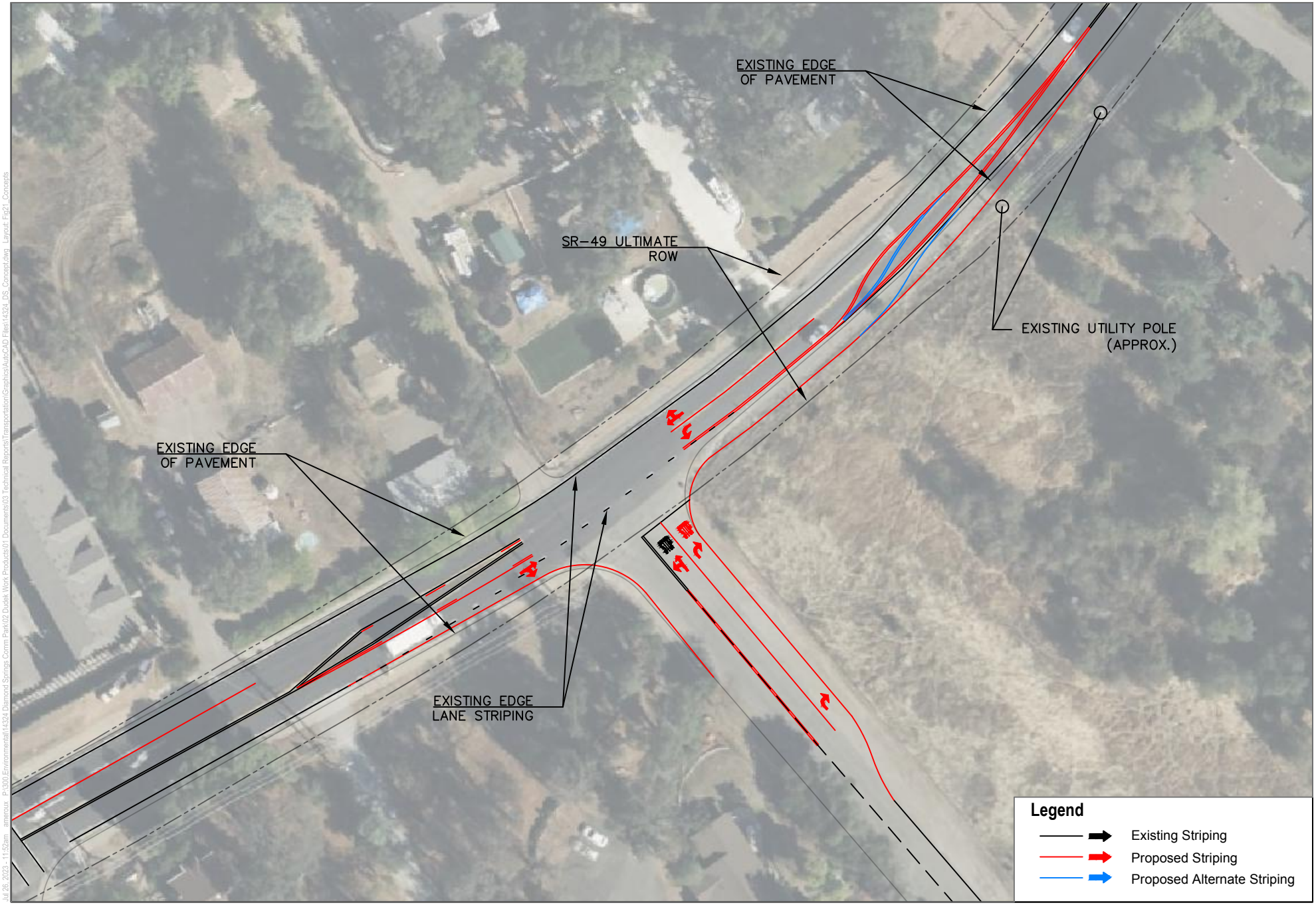

SOURCE: Bing Maps

FIGURE 3.12-**2**

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1" = 70'

Conceptual Geometrics for Recommended Improvement Measures at SR-49/Oak Dell Road

Diamond Springs Community Park Project

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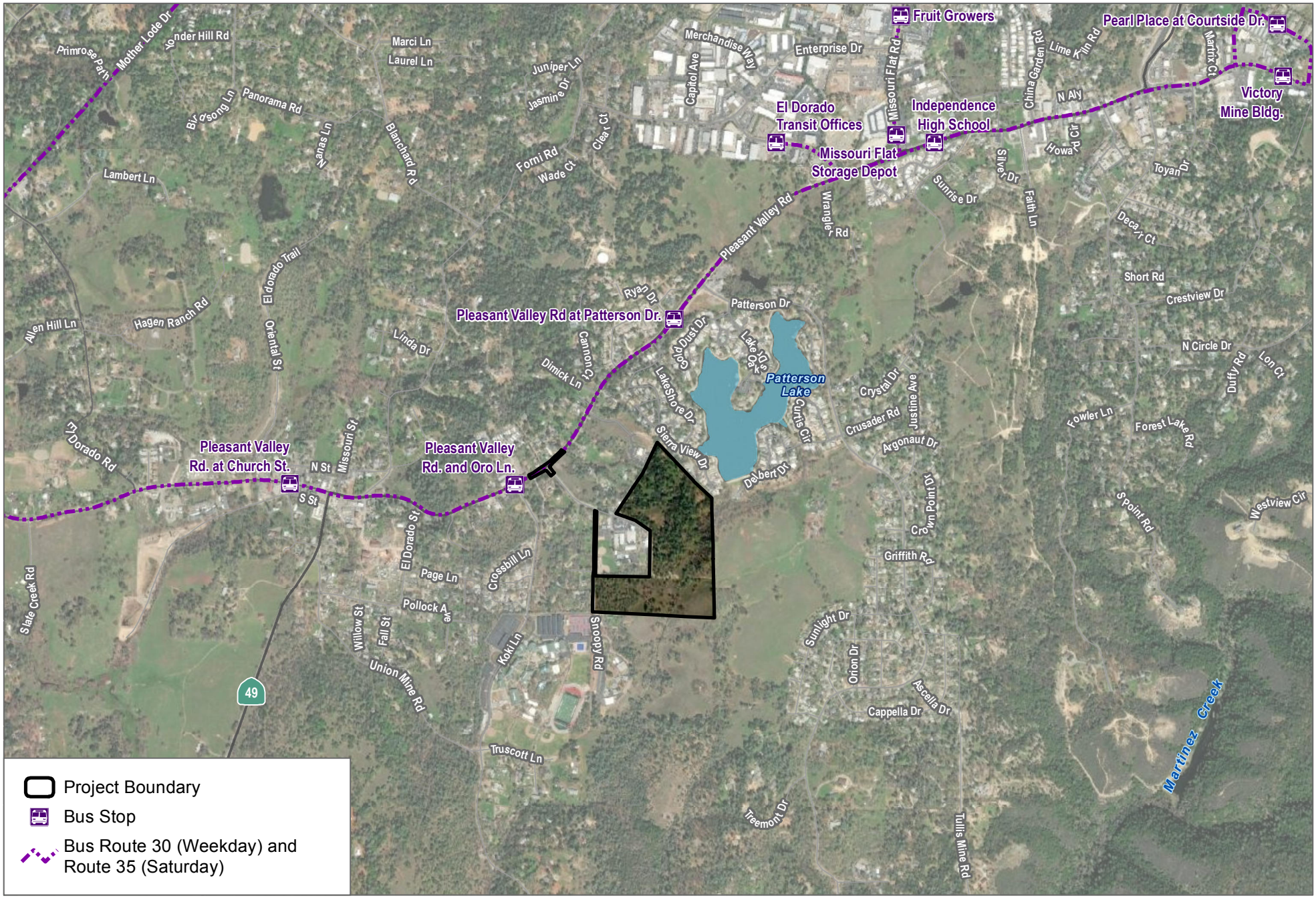

SOURCE: ESRI Imagery 2023, Open Street Map 2019, El Dorado Transit 2023, El Dorado County 2022

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0 750 1,500 Feet

FIGURE 3.12-**3**

Existing Transit Facilities

Diamond Springs Community Park Project

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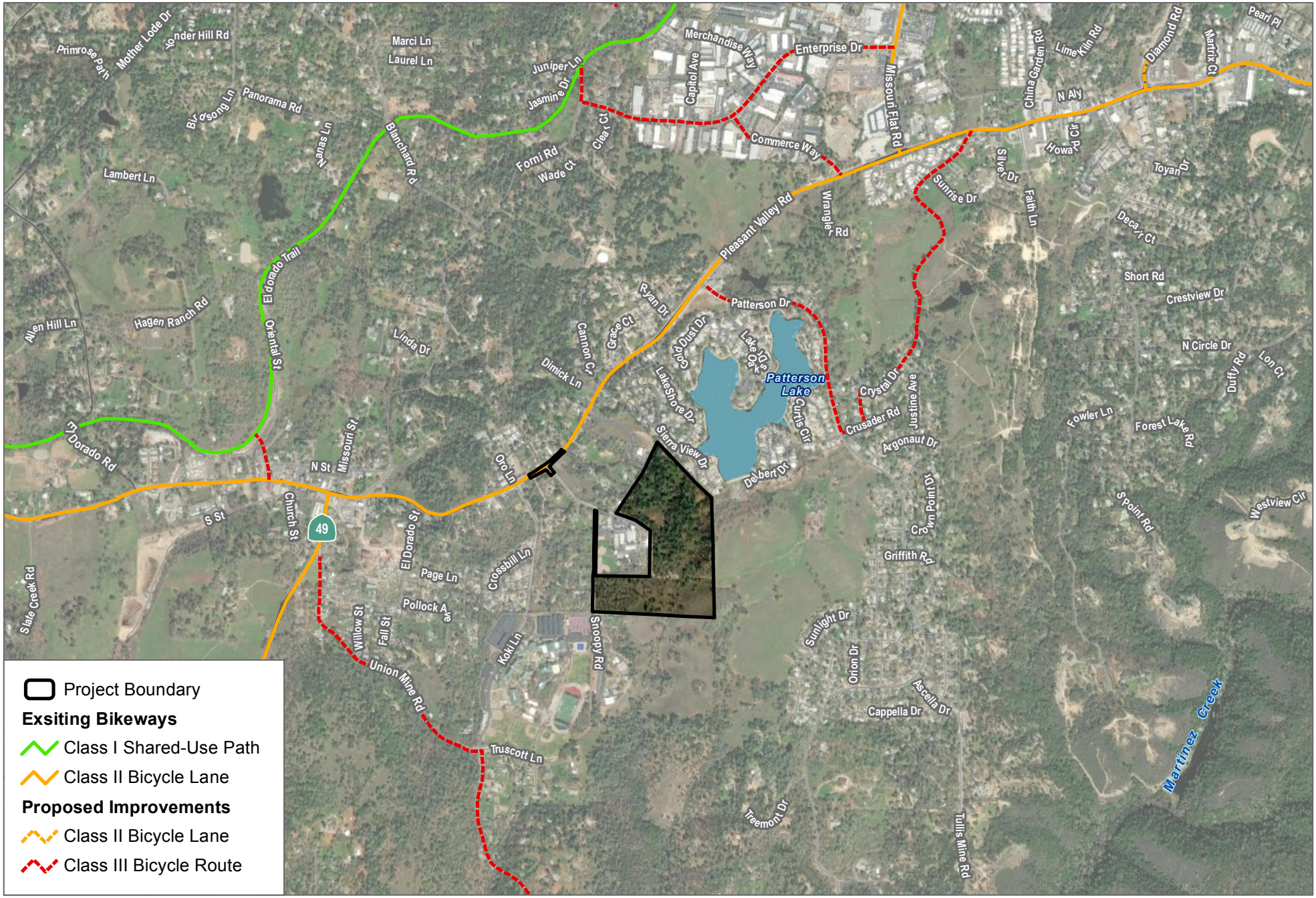

SOURCE: ESRI Imagery 2023, Open Street Map 2019, El Dorado Transit 2023, El Dorado County 2022

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FIGURE 3.12-4

Existing and Proposed Bicycle Facilities

Diamond Springs Community Park Project

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3.13 Utilities and Service Systems

This section describes the existing utilities and service systems conditions of the proposed project site and vicinity, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant impacts related to implementation of the proposed Diamond Springs Community Park Project (project).

A summary of the comments received during the scoping period for this EIR is provided in Table 2-1, Scoping Comments Summary, in Chapter 2, Introduction, and a complete list of comments is provided in Appendix A. Comments related to utilities and service systems were generally related to the existing EID lift station on site.

3.13.1 Existing Conditions

The project site is served by the following public utilities identified in Table 3.13-1, Utility Providers for the Project Area, and discussed in detail below.

Table 3.13-1. Utilities Providers for the Project Area

Utility	Agency/Provider
Water Supply	El Dorado Irrigation District
Wastewater Collection and Conveyance	El Dorado Irrigation District
Wastewater Treatment	El Dorado Irrigation District
Stormwater Conveyance	El Dorado Water Agency
Solid Waste Collection	El Dorado Disposal Services
Electrical Service	Pacific Gas & Electric
Natural Gas	Pacific Gas & Electric

Source: Data compiled by Dudek in 2023.

3.13.1.1 Water Supply

Surface Water

The El Dorado Irrigation District (EID) is the largest of five water purveyors in El Dorado County (County) and provides water services to the project area. EID was originally formed to supply farming irrigation water but has become more urbanized over time as a result of population growth and demand. The EID service area has grown to cover approximately 220 square miles and provides both municipal and agricultural services to approximately 110,00 people. The EID, alongside the El Dorado County Water Agency, plan and manage water usage throughout the County.

Surface water is the primary water supply source in the County. Surface water is generally diverted from water sources such as streams and reservoirs, treated at treatment plants, and then conveyed to water users through canals and pipelines in the County. There are three principal watersheds on the west slope of El Dorado County, including the Middle Fork American River, the South Fork American River, and the Consumnes River (El Dorado County 2003). Rights and entitlements emanating from further up the South Fork and American River watershed and the Cosumnes watershed, supply the Western/Eastern system of the County. The South Fork American River watershed's surface water encompasses the central region of the County. The peak runoff from this watershed

typically occurs from March through June, primarily existing as snowfall precipitation in the upper elevations and rainfall in the lower elevations of the watershed. The Cosumnes River watershed is located in the southern region of the County as well as the northwestern region of Amador County. Precipitation occurs primarily as rainfall for the Cosumnes River watershed, with the peak runoff occurring from January through April.

EID has historically received water supplies that are more than sufficient to support water demands throughout their service area. Table 3.13-2 below shows EID's current and planned water supplies in normal, dry, and multiple dry years. In normal years EID's water supply assets total 70,794 acre-feet per year. In a single dry water year, under water supplies secured by the district, assets total 63,379 acre-feet per year. Secured supplies are further reduced to 55,328 acre-feet per year by the fifth multi-year drought. The planned CVP Fazio Water assets are anticipated to be available by use of the EID in 2035. Although this addition to the district's assets is not needed to meet demands in any scenario that is examined in the Urban Water Management Plan (UWMP), it will further improve supply reliability above existing levels. In all, by 2045 the total average water supplies are anticipated to be 78,294 acre-feet annually (EID 2020).

Table 3.13-2. Water Supply Summary 2020-2045 (values in acre-feet)

Supply Sources	Maximum Water Assets Available	Normal Year	Single Dry Year	Multiple Dry Years				
				Year 1	Year 2	Year 3	Year 4	Year 5
Surface Water	77,694	67,294	59,879	59,879	55,868	51,828	51,828	51,828
Recycled Water	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Ground Water	—	0	0	0	0	0	0	0
Subtotal Existing Supplies	*81,194*	*70,794*	*63,379*	*63,379*	*59,368*	*55,328*	*55,328*	*55,328*
Planned Supplies (CVP Fazio Water entitlement)	7,500	7,500	3,750	3,750	3,750	1,235	1,235	1,235
Totals	**88,694**	**78,294**	**67,129**	**67,129**	**63,118**	**56,563**	**56,563**	**56,563**

Source: El Dorado Irrigation District UWMP 2020 Table 3-5

Groundwater

In comparison to surface waters in the County, groundwater access is relatively limited due to the geologic conditions. This noted, EID does not utilize groundwater as a supply. However, for rural areas of the County, groundwater remains the primary source of water. The limited access of groundwater as well as the geology of the region makes it difficult to estimate the long-term reliability of groundwater with the same level of confidence as surface water (El Dorado County 2003). The UWMP states that it is extremely unlikely that the EID will ever utilize groundwater as a source of supply in the future as other water assets such as surface water has proved to be both sufficient and reliable (EID 2020).

3.13.1.2 Wastewater

Wastewater treatment and collection for the project site is provided by EID. EID uses two types of systems to treat wastewater, including Wastewater Treatment Plants (WWTPs) and onsite wastewater treatment systems (OWTS). WWTPs connect to a collection system consisting of pipelines and lift stations, whereas OWTS connect to individual residences or nonresidential buildings for areas not served by the EID collection system. Areas that utilize OWTS

rely on septic tanks or onsite disposal by way of underground leach field and other soil absorption systems. Captured and treated wastewater from the local communities produces recycled water used for irrigation to help supplement EID's potable supplies.

EID has four permitted wastewater collection systems: El Dorado Hills, Deer Creek, Camino Heights, and Gold Ridge Forest. The project site is served by the Deer Creek WWTP (DCWWTP) which includes an approximate 24 square-mile service area. The DCWWTP services the communities of Cameron Park, Shingle Springs, and Diamond springs with approximately 10,000 wastewater service connections and an existing capacity of approximately 3.6 mgd (EID 2016). Currently, the ADWF (Average Dry Waterflow Year) capacity for DCWWTP is 3.6 mgd. Table 3.13-3 below displays the future flow projections during an average dry weather flow year.

Table 3.13-3. Future Flow Projections

	EDHWWTP (mgd)	DCWWTP (mgd)
Existing ADWF*	2.65	2.64
Future Unplanned Density ADWF	0.88	2.25
Future Planned Density	1.92	0.11
Total Projected ADWF	**5.45**	**5.00**

Source: Table 4-6 EID Wastewater Facilities Master Plan 2013
Note:
* Equal to arithmetic average of 2006 through 2009 ADWFs.

The Deer Creek Collection System is expected to reach the current rated capacity between 2022 and 2032, In order to accommodate future growth of the system, the EID Wastewater Facilities Master Plan recommends that the DCWWTP expands to 5.0 mgd by 2029. Expansion of the DCWWTP is currently in Phase 2 of a proposed 3 phase buildout (EID 2013). Existing wastewater infrastructure surrounding the project site consists of a major force main that runs beneath Oak Dell Road on the west side of the project site. There is also an existing EID lift station (Charles Brown Lift Station) located on the central-southern portion of the project site that would remain through development and operation of the project. East of the lift station, the force main transitions to a gravity line that heads east across the site.

3.13.1.3 Stormwater

The Middle Fork American River, the South Fork American River, and the Consumnes River, described above, each drain into one of three major rivers: the Middle Fork American River, the South Fork American River, and the Cosumnes River. These watersheds are further split into smaller drainage basins that deliver water to the tributaries of these major rivers. Many of the existing drainage basins in the County have developed drainage infrastructure. The project site occurs within the Martinez Creek Watershed, within the greater Cosumnes River Watershed, and is part of the Cosumnes, American, Bear and Yuba Watersheds (CABY) Integrated Regional Water Management Plan (CABY 2021).

The project site consists of undeveloped, vacant land and does not include any existing stormwater or drainage infrastructure. As a result of natural drainage within the site, site topography directs the flow of all stormwater and runoff towards Deadman Creek, which runs north-south through the eastern portion of the site. There is no existing stormwater infrastructure onsite.

3.13.1.4 Solid Waste

As previously described, the project site consists of vacant, undeveloped land. Thus, there are no existing solid waste services provided to the site. El Dorado Disposal Services provides residential and commercial trash, recycling, and organics collection services to the unincorporated areas as well as several other towns in the central eastern portion of the County. Their services include waste collection from construction, demolition, and debris recycling.

The County has prepared an Integrated Waste Management Plan (IWMP), in accordance with Assembly Bill 939. The IWMP includes the establishment of two Material Recovery Facilities (MRFs), the Western El Dorado MRF/transfer station and the Eastern Regional MRF/transfer station (El Dorado County 2012). The Western El Dorado MRF serves the project area and is located approximately 1.5 miles northeast of the project site. The Western El Dorado MRF works to fulfill waste diversion goals set forth by the County through the implementation of source reduction, composting, and recycling programs that have been successful.

As of 2009, the unincorporated areas of the County were disposing 100,150 tons into landfills per year (El Dorado County SWMP 2012). Waste from the project area is first brought to the Eastern Regional MRF to sort out recyclable materials from the waste stream. The remaining waste is then transferred to Lockwood landfill in Nevada for disposal. The Lockwood landfill, located approximately 12 miles east of Reno, Nevada and 86 miles northeast of the project site, accepts solid waste from counties in Nevada and California. This regional sanitary landfill has a permitted total capacity of approximately 265 million cubic yards and, as of 2021, a remaining capacity of 1,112,018,682 (EPA 2023. The daily volume of waste received by the Lockwood landfill is approximately 5,000 tons, or 18,519 cubic yards (NDEP 2014). According to the Environmental Protection Agency, the Lockwood landfill is expected to be in operation until the year of 2139 (EPA 2023). Historically, the County has also used the Potrero Hills Landfill in Solano County for disposal. The Potrero Hills Landfill accepts a variety of wastes including industrial, mixed municipal, construction and demolition, agricultural, ash, sludge, and tires. The Potrero Hills landfill accepts a maximum of 4,330 cubic yards of disposal material per day. The permitted capacity of the landfill is 83.1 million cubic yards. As of 2006, there was a remaining capacity of 13.9 million cubic yards, which is 16.7 percent of the landfill's overall capacity (CalRecycle 2023). The Potrero landfill is expected to cease operations in the year of 2048 (CalRecycle 2023).

Facility	Daily Permitted Capacity (cubic yards)	Maximum Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)
Lockwood Landfill	18,519	302,500,000	32,800,000
Potrero Landfill	4,330	83,100,000	13,900,000

Source: CalRecycle. 2019,

3.13.1.5 Energy and Natural Gas

Pacific Gas & Electric (PG&E) provides electrical and natural gas to the Diamond Springs community and project area. PG&E offers sliding rates for both electrical and natural gas services based on use and charges connection and user fees for all new development. Electrical services to the project site would be conveyed via on and off-site underground and aboveground facilities as determined necessary by PG&E. The proposed project does not require the use of natural gas for construction or operation purposes.

3.13.2 Regulatory Setting

3.13.2.1 Federal

U.S. Safe Drinking Water Act

The U.S. Safe Drinking Water Act (SDWA), established on December 16, 1974, is the main federal law that ensures the quality of drinking water by setting standards for drinking water quality and by providing guidance to the states, localities, and water suppliers who implement those standards.

National Pollutant Discharge Elimination System

Federal and state laws relating to wastewater primarily focus on the regulation of pollutant discharges that could contaminate surface waters or groundwater. As such, the Federal Clean Water Act and National Pollutant Discharge Elimination System (NPDES), as well as the state Porter-Cologne Water Quality Control Act, all regulate wastewater treatment and the discharge of treated effluent. NPDES permits cover various industrial and municipal discharges, including discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than 1 acre, and mining operations. (See Section 3.9, Hydrology and Water Quality).

Clean Water Act

The Clean Water Act (CWA) regulates the discharge of pollutants into United States waters and establishes water surface quality standards in order to maintain the chemical, physical, and biological health of national water systems. Under the CWA, pollutants may not be discharged from a point source into surface waters unless permitted by the NPDES under the regulation of the US EPA.

3.13.2.2 State

Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Sections 10610-10656) requires that all urban water suppliers prepare urban water management plans and update them every five years. The UWMP prepared by the EID in 2020, provides information related to past, current, and future water conditions and management in the region. Topics covered in the UWMP include water supply and availability, demand, infrastructure, and projections for the future.

Assembly Bill 901

Assembly Bill 901 (AB 901) requires the UWMP to document the quality of a supplier's available water source(s) and provide an assessment of the ways in which water quality affects its water management strategies and supply.

Assembly Bill 325

Assembly Bill 325 (AB 325), the Water Conservation in Landscaping Act, directs local governments to require the use of low-flow plumbing fixtures and the installation of drought tolerant landscaping in all new development. Pursuant to the Act, the Department of Water Resources developed a Model Water Efficient Landscape Ordinance.

Senate Bill 365

Existing provisions of the California Water Code declare that the use of potable water for certain non-potable uses "is a waste or an unreasonable use of water." SB 365 amends and expands the Water Code to strengthen the provision that the use of potable water for the irrigation of residential landscaping, floor-trap priming, cooling towers, or air-conditioning devices is wasteful and unsound if reclaimed water suitable for these purposes is available. SB 365 also gives the power to any public agency—including a state agency, city, county, district, or any other political subdivision of the state—to require the use of reclaimed water for these purposes if certain conditions are met. The conditions that must be met are:

- Reclaimed water meeting the requirements of existing law (Section 13550 of the Water Code) is available to the user;
- The use of reclaimed water does not cause any loss or diminution of any existing water right;
- Public health concerns regarding exposure to mist or spray must be addressed, if appropriate; and
- The water user must prepare an engineering report pursuant to Title 22 regulations governing the use of reclaimed water.

The requirements of the law are applicable to all new industrial facilities and subdivisions for which the Department of Health Services has approved the use of reclaimed water, and for which a building permit is issued on or after March 15, 1994; or, if a building permit is not required, new structures for which construction begins on or after this date.

State Health and Safety Code Section 64562

Section 64562 of the California Health and Safety Code requires each public water system to have sufficient water available from its water sources and distribution reservoirs to supply adequately, dependably, and safely the total requirements of all its users under maximum demand conditions before an agreement can be made to permit additional service connections to that system.

California Integrated Waste Management Act of 1989 and SB 1016

The California Integrated Waste Management Act of 1989, or Assembly Bill (AB) 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans and also mandated that local jurisdictions divert at least 50 percent of all solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. In 2006, SB 1016 updated the requirements. The new per capita disposal and goal measurement system moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a factor, along with evaluating program implementation efforts. These two factors will help determine each jurisdiction's progress toward achieving its Integrated Waste Management Act (AB 939) diversion goals.

California Code of Regulations Title 24

The State of California regulates energy consumption under Title 24 of the California Code of Regulations. The Title 24 Building Energy Efficiency Standards (CALGreen) were developed by the California Energy Commission (CEC) and apply to energy consumed for heating, cooling, ventilation, water heating and lighting in new residential and non-residential buildings. The CEC updates these standards periodically, and adopted the latest standards in 2019.

These standards establish lighting zones that differentiate the amount of outdoor lighting by geographical location, and establish new performance standards for residential lighting.

The state building standards code (CalGreen) requires that at least 50 percent of weight of non-hazardous job site debris generated by new construction be recycled, reused, or otherwise diverted from landfill disposal. CalGreen requires submission of plans and verifiable post-project documentation to demonstrate compliance.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to assure California utility customers of safe, reliable utility service at reasonable rates; protect utility customers from fraud; and promote a healthy California economy. PG&E is a California-based utility, regulated by the CPUC. The CPUC mandates that PG&E obtain specific clearance requirements between utility facilities and surrounding objects or construction activities. The CPUC recommends a reasonable amount of clearance beyond the minimum requirements to allow for several years' worth of vegetation growth, potential wind sway and other environmental factors. Distances obtained from the line after a pruning cycle may be more than 20 feet for fast-growing species such as mulberry or eucalyptus trees along distribution lines, and 4 years or 40 feet of clearance is required for high-voltage transmission line.

3.13.2.3 Local

El Dorado County General Plan

The El Dorado County General Plan addresses utilities and service systems in the Public Services and Utilities Element. The Public Services and Utilities Element is intended to promote development in the County that maximizes existing services, while also minimizing the cost of providing new services and facilities.

Goal 5.1. Provision of Public Services: Provide and maintain a system of safe, adequate, and cost-effective public utilities and services; maintain an adequate level of service to existing development while allowing for additional growth in an efficient manner; and, ensure a safe and adequate water supply, wastewater disposal, and appropriate public services for rural areas.

Policy 5.1.2.3. New development shall be required to pay its proportionate share of the costs of infrastructure improvements required to serve the project to the extent permitted by State law. Lack of available public or private services or adequate infrastructure to serve the project which cannot be satisfactorily mitigated shall be grounds for denial of any project or cause for the reduction of size, density, and/or intensity otherwise indicated on the general plan land use map to the extent allowed by State law.

Goal 5.2. Water Supply: The development or acquisition of an adequate water supply consistent with the geographical distribution or location of future land uses and planned developments.

Policy 5.2.1.2. An adequate quantity and quality of water for all uses, including fire protection, shall be provided for with discretionary development.

Policy 5.2.1.6. Priority shall be given to discretionary developments that are infill or where there is an efficient expansion of the water supply delivery system.

Policy 5.2.1.10. The County shall support water conservation and recycling programs and projects that can reduce future water demand consistent with the policies of the general plan. The County will develop and implement a water use efficiency program for existing and new residential, commercial/industrial, and agricultural uses. The County will also work with each of the County's water purveyors to develop a list of the type of uses that must utilize reclaimed water if feasible. The feasibility of using reclaimed water will be defined with specific criteria developed with public input and with the assistance of EID, and will be coordinated with their ongoing reclaimed water (also referred to as recycled water) planning and implementation process. The County shall encourage all water purveyors to implement the water conservation-related Best Management Practices already implemented by EID and in compliance with the related criteria established by U.S. Bureau of Reclamation.

Policy 5.2.1.11. The County shall direct new development to areas where public water service already exists. In Community Regions, all new development shall connect to a public water system. In Rural Centers, all new development shall connect either to a public water system or to an approved private water system.

Goal 5.3. Wastewater Collection and Treatment. An adequate and safe system of wastewater collection, treatment, and disposal to serve current and future County residents.

Policy 5.3.1.1. High-density and multifamily residential, commercial, and industrial projects shall be required to connect to public wastewater collection facilities as a condition of approval except in Rural Centers and areas designated as Platted Lands (- PL). In the Community Region of Camino/Pollock Pines, the long term development of public sewer service shall be encouraged; however, development projects will not be required to connect to wastewater collection facilities where such connection is infeasible, based on the scale of the project. (Res. No. 298-98; 12/8/98)

Policy 5.3.1.7. In Community Regions, all new development shall connect to public wastewater treatment facilities. In Community Regions where public wastewater collection facilities do not exist project applicants must demonstrate that the proposed wastewater disposal system can accommodate the highest possible demand of the project.

Goal 5.5. Solid Waste. A safe, effective and efficient system for the collection and processing of recyclable and transformable materials and for the disposal of residual solid wastes which cannot otherwise be recycled or transformed.

Policy 5.5.2.1. Concurrent with the approval of new development, evidence will be required that capacity exists within the solid waste system for the processing, recycling, transformation, and disposal of solid waste.

Policy 5.5.2.3. The County shall adopt a Construction and Demolition Debris Diversion Ordinance requiring that a minimum of 50 percent of the debris from construction and demolition projects be reused or recycled. The County shall encourage a higher rate of diversion.

Goal 5.6. Gas, Electric, and Other Utility Services. Sufficient utility service availability consistent with the needs of a growing community.

Policy 5.6.1.1. Promote and coordinate efforts with utilities for the undergrounding of existing and new utility distribution lines in accordance with current rules and regulations of the California Public Utility Commission and existing overhead power lines within scenic areas and existing Community Regions and Rural Centers.

Policy 5.6.1.2. Reserve adequate rights-of-way to facilitate expansion of services in a timely manner.

3.13.3 Environmental Impacts and Mitigation Measures

3.13.3.1 Thresholds of Significance

The significance criteria used to evaluate the project impacts to utilities and service systems are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to utilities and service systems would occur if the project would:

A. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
B. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
C. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
D. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
E. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

3.13.3.2 Methodology

Potential impacts to public utilities are determined qualitatively by comparing the project to the existing conditions. In determining the level of significance, this analysis assumes that the proposed project would comply with relevant State and local ordinances and regulations, as well as the General Plan policies presented above.

3.13.3.3 Project Impact Analysis

Impact UTL-1 The project would not require or result in the relocation or construction of new or expanded water, waste water treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

The proposed project would require the construction of additional utility infrastructure on site to serve the project elements. The installation of onsite utility systems is considered in the project description and the construction analyses in Chapter 3, Environmental Setting, Impacts and Mitigation Measures, of the EIR.

It is anticipated that the proposed project would require new points of connection for domestic water, fire water, sewer, electricity, and telecommunications. All proposed connections to existing utility infrastructure would be sized to serve anticipated project buildout. Similarly, all existing utility infrastructure that the proposed project would connect to are adequately sized to serve the proposed project without the need to expand. A piped drainage system would be installed to convey stormwater and runoff to Deadman Creek as occurs under existing conditions. Onsite retention would be designed to prevent an increase in offsite stormwater flow as compared to existing conditions. The new drainage system would require the installation of an oversized storm drain at the east end of the proposed soccer field that drains to Deadman Creek. The drainage will enter Deadman Creek at locations similar to existing conditions.

The proposed project proponent would coordinate with relevant utility providers as needed throughout the design and construction process to prevent any potential possibility of a temporary disruption to utility services for the adjacent areas as a result of construction on the project site. In addition to this, the proposed project would also coordinate with the County to secure permits prior to ground disturbance activities to reduce the potential of damaging or rerouting existing utilities infrastructure. Given these precautions, impacts related to utilities infrastructure and service as a result of the project would be **less than significant**.

Impact UTL-2 The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

The El Dorado Irrigation District maintains and operates water systems in El Dorado County and would serve the proposed project site. Project-related water use would include during construction and throughout operation of the project. Operation of the proposed project would require water supply for irrigation of all recreational turfs, sports fields, landscaping, and trees, as well as restroom facilities and water fountains. This would result in an increase in water demand as compared to existing conditions of the proposed project site. However, the proposed project would not include any habitable structures or land uses (e.g., residential, industrial, commercial) that are typically associated with a substantial increase in water use.

The largest component of water demand would be for landscaping and irrigation. It is estimated that the proposed project would require approximately 16,780,907 gallons per year for landscaping purposes and irrigation of all athletic fields and recreational turfs. This is approximately 51 acre-feet per year, which represents 0.06% of EID's forecasted 2020-2045 supply.

As described in Section 3.13.1, Existing Conditions, above, the County's water supply system consists of surface water and recycled water, as two water treatment plants. Based on historic and anticipated water use in the EID service area, the EID UWMP determined that there will be no anticipated water supply shortages throughout the year of 2045 during a normal, dry, or multiple dry years (See Table 3.13-2). Given this determination, as well as the proposed project's negligible demand on the available water supply, it is anticipated that EID would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts related to water supplies would be **less than significant**.

Impact UTL-3 The project would result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitment.

The proposed project would require new connections for water supply and sanitary sewer services. Wastewater generated by the proposed project would be conveyed through the EID wastewater collection system and eventually treated at the DCWWTP. The DCWWTP average dry weather flow, as of 2008, was 3.01 mgd of wastewater and has

a capacity to treat up to 3.6 mgd. Therefore, the DCWWTP has an excess capacity of 0.59 million gallons. DCWWTP is also in the process of expanding its capacities to 5.0 mgd. The EID Wastewater Facilities Master Plan states that the upgrade is expected to be online in 2029 (EID 2013).

The proposed project would generate minimal wastewater, as demand would be limited to temporary park visitors. Thus, the proposed project would not significantly impact the DCWWTP's ability to serve the proposed project's demand in addition to their existing commitments and would not result in a determination by the wastewater treatment provider that they do not have adequate capacity to serve the proposed project demand in addition to the provider's existing commitments. Therefore, impacts would be **less than significant**.

Impact UTL-4 The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. The project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

The proposed project site is located within the El Dorado Disposal service area which provides solid waste collection, disposal, and recycling services to the Diamond Springs community area. As noted in the Existing Conditions discussion above, the area landfills are currently processing waste at levels below their original capacity designs. Active permits for the landfills further indicate that they have existing capacity. This information suggests that the construction debris generated by the project would not exceed the capacity of the local infrastructure, nor would it result in the need to expand or construct new landfill facilities. In addition, the proposed project would adhere to all required State and County waste management ordinances and requirements, including the development of a Construction Waste Management Plan.

Waste collected from the project site during construction and throughout operation would likely be transferred to the WERS Transfer Station and Materials Recovery Facility (MRF), which is permitted to accept up to 400 tons per day. After processing, the non-recyclable wastes from the WERS Transfer Station and MRF are transported to the Potrero Hills Landfill. The Potrero Hills Landfill has an estimated remaining capacity of approximately 13.9 million cubic yards and is expected to remain in operation until 2048. Solid waste generated by the proposed project is estimated to be approximately eight cubic yards of solid waste per week, or 416 cubic yards per year. This estimate is conservative as production of solid waste is anticipated to decrease during winter months of project operations. Nonetheless, this represents a negligible increase in solid waste and would not consume a substantial portion of the permitted capacity at either facility. Thus, the proposed project would not result in the need for new or expanded landfill facilities. In addition, the proposed project would adhere to all state and County waste management ordinances and requirements. Therefore, impacts on solid waste disposal facilities would be **less than significant**.

3.13.3.4 Cumulative Impacts

The cumulative projects discussed in section 3.0 Intro to Analysis would result in increased demand for utilities. The cumulative projects are consistent with the County General Plan and its expected growth. General Plan policies address future utilities needs, as do planning documents such as EID's Urban Water Management Plan. As the cumulative projects are consistent with plans and policies to accommodate future growth, a cumulative utilities impact is not anticipated. The proposed project would not contribute to a cumulative impact to utilities.

3.13.3.5 Mitigation Measures

No mitigation measures re required.

3.15.4 References

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3.14 Wildfire

This section describes the existing wildfire conditions of the project site and vicinity, identifies associated regulatory requirements, evaluates potential project and cumulative impacts, and identifies mitigation measures for any significant impacts related to implementation of the proposed Diamond Spring Community Park Project (project). This analysis is based on a review of fire hazard severity zone maps and existing studies. Transportation related evacuation issues are addressed in Section 3.12, Transportation.

Comments related to wildfire included concerns for evacuation in the event of a wildfire or fire emergency. Scoping comment letters received are included as Appendix A. Transportation related evacuation concerns are further addressed in Section 3.12. Issues identified in the public comments related to potentially significant effects on the environment according to the California Environmental Quality Act (CEQA) and/or issues raised by responsible and trustee agencies are identified and addressed in this EIR.

3.14.1 Existing Conditions

3.14.1.1 Background

Wildfire has shaped California's ecosystems for millennia, recurring at varying intervals in virtually all of the state's vegetation types. Before Euro-American settlement, an estimated 4.5 to 12 million acres burned annually across the state. Natural fire regimes have changed dramatically due to land management practices and a century of effective fire suppression, which, in conjunction with climate change and expanding development, have led to increased wildfire impacts on ecosystems and people (California Department of Forestry and Fire Protection [CAL FIRE] 2018).

A wildfire is a nonstructural fire that occurs in vegetative fuels, excluding prescribed fire. Various factors contribute to the intensity and spread of wildfires: humidity, wind speed and direction, vegetation type, the amount of vegetation (i.e., fuel), and topography. While wildfires are a natural component of California's fire-adapted ecosystems, they represent a hazard where development is adjacent to open space or within close proximity to wildland fuels or designated fire severity zones. Wildfires can occur in undeveloped areas and spread to urban areas where the landscape and structures are not designed and maintained to be ignition-resistant. The impacts of wildfire on a community are far-reaching. The most significant impacts would be loss of life, loss of property, and environmental damage. Environmental damage resulting from wildland fires could include negative impacts to water quality, wildlife habitat and ecosystem health, as well as forest resources (El Dorado County 2003). Air quality is also a major issue, which can force the closure of schools and businesses as well as limit human activity.

Wildland Urban Interface

The wildland urban interface (WUI), defined as the areas where urban development is located in proximity to or interspersed with undeveloped open space or "wildland" areas, has expanded rapidly in recent decades, with extensive residential development occurring in the fringes of metropolitan areas and in rural foothill or mountain areas with attractive recreational and aesthetic amenities, such as El Dorado County (County). The WUI consists of such communities that are directly adjacent to wildland fuels such as grass, brush, and timber-covered lands, or have structures scattered throughout wildland areas. WUI environments are further classified into two types. They include the wildland urban interface, where development abruptly meets wildland, as well as the wildland urban intermix, where rural, low-density communities and structures are dispersed throughout wildland areas.

This pattern of development has implications for wildfire management and impact, as fire risk and damage potential are elevated in the WUI due to the abundance of both fuel and ignition sources. An increased number of habitable structures in proximity to flammable landscapes can be a potentially dangerous situation in the event of a fire; fires that occur in the WUI pose the greatest risk to life and property. Access, structure protection, and fire control are increasingly difficult in WUI environments. The WUI for El Dorado County consists of communities at risk and the areas around the communities that pose a fire threat. The population of the County continues to expand into these forested and vegetated areas with both residential and commercial development occurring in WUI areas of high fire risk (El Dorado County Fire Safe Council 2017).

3.14.1.2 Wildfire Risk

Pursuant to PRC sections 4201-4204, California Code of Regulations Title 14, Section 1280 and California Government Code 51175-89.CAL FIRE has mapped areas of significant fire hazards in the state through its Fire and Resources Assessment Program (FRAP). These areas are referred to as Fire Hazard Severity Zones (FHSZs). CAL FIRE's fire hazard severity maps identify Federal Responsibility Areas (FRAs), where federal agencies have responsibility for wildfire protection, State Responsibility Areas (SRAs), where CAL FIRE has responsibility for wildfire protection, and Local Responsibility Areas (LRAs), where local fire protection agencies have responsibility for wildfire protection. FHSZs are classified as moderate, high, and very high, based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather where urban conflagration could result in catastrophic losses. The speed and intensity of potential fires within the area, ability of embers to spread and multiply, loading of fuel, topographic conditions, and local climate all contribute to the fire hazard severity of an area. CAL FIRE provides fire hazard mapping for moderate to very high FHSZs within the SRA, as well as recommended very high FHSZs within the LRA.

El Dorado County is at a significant risk of wildland fires. Due to the local topography, dense vegetation, high fuel loads consisting of dead trees, and Mediterranean-type climate with hot, dry summers and cool moist winters, the County is prone to periodic large wildfire events (El Dorado Fire Safe Council 2022). Locations that are most vulnerable to wildfire in the County are associated with the areas starting in the foothills, extending east of El Dorado Hills and north and south to the County lines. This includes the project site, which is entirely located in a SRA moderate fire hazard severity zone (CAL FIRE 2007).[1]

The following sections provide more information regarding the fire environment associated with the proposed project and potential environmental effects of wildfire burning on or near the proposed project site.

Vegetation

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf size, branching patterns), and overall fuel loading. For example, grass dominated plant communities become seasonally prone to ignition and produce lower intensity, higher spread rate fires. El Dorado County has extensive, dense cover of coniferous and hardwood forests as well as grasslands and shrub dominated vegetation types. As

[1] CAL FIRE is currently in the process of updating the State's Fire Hazard Severity Zone maps. A draft revised map of El Dorado County was published on November 21, 2022, and revised June 15, 2023. This map would change the site designation and adjacent properties to a very high fire hazard severity zone. However, as of the date of the Notice of Preparation of this Draft EIR, the 2007 classification is in effect.

described in Section 3.3 Biological Resources, vegetation on the project site consists of Baltic and Mexican rush Marsh, oak woodland, and annual brome grassland.

Weather

The climate of region consists of warm, dry summers and cool, wet winters. Local climatology of the project site is best represented by ambient temperature measurements at the Western Regional Climate Center-operated Represa Station in El Dorado County. Maximum temperatures occur during July and reach 90 degrees Fahrenheit (°F) on average. Minimum temperatures can be as low as 38°F during winter months (WRCC 2012). Average annual precipitation of approximately 23 inches (0.3 inches of snowfall) occurs primarily during the months of November through March (WRCC 2012). During the summer, temperatures often exceed 85 (°F) coupled with clear sky conditions, which is favorable for the ignition and spread of wildfires. As a result, each year from late spring through fall (approximately May through October), the County faces a serious threat of wildfires.

Topography

The project site is located in the foothills of the Sierra Nevada Mountain range. The surrounding areas and project site are gently sloped. The elevation of the project site ranges from approximately 1,670 to 1,720 feet above mean sea level.

3.14.1.3 Wildfire Incidents

Each year, state, local, and volunteer departments throughout the region respond to numerous wildfires. The County has experienced several small fires annually, with large fires occurring every ten to thirty years. In 2021, CAL FIRE reported a total of 180 ignitions within the County (CAL FIRE AEU 2022). The most recent significant fire in the County was the Caldor Fire in 2021. The Caldor Fire encompassed a total of 221,835 acres, reaching from Omo Ranch to South Lake Tahoe, and destroyed over 1,000 structures including 782 homes. The fire's southwestern most edge reached approximately 9.3 miles east of the project site. Prior to the Caldor Fire, in 2014 the King Fire burned 161,253 acres, forced the evacuation of 3,000 people and destroyed 80 structures. Likewise, the Angora Fire in 2007 destroyed over 250 homes and the 1992 Cleveland Fire took two lives as well as 40 homes (El Dorado County Fire Safe Council 2022).

3.14.1.4 Fire Protection

Fire protection at the proposed project site would be provided by the Diamond Springs - El Dorado Fire Protection District (District). The District provides fire suppression, rescue and emergency medical services to the communities of Diamond Springs, El Dorado, Sleepy Hollow, Logtown, Missouri Flat, Nashville and Sandridge. Approximately 11,731 residents are served by the District, which encompasses 65.5 square miles of semi urban and rural settling. The District is also a part of an mutual aid agreement to provide fire, rescue and EMS emergency services to 12 other fire districts in the County. Through this agreement, the District serves a greater population of 180,000 and covers 2,000 square miles.

Personnel in the District is made up of career, volunteer, and limited term employees that staff the five stations located throughout their jurisdiction. Station 49 is the District's main station and administrative headquarters. It is located at 501 Pleasant Valley Road, approximately 1.7 miles (driving distance) northeast of the project site. Station 49 is the only station in the District that is staffed 24 hours per day, whereas the other four are staffed by resident volunteers (DSEFPD 2018).

During the fire season, CAL FIRE will also station an engine in Diamond Springs.

3.14.2 Regulatory Framework

3.14.2.1 International Fire Code

The International Fire Code (IFC), created by the International Code Council, is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the International Building Code use a hazard classification system to determine what measures are required to protect against structural fires. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, IFC employs a permit system based on hazard classification. The IFC is updated every three years.

3.14.2.2 Federal

The project site is located within a State Responsibility Area for the purposes of wildland fire protection and prevention. As such, there are no federal regulations pertaining to wildfire that apply to the project.

3.14.2.3 State

California Department of Forestry and Fire Protection

CAL FIRE protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values providing social, economic, and environmental benefits to rural and urban citizens. CAL FIRE's firefighters, fire engines, and aircraft respond to an average of nearly 6,000 wildland fires that burn over 260,000 acres each year (CAL FIRE 2019). CAL FIRE is responsible for the protection of approximately 31 million acres of private land within the state and, at the local level, is responsible for inspecting defensible space around private residences. CAL FIRE is also responsible for enforcing State of California fire safety codes included in the California Code of Regulations and California Public Resources Codes (discussed further below).

The Office of the State Fire Marshal supports CAL FIRE's mission by focusing on fire prevention. It provides support through a wide variety of fire safety responsibilities including by regulating buildings in which people live, congregate, or are confined; by controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death, and destruction by fire; by providing statewide direction for fire prevention in wildland areas; by regulating hazardous liquid pipelines; by reviewing regulations and building standards; and by providing training and education in fire protection methods and responsibilities.

The Board of Forestry and Fire Protection (Board) is a government-appointed body within the CAL FIRE. It is responsible for developing the general forest policy of the state, determining the guidance policies of the CAL FIRE, and representing the state's interest in forestland in California. Together, the Board and the CAL FIRE work to carry out the California Legislature's mandate to protect and enhance the state's unique forest and wildland resources.

The Board is charged with protecting all wildland forest resources in California that are not under federal jurisdiction. These resources include major commercial and non-commercial stands of timber, areas reserved for parks and recreation, woodlands, brush-range watersheds, and all private and state lands that contribute to California's forest resource wealth.

CAL FIRE 2018 Strategic Fire Plan

Public Resources Code Sections 4114 and 4130 authorize the State Board of Forestry to establish a fire plan (The 2018 Strategic Fire Plan for California) that establishes the levels of statewide fire protection services. These levels of service recognize other fire protection resources at the federal and local level that collectively provide a regional and statewide emergency response capability. In addition, California's integrated mutual aid fire protection system provides fire protection services through automatic and mutual aid agreements for fire incidents across all ownerships. The California Fire Plan is the state's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and to contribute to ecosystem health.

The Board has adopted these Strategic Fire Plans for California since the 1930s and periodically updates them to reflect current and anticipated needs of California's wildland. The Strategic Fire Plan is the state's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and contribute to ecosystem health. The Strategic Fire Plan is adopted to better respond to the changes of the environmental, social, and economic landscape of California's wildlands and to provide CAL FIRE with appropriate guidance for adequate statewide fire protection of state responsibility areas. The latest Strategic Fire Plan is dated August 22, 2018. However, CAL FIRE is in the process of preparing a new 2024 Strategic Plan that is to be released in July of 2024.

CAL FIRE implements and enforces the Board's policies and regulations. The 2018 Strategic Fire Plan reflects CAL FIRE's focus on (1) fire prevention and suppression activities to protect lives, property, and ecosystem services, and (2) natural resource management to maintain the state's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation.

State Fire Regulations

Fire regulations for California are established in Sections 13000 et seq. of the California Health and Safety Code and include regulations for structural standards (similar to those identified in the California Building Code), fire protection and public notification systems, fire protection devices such as extinguishers and smoke alarms, standards for high-rise structures and childcare facilities, and fire suppression training. The State Fire Marshal is responsible for enforcement of these established regulations and building standards for all state-owned buildings, state-occupied buildings, and state institutions within California.

Fire Hazard Severity Zones

CAL FIRE mapped Fire Hazard Severity Zones in El Dorado County based on fuel loading, slope, fire weather, and other relevant factors as directed by Public Resources Code Sections 4201–4204 and Government Code Sections 51175–51189. Fire Hazard Severity Zones are ranked from moderate to very high and are categorized for fire protection within a federal responsibility area, state responsibility area, or local responsibility area under the jurisdiction of a federal agency, CAL FIRE, or local agency, respectively. The California Code of Regulations (CCR), Title 14, Section 1280 entitles the maps of the geographical areas as "Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California."

Emergency Response California Emergency Services Act

The California Emergency Services Act was adopted to establish the state's roles and responsibilities during human-caused or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or resources of the state. This act is intended to protect health and safety by preserving the lives and property of the people of the state.

3.14.2.4 Local

CAL FIRE Amador – El Dorado Unit Strategic Fire Plan

CAL FIRE requires local CAL FIRE Unites to develop fire protection management plans that address potential threats of wildland fires. The CAL FIRE Amador - El Dorado Unit (AEU), which encompasses Amador, El Dorado, Alpine and portions of Sacramento and San Joaquin Counties, adopted the 2022 Strategic Fire Plan for the Amador and El Dorado County unit in May 2022. The plan is an assessment and planning tool that identifies and prioritizes pre-fire and post-fire management strategies and tactics meant to reduce the loss of values at risk within the Unit.

El Dorado County Local Hazard Mitigation Plan

Pursuant to the requirements of the Disaster Mitigation Act of 2000, El Dorado County prepared a Local Hazard Mitigation Plan (LHMP) ensuring the County's eligibility for the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation and Hazard Mitigation Grant programs. The purpose of the El Dorado County LHMP is to reduce or eliminate long-term risk to people and property from hazards. The LHMP acts as a guide for the County's response to emergency situations such as wildfire, earthquakes, floods, levee failures, and severe weather. The Plan also provides guidance and coordination for mitigation activities and decisions for local land use policy in the future.

The County followed a planning process prescribed by FEMA, which began with the formation of a hazard mitigation planning committee (HMPC) comprised of key County representatives, and other regional stakeholders. The HMPC conducted a risk assessment that identified and profiled hazards that pose a risk to the County, assessed the County's vulnerability to these hazards, and examined the capabilities in place to mitigate them. Based on the risk assessment, the HMPC identified goals and objectives for reducing the County's vulnerability to hazards. They include:

Goal 1. Minimize risk and vulnerability of El Dorado County to the impacts of natural hazards and protect lives and reduce damages and losses to property, economy, public health and safety, and the environment.

Goal 2. Provide protection for critical facilities, infrastructure, utilities and services from hazard impacts.

Goal 3. Improve public awareness, education, and preparedness for all hazards.

Goal 4. Increase communities' capabilities to mitigate losses and to be prepared for, respond to, and recover from a disaster event.

Goal 5. Maintain FEMA Eligibility/Position the communities for grant funding. Continued compliance with the National Flood Insurance Program (NFIP)/enhancement of floodplain management program through participation in the NFIP.

Western El Dorado Community Wildfire Protection Plan

Community Wildfire Protection Plans (CWPPs) are authorized and defined in Title 1 of the Healthy Forests Restoration Act (HRFA) of 2003. The Western El Dorado Community Wildfire Protection Plan (CWPP) identifies the risks and hazards associated with wildland fires in the WUI areas of Western El Dorado County. The plan also identifies recommendations aimed at preventing and reducing both infrastructure and ecosystem damage associated with wildland fires. The plan documents recommended goals and actions intended to reduce the risk to people, property and the environment. Fuel reduction projects identified in an approved CWPP receive priority for federal funds. The plan was last updated in February 2022.

El Dorado County Code

Chapter 8.08 (Fire Prevention) of the El Dorado County Code specifies limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments. Chapter 8.09 (Vegetation Management and Defensible Space) of Title 8 of the County Code requires the removal or abatement of all hazardous vegetation and combustible material that constitutes a fire hazard which may endanger or damage neighboring property, and describes the means of enforcement. The following provisions are applicable to the proposed project:

Sec. 8.09.070. - Duty to remove and abate hazardous vegetation and combustible material.

A. It shall be the duty of every owner, occupant, and person in control of any parcel of land or interest therein, which is located within the County to remove, or abate, all hazardous vegetation and combustible material, which constitutes a fire hazard and may endanger or damage neighboring property.
B. The owner, lessee or occupant of buildings, grounds, or lots within the County shall remove from such property and adjacent streets all waste, garbage, rubbish, weeds, hazardous vegetation or other combustible materials growing or accumulated thereon in accordance with the procedures and methods prescribed in this chapter and by the Enforcement Official.
C. The California Code of Regulations Code, 14 C.C.R., Sections 1270.01-1276.03 and 19 C.C.R., Division 1, Chapter 7, Subchapter 1, Section 3.07.
D. Any home owners association (HOA), lighting and landscape district, subdivision development, special district, or other entity that has a developed and approved Wildland Fire Safe Plan in accordance with the County's General Plan requirement and CFC Chapter 49, shall be granted a reasonable amount of time to comply with this ordinance not to exceed five years from the date which this ordinance was approved and ratified by the Board of Supervisors (May 30, 2019).
E. Prior to the close of any real estate sales transaction within the County, the requirements for property owners to comply with the Vegetation Management Ordinance shall be disclosed to all potential property owners.
F. All improved parcels, shall comply with the following requirements:
    a. Maintain defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line except as provided in Paragraph 11. The amount of fuel modification necessary shall take into account the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This paragraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation.

b. Consistent with fuels management treatment objectives, steps should be taken to minimize erosion. For the purposes of this paragraph, "fuel" means any combustible material, including petroleum-based products and wildland fuels.

c. A greater distance than that required under Paragraph 1 may be required by State law, local ordinance, rule, or regulation. Clearance beyond the property line may only be required if the State law, local ordinance, rule, or regulation includes findings that the clearing is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure.

d. Clearance on adjacent property shall only be conducted following written consent by the adjacent landowner.

e. Remove that portion of a tree that extends within ten feet of the outlet of a chimney or stovepipe.

f. Maintain trees, shrubs, or other plants adjacent to or overhanging a building free of dead or dying wood.

g. Maintain the roof of a structure free of leaves, needles, or other vegetative materials.

h. A person is not required under this section to manage fuels on land if that person does not have the legal right to manage fuels, nor is a person required to enter upon or to alter property that is owned by any other person without the written consent of the owner of the property.

i. Cultivated and useful grasses and pastures shall not be considered a public nuisance. However, if the County's Enforcement Official determines it necessary to protect adjacent improved property from fire exposure, an adequate firebreak may be required.

j. The public and entities should be aware of rare plants areas, riparian areas, and raptor nesting trees on the property and try to avoid these sites.

k. Good neighbor and neighborhood protection policy including unimproved parcels. A 100-foot wide strip of land around structure(s) located on an adjacent improved parcel (some or all of this clearance may be required on the adjacent improved parcel or the adjacent unimproved parcel depending upon the location of the structure on the improved parcel). For example, a structure could be within 70 feet of its property line. The adjacent property owner shall assist its neighbor by completing fuels management on another 30 feet to create a 100-foot strip of treated land.

l. Improved and unimproved parcels adjacent to all roadways that have been designated by the County Enforcement Official (or designee) to be necessary for the safe ingress and egress to the area served by the roadway or fire access easement and the current condition of fuels on the improved or unimproved parcel is assessed by the County Enforcement Official as an extra hazardous fire condition which must be treated or abated.

El Dorado County General Plan

The El Dorado County General Plan provides for a long-range direction and policy for the use of land within El Dorado County. Policies applicable to wildfire within the General Plan are addressed in the Conservation and Open Space Element, Public Services and Utilities Element, and the Public Health, Safety, and Noise Element of the General Plan. The policies listed in below are applicable to the project.

Conservation and Open Space Element

Policy 7.1.2.1. Development or disturbance of slopes over 30% shall be restricted. Standards for implementation of this policy, including but not limited to exceptions for access, reasonable use of the parcel, and agricultural uses shall be incorporated into the Zoning Ordinance

Policy 7.1.2.2. Discretionary and ministerial projects that require earthwork and grading, including cut and fill for roads, shall be required to minimize erosion and sedimentation, conform to natural contours, maintain natural drainage patterns, minimize impervious surfaces, and maximize the retention of natural vegetation. Specific standards for minimizing erosion and sedimentation shall be incorporated into the Zoning Ordinance.

Policy 7.1.2.3. Enforce Grading Ordinance provisions for erosion control on all development projects and adopt provisions for ongoing, applicant-funded monitoring of project grading.

Public Services and Utilities Element

Policy 5.7.1.1. Prior to approval of new development, the applicant will be required to demonstrate that adequate emergency water supply, storage, conveyance facilities, and access for fire protection either are or will be provided concurrent with development.

Policy 5.7.2.1. Prior to approval of new development, the responsible fire protection district shall be requested to review all applications to determine the ability of the district to provide protection services. The ability to provide fire protection to existing development shall not be reduced below acceptable levels as a consequence of new development. El Dorado County General Plan Public Services and Utilities Element July 2004 (Amended December 2015) Page 101 recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.

Policy 5.7.4.1. Prior to approval of new development, the applicant shall be required to demonstrate that adequate medical emergency services are available and that adequate emergency vehicle access will be provided concurrent with development.

Policy 5.7.4.2. Prior to approval of new development, the Emergency Medical Services Agency shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.

Public Health, Safety, and Noise Element

Policy 6.1.1.1. The El Dorado County Multi-jurisdictional Local Hazard Mitigation Plan (LHMP) shall serve as the implementation program for the coordination of hazard planning and disaster response efforts within the County and is incorporated by reference to this Element. The County will ensure that the LHMP is updated on a regular basis to keep pace with the growing population.

Policy 6.2.1.1. Implement Fire Safe ordinance to attain and maintain defensible space through conditioning of tentative maps and in new development at the final map and/or building permit stage.

Policy 6.2.1.2. Coordinate with the local Fire Safe Councils, California Department of Forestry and Fire Protection, and federal and state agencies having land use jurisdiction in El Dorado County in the development of a countywide fuels management strategy.

Policy 6.2.2.1. Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.

Policy 6.2.2.2. The County shall preclude development in areas of high and very high wildland fire hazard or in areas identified as wildland-urban interface (WUI) communities within the vicinity of Federal lands that are a high risk for wildfire, as listed in the Federal Register Executive Order 13728 of May 18, 2016, unless such development can be adequately protected from wildland fire hazard, as demonstrated in a WUI Fire Safe Plan prepared by a qualified professional as approved by the El Dorado County Fire Prevention Officers Association. The WUI Fire Safe Plan shall be approved by the local Fire Protection District having jurisdiction and/or California Department of Forestry and Fire Protection. (Resolution 124- 2019, August 6, 2019)

Policy 6.2.3.1. As a requirement for approving new development, the County must find, based on information provided by the applicant and the responsible fire protection district that, concurrent with development, adequate emergency water flow, fire access, and fire fighting personnel and equipment will be available in accordance with applicable State and local fire district standards.

Policy 6.2.3.2. As a requirement of new development, the applicant must demonstrate that adequate access exists, or can be provided to ensure that emergency vehicles can access the site and private vehicles can evacuate the area.

Policy 6.2.3.4. All new development and public works projects shall be consistent with applicable State Wildland Fire Standards and other relevant State and federal fire requirements.

Policy 6.2.4.1. Discretionary development within high and very high fire hazard areas shall be conditioned to designate fuel break zones that comply with fire safe requirements to benefit the new and, where possible, existing development.

Policy 6.2.4.2. The County shall cooperate with the California Department of Forestry and Fire Protection and local fire protection districts to identify opportunities for fuel breaks in zones of high and very high fire hazard either prior to or as a component of project review.

Policy 6.2.5.1. The County shall cooperate with the U.S. Forest Service, California Department of Forestry and Fire Protection, and local fire districts in fire prevention education programs.

3.14.3 Impacts and Mitigation Measures

This section contains the evaluation of potential environmental impacts associated with the proposed project related to wildfire. The section identifies the thresholds of significance used in evaluating the impacts, describes the methods used in conducting the analysis, and evaluates the Proposed Project's impacts and contribution to significant cumulative impacts, if any are identified. Mitigation measures are presented for identified significant or potentially significant impacts, and the level of significance with mitigation also is identified.

3.14.3.1 Thresholds of Significance

The thresholds of significance used to evaluate the impacts of the Proposed Project related to wildfire materials are based on Appendix G of the CEQA Guidelines, as listed below. A significant impact would occur if the Proposed Project would:

G. Substantially impair an adopted emergency response plan.

H. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

I. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

J. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

K. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

3.14.3.2 Analytical Methods

Map and reports prepared by CAL FIRE and the building application materials for the proposed project were reviewed to determine the proposed project's potential impacts related to wildfire. Potential impacts related to wildfire were determined qualitatively by comparing the project to the existing conditions. In determining the level of significance, this analysis assumes that the proposed project would comply with relevant State and local ordinances and regulations, as well as the general plan policies presented above. Note that, under CEQA, the effects of the existing environment upon a proposed project is not a project impact. A project impact occurs when direct or indirect changes to the environment would occur as a result of implementation of the project.

3.14.3.3 Project Impact Analysis

Impact WF-1 The project would not substantially impair an adopted emergency response plan or emergency evacuation plan.

The project site is subject to several emergency response plans. Most notably, the El Dorado County Local Hazard Mitigation Plan (LHMP), which provides guidance to the County in the event of emergency situations, including wildfire and emergency evacuation.

The development of the proposed community park and associated improvements would not physically interfere with or impair implementation of the El Dorado County Local Hazard Mitigation Plan. Most of the project is located on undeveloped lands east of Oak Dell Road. This portion of the construction would occur off public roads and would not require any road closures or restrictions. The project also includes road improvements for State Route (SR) 49 and Snoopy Road. SR 49 will be widened as necessary at Oak Dell Road and restriped to provide for a dedicated left turn lane on westbound SR 49. Oak Dell Road will have right and left turn lanes at SR 49. Snoopy Road is currently a dirt road and will become an aggregate base road for emergency access to the proposed park. No road closures are anticipated, and emergency access in the project area would be maintained at all times throughout project construction. The proposed road improvements would result in an improvement of emergency access for the surrounding residents on Snoopy and Oak Dell Road. See Section 3.12 for an analysis of

transportation related emergency access impacts. Additionally, all road improvements would be designed with adequate width, turning radius, and grade to facilitate access by County's firefighting apparatus, and to provide alternative emergency ingress and egress.

The project would result in an increase in intensity of use of the existing undeveloped landscape and would introduce new human activity on site that could result in the need to evacuate recreational visitors from the project site in the event of an emergency. However, in the event of an ongoing wildland fire emergency in the region, it is unlikely that there would be a substantial number of recreational visitors at the proposed project site due to poor air quality from the wildland fire(s). Access to the project site would be provided via Oak Dell Road, utilizing the existing Oak Dell Road/Golden Chain Highway (SR-49) intersection. In the event of an emergency, emergency vehicles would be able to access the site from Oak Dell Road, Snoopy Road, and from the south via a raised arm bar that separates the project site from Union Mine High School. All street improvements will be designed with adequate width, turning radius, and grade to facilitate access by County's firefighting apparatus, and to provide alternative emergency ingress and egress.

Likewise, the project site is anticipated to be utilized as a staging site in the event of an emergency.

The proposed project would be required to adhere to numerous El Dorado County General Plan Policies that ensure new development has taken adequate measures for emergency response access and evacuation. Policy 5.7.1.1 requires that, prior to approval of a new development, the applicant must be able to demonstrate that there would be adequate emergency water supply, storage, conveyance facilities, and access for fire protection concurrent to development of the project site or are existing facilities. Additionally, Policy 5.7.2.1 requires that the responsible fire protection district review all project applications to determine the ability of the district to provide protection services without reducing acceptable levels of service to all existing development commitments. Policy 5.7.4.1 requires project applicants to demonstrate, prior to approval of new development, that adequate medical emergency services are available, and that emergency vehicle access would be provided concurrent with development. Lastly, Policy 6.2.3.4 requires all new development to be consistent with applicable State Wildland Fire Standards and other relevant State and federal fire requirements.

The site plan would also be subject to plan review by the Diamond Springs-EL Dorado Fire Protection District to ensure proper access for fire and emergency response is provided and required fire suppression features are included. The proposed project's compliance with County policies and development standards that ensure proper emergency response and evacuation, would ensure that impacts related to impairing an emergency evacuation plan would be **less than significant**.

Impact WF-2 The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

The degree of hazard in wildland areas depends on weather conditions (i.e., temperature, wind, and moisture), drought conditions, types and density of vegetation, slope steepness, accessibility to human activities, accessibility of firefighting equipment, and fuel clearance around structures. The project site is in an area of moderate hazard for wildland fire pursuant to CAL FIRE's FHSZ. As noted in Section 3.14.1.2, Wildfire Risk above, the project site and surrounding areas are mapped as a moderate fire hazard severity zone in a state responsibility area (CAL FIRE 2007).

The project site is located approximately 0.20 miles southeast of SR 49 and the surrounding topography is gently rolling hills. The closest fire station to the project site is Station 49, located 1.30 miles northeast of the project site. Therefore, the project site is readily accessible to firefighting equipment and personnel.

The proposed project does not include the addition of any residential buildings. As discussed in Impact WF-1, it is unlikely that there would be a substantial number of recreational visitors at the proposed community park in the event of a wildland fire emergency in the region due to poor air quality. Further, construction activities on the project site would be required to comply with the CAL FIRE requirements for the prevention of wildland fires during construction and the proposed site plan would also be subject to plan review by the Diamond Springs-EL Dorado Fire Protection District. Vegetation management and operational activities on the project site would be required to comply with Chapter 8.09 (Vegetation Management and Defensible Space) of the El Dorado County Code to reduce the risk of wildfires.

Compliance with local and State requirements related to wildland fires would reduce the potential of the proposed project to expose people or structures to a significant risk of loss, injury or death involving wildland fires to **less than significant.**

Impact WF-3 The project would not, due to slope, prevailing winds, and other factors exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

The project site is bound by the north and east by the undeveloped lands and a residential mobile home park, beyond which is Patterson Lake. South of the project site lies undeveloped lands and scattered rural homes. Union Mine High School and Pacific Crest Academy adjoin the project site to the south and southwest. To the west is the former Charles F. Brown Elementary School and residential properties along Snoopy Road.

The approximate 39.5-acre project site consists entirely of undeveloped lands, aside from an El Dorado Irrigation District (EID) lift station and access road on the southern end of the property. Vegetation on the project site primarily consists of oak woodland and grasslands consistent with other undeveloped areas in the vicinity.

The project is expected to be developed over the course of 10-15 years taking place in multiple phases, with mass grading and site preparation occurring initially, followed by detailed development of the various phases. Construction of the community park would occur in typical fashion, with tree removal and mass grading of the entire site occurring first, followed by the construction of athletic fields, parking areas, structures, and utilities.

Development of the project would require tree and vegetation removal. The removal of trees and vegetation as part of site preparation, and conversion of undeveloped land to maintained and irrigated landscapes and sports fields would reduce the available fuels on the project site. The project site would also be subject to ongoing fuel and vegetation management. Irrigation would be installed as part of the project to provide maintenance and upkeep of the proposed athletic fields. Irrigation and fuel reduction as part of the project plans would significantly lessen the risk of wildfire on the project site and would also lessen the severity of such an event should it occur. The project would also require review and subsequent approval of the proposed improvement plans by fire district. Furthermore, the project would serve as a potential fuel break between existing development and adjacent undeveloped lands.

The project proposes to construct one new habitable structure on the project site, an indoor gymnasium. The gymnasium would be required to comply with Chapter 7A of the CFC and be constructed of ignition resistant materials. Further, 100 feet of fuel modification would be required surrounding the gymnasium.

Based on the information that has been presented, development of the proposed project would not exacerbate wildfire risks, nor would it substantially increase the likelihood that the project would expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Instead, the operational features of the project and the necessary fuel reductions for development of the project would result in improvements to current conditions, since the wildfire risks associated with the site's existing conditions would be reduced. Thus, the impact would be **less than significant**.

Impact WF-4 The project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

As discussed above, the infrastructure improvements associated with the project would result in an improved condition in relation to wildfire preparedness and the ability to lessen the overall severity of potential future wildfires in the area. The proposed road improvements discussed in Impact WF-1, would improve emergency access to the site and surrounding properties. Likewise, the construction of the proposed project and the associated irrigated athletic fields would increase the defensible space around structures on and adjacent to the site. Therefore, the project would improve the existing conditions related to wildfire risk, and not exacerbate fire risk. Various sections of this EIR evaluate the environmental effects associated with the proposed project's development, including aspects of the project that relate to abatement of wildfire risk and hazardous fuel reductions. In all instances, it was found that the effects of project implementation were determined to be less than significant. As such, the impact would also be **less than significant**.

Impact WF-5 The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

As documented in the Biological Resources Assessment (Appendix C), the project site and surrounding area is characterized by gently rolling foothills. Elevation at the project site sits at an average of 1,679 feet above mean sea level. There is a generally north-south ridgeline, on the eastern portion of the site, which routes all drainage to an intermittent stream on the project site. The stream, also known as Deadman Creek, runs somewhat parallel to the ridgeline, and flows in a southern direction from the northeast to south through the project site. Development on the project site would occur primarily west of Deadman Creek. As such, the project plans include a retaining wall west of the Creek and along other portions of the project site that are at a lower elevation. As discussed in Section 3.6, Geology and Soils, landslides, slope failures, and mudflows of earth materials generally occur where slopes are steep and/or the earth materials are weak. Earthquake-induced landslides may also occur due to seismic ground shaking. According to the geotechnical report, the absence of a permanent elevated groundwater table combined with relatively low seismicity of the area and shallow depth to bedrock make the potential for slope instability very low (Appendix E). Construction of the retaining wall would ensure that post-fire slope instability, increased runoff, or drainage changes in areas surrounding the project site would not expose people or structures at the project site to increased risk of flood or landslides. Furthermore, project plans include a piped drainage system that will convey the drainage from the new improvements to the creek. The drainage is planned to enter the creek at similar locations to existing conditions. The impact would be **less than significant**.

3.14.3.4 Cumulative Impacts

The geographic scope for wildfire risks consists of the project site and three cumulative projects in the vicinity (described in Section 3.0). The three cumulative projects consist of two residential developments and one roadway

improvement project. Similar to the proposed project, the development of the cumulative projects would not interfere with emergency access, and therefore would not have the cumulative potential to impair an adopted emergency response plan. Two of the cumulative projects involve the alteration or construction of roadways that would benefit emergency response in the area. Both the proposed project and cumulative projects are located in gently sloped areas that are at low risk of landslides. Furthermore, both the proposed project and cumulative projects are not located in flood hazard zones (FEMA 2008). The nearest local waterways are Deadman Creek, located on the project site, and Patterson Lake just north of the project site. Section 3.9, Hydrology and Water Quality of this EIR determined that the two bodies of water do not pose a threat of flooding on the project site, and thus, the cumulative project sites. For these reasons, the cumulative potential to expose people or structures to post-fire flooding or landslide risk would be less than significant.

The proposed project and cumulative impacts, including any proposed utility connections, are subject to review by the El Dorado County Fire District and must comply with any conditions of approval required by the Fire District. The proposed project and cumulative projects would be required to adhere to all fire prevention and protection regulations including Chapter 8.08 (Fire Prevention) and Chapter 8.09 (Vegetation Management and Defensible Space) of the County Code and with the California Fire Code, including requirements for the maintenance of defensible space around the structures on properties. Compliance with existing regulations would reduce the potential cumulative impact related to the exacerbation of fire risk to less than significant.

Development standards brought forth by CAL FIRE for hazardous fuel reduction and management, site design, and other requirements, as presented in Title 14 of the Public Resources Code, would be required for future development projects within wildfire-prone areas. Each of those projects would be required to consider site-specific attributes such as slope, prevailing winds, and fuel loads, and address such features in the projects' associated plans and design features. Project plans would also be subject to review and approval by the responsible fire protection district in cooperation with CAL FIRE. Compliance with those requirements would ensure that cumulative impacts related to risks from wildfire and exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would be less than significant.

3.14.3.5 Mitigation Measures

Mitigation measures are not required.

3.14.4 References

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4 Alternatives

4.1 Introduction

This chapter describes alternatives to the proposed Diamond Springs Community Park Project (Proposed Project), consistent with California Environmental Quality Act (CEQA) Guidelines Section 15126.6. This chapter presents the objectives of the Proposed Project, a summary of its significant environmental impacts, and a description of the alternatives that were considered but eliminated from further consideration, followed by an analysis of the three alternatives evaluated, including the No Project Alternative. A comparison of the three alternatives to the Proposed Project is provided and the environmentally superior alternative is identified.

According to CEQA Guidelines Section 15126.6, an environmental impact report (EIR) shall describe a range of reasonable alternatives to the project or to the location of the project, that would feasibly attain most of the basic objectives of the project and could avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. This section of the guidelines further requires that the discussion focus on alternatives capable of eliminating significant adverse impacts of the project or reducing them to a level of insignificance even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly. The alternatives analysis also should identify any significant effects that may result from a given alternative.

The lead agency is responsible for selecting a reasonable range of potentially feasible project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. The range of alternatives is governed by a "rule of reason" that requires the EIR to set forth only those potentially feasible alternatives necessary to permit a reasoned choice. The alternatives shall be limited to those that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only those that the lead agency determines could feasibly attain most of the basic objectives of the project while substantially lessening any of the significant effects of the project. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation.

An EIR is not required to consider alternatives which are infeasible. "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (CEQA Guidelines Section 15364). Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or already owns the alternative site). None of these factors establishes a fixed limit on the scope of reasonable alternatives. Under CEQA case law, the concept of feasibility also "encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors." (*City of Del Mar v. City of San Diego* [1982] 133 Cal.App.3d 410, 417; *California Native Plant Society v. City of Santa Cruz* [2009] 177 Cal.App.4th 957.) In assessing the feasibility of alternatives, agency decisionmakers may also take account of the extent to which the alternatives meet or further the agency's underlying purpose or objectives in considering a proposed project. (*Sierra Club v. County of Napa* [2004] 121 Cal.App.4th 1490, 1506-1509;

Citizens for Open Government v. City of Lodi [2012] 296 Cal.App.4th 296, 314-315; *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* [2008] 43 Cal.4th 1143, 1165, 1166.)

4.2 Project Objectives

The underlying purpose of the proposed project is to address the increasing need for local parks, passive open space, and ballfields within Diamond Springs and the surrounding area. The County has identified the project site for development of a recreational facility that would serve the local community, nearby schools, and sports leagues. The objectives for the project are as follows:

1. Provide recreational facilities for use by the community in the Diamond Springs area.
2. Provide a variety of recreation amenities including multi-purpose fields, ballfields, playgrounds, picnic areas, and tennis courts.
3. Provide a community gathering point.
4. Provide a potential community center for emergency purposes.
5. Protect environmental resources, including cultural and biological resources.

4.3 Overview of Significant Project Impacts

The range of alternatives studied in the EIR must be broad enough to permit a reasoned choice by decision-makers when considering the merits of the project. The analysis should focus on alternatives that are potentially feasible. Under CEQA, alternatives that are remote or speculative should not be discussed in the analysis of alternative. Furthermore, alternatives should focus on reducing or avoiding significant environmental impacts associated with the project as proposed. As described in Chapter 3, the project would result several potentially significant environmental impacts. Note that none of the impacts are significant and unavoidable. Nevertheless, significant impacts can be addressed either by mitigation measures or project alternatives. Potentially significant impacts are identified in Table 4-1.

4.4 Alternatives Considered but Eliminated

This section discusses alternatives that were considered but were eliminated from detailed consideration because they did not meet most of the basic project objectives; were found to be infeasible for technical, environmental, or social reasons; or they did not avoid or substantially lessen significant environmental impacts of the Proposed Project. Section 15126.6(c) of CEQA Guidelines indicates that the range of potential alternatives shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible, and briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (1) failure to meet most of the basic project objectives, (2) infeasibility (see introduction to this Chapter), or (3) inability to avoid significant environmental impacts.

4.4.1 Offsite Alternative

Per Section 15126.6(f)(2), an EIR should generally consider an alternative location. The selection of an alternative location should be based on the ability to avoid or substantially reduce a significant impact and the feasibility of an alternative location. In the instance of the proposed project, certain site-specific impacts may be reduced, notably biological resources and cultural resources. Other impacts, including air quality, are driven by the construction and operation of a community park facility, rather than the specific location, and would likely occur at an alternative location. Certain impacts, such as light and noise, might be greater in an area with a higher population density or with fewer natural barriers (such as the creek and the tree cover).

The project site is the subject of a charitable gift by a private trust to El Dorado County provided that a park can be constructed there. Should the park not be constructed, the site will pass to the control of the Boys and Girls Club of America, a charitable organization. The County has not identified a feasible alternative site (appropriately sized that could feasibly be acquired) that would accommodate a community park in the western county. As the project site is a charitable gift, the County has not identified a funding source for acquisition of an alternative site. For these reasons, the offsite alternative has been eliminated from further consideration.

4.5 Alternatives Selected for Analysis in the EIR

This section describes the alternatives to the project that were selected and analyzed according to CEQA Guidelines Section 15126.6(a). The analyzed alternatives represent a reasonable range of alternatives to the project that would feasibly attain most of the project's basic objectives, and would avoid or substantially lessen the significant adverse environmental effects of the project. As most identified impacts of the Proposed Project relate to the actual construction of various project and programmatic infrastructure components, the alternatives selected consider no or reduced infrastructure components.

The following four alternatives, which are summarized in Table 6-1 and described in detail below, were selected for comparative analysis in this EIR:

1. No Project Alternative – The No Project Alternative are the circumstances under which the Proposed Project does not proceed.
2. Roadway Connector Alternative – This alternative involves implementing the circulation guideline as presented in the Diamond Springs-El Dorado Circulation Map and would include a roadway through the project site that would connect to new roadways built concurrently with future development in the currently undeveloped adjacent parcels.
3. Alternate Site Plan /Lower Density Use Park – This alternative would construct a lower density use park with few ballfields and more unprogrammed spaces in the northern half of the site.

4.5.1 No Project Alternative

4.5.1.1 Description

CEQA Guidelines Section 15126.6(e) generally provides that "[t]he 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published, … as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and

consistent with available infrastructure and community services." Section 15126(e)(3)(B) provides that, where, as here, a proposed project is something "other than a land use or regulatory plan," the "No Project" Alternative is "the circumstance under which the project does not proceed." The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the impacts of approving the Proposed Project with the impacts of not approving the Proposed Project (CEQA Guidelines Section 15126.6[e][1]). "[W]here failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment." (CEQA Guidelines Section 15126.6[e][3][B]).

Under the No Project Alternative, the park would not be constructed. As noted in Section 4.4.1, the project site is a charitable gift to the County. If a park is not constructed, the site would be transferred to the Boys and Girls Club of America. Given the lack of on-site infrastructure, and the zoning of the project site (residential) it is not likely that a different property owner would develop the site. It is therefore assumed that for purposes of the No Project Alternative, the site would remain undeveloped.

4.5.1.2 Impact Analysis

As shown in Table 4-1, the project would avoid all potentially significant impacts associated with the proposed project.

4.5.1.3 Ability to Meet Project Objectives

The No Project Alternative would not meet any of the project objectives, except for the protection of biological and cultural resources (since the project site would remain undeveloped).

4.5.2 Accommodation of the County's Traffic Circulation Plan Alternative

4.5.2.1 Description

This alternative would include the connector between Oak Dell Road and Patterson Drive (at Argonaut Drive), shown on the Diamond Springs - EL Dorado Circulation Map. The Diamond Springs - EL Dorado Circulation Map, which identifies potential roadway connections within the area, was incorporated into the Diamond Springs and El Dorado Area Mobility and Livable Community Plan prepared by the El Dorado County Transportation Commission (February 28, 2014) with funding by the California Department of Transportation (Caltrans). Although that Plan was never formally adopted by the Board of Supervisors, direction was given to staff to use the Plan as a circulation guideline as future development came forward in the area.

The Plan includes a future roadway, shown in Figure 4-1 Roadway Alternative, that would extend from Oak Dell Road, then south through the center of the project site, and then turn east across Deadman Creek to connect with proposed Lake Oaks Subdivision (a 270-unit subdivision west of Patterson Drive). The roadway would also connect to the proposed McCann Subdivision (a 72-unit subdivision). Note that a pre-application was accepted by the County for the Lake Oaks Subdivision, but a tentative map has not been approved. There is no current active application for the McCann Subdivision.

4.5.2.2 Impact Analysis

This alternative would not avoid or reduce any of the impacts associated with the proposed project. It may provide a benefit to future developers adjacent to the project site by providing a secondary means of ingress/egress to potential future subdivisions. As shown in Table 4-1, the roadway alignment would increase biological impacts by requiring a new crossing of Deadman Creek, and would potentially impact the significant cultural resources located east of the Creek (and avoided by the proposed project).

The alternative would not reduce noise impacts, as recreational activities would still occur at the north and south ends of the site (where sensitive receptors are located. In addition, traffic noise from through traffic could increase noise levels in the project vicinity.

Per the *Technical Advisory on Evaluating Transportation Impacts in CEQA,* prepared by the Governor's Office of Planning and Research (OPR 2018), construction of new roadways must be analyzed for "induced vehicle travel" which may increase the vehicle miles traveled (VMT) in the County. Modeling would be required to determine if the induced travel would be significant, but it is noted as potentially greater impact, as compared to the proposed project.

4.5.2.3 Ability to Meet Project Objectives

The inclusion of a roadway would still allow the project to meet most of its objectives. Ballfield space would be reduced (likely one lighted and one unlighted softball/baseball fields would be eliminated). Nevertheless, community level recreational facilities could still be constructed. The project would not fully implement the objective to protect biological and cultural resources, by introducing new impacts to Deadman Creek and the area to the east.

4.5.3 Alternate Site Plan/Lower Density Use Park

4.5.3.1 Description

This alternative involves turning the proposed project into a lower density use park with unprogrammed space. There would be no designated recreation fields or associated amenities. As shown in Figure 4-2, Low Density Plan, the proposed park would have two lighted softball fields, one unlit softball field, one lighted soccer field, a basketball court, 4 tennis courts, a gym, and open turf play area. Undeveloped space in the northern half of the site would be constructed with walking trails. The proposed project, by comparison would construct two full size soccer fields in the northern half, two lighted softball/baseball fields, and two unlighted softball fields that could also accommodate a youth-sized soccer fields in the outfield. The low density project would have fewer parking spaces, as shown in Figure 4-2.

4.5.3.2 Impact Analysis

By reducing the active recreational facilities, the project would decrease the number of visitors and associated traffic. This would reduce, but not avoid, impacts to air quality, biological resources, cultural resources, and noise. The smaller footprint would reduce construction impacts, including air emissions, noise, and impacts to biological resources (oak woodlands in the northern half of the site).

4.5.3.3 Ability to Meet Project Objectives

The project alternative would achieve the basic project objectives, although it would reduce the facilities available to organized sports (such as baseball, softball, and soccer).

4.6 Impact Comparison

Table 4-1 shows the potentially significant impacts of the proposed project, and the potential impacts of each alternative. Where an alternative would result in a potentially significant impact that would not occur under the proposed project, that is also noted in the table.

Table 4-1. Comparison of Alternatives

Project Impact	No Project	Roadway Alt.	Low Density Alt.
Aesthetics – No Significant Impacts			
Air Quality			
AIR-2. Construction of the project would result in emissions of dust that could violate any air quality standard or contribute substantially to an existing or projected air quality violation. Regarding other criteria air pollutants, construction and operation of the project would result in emissions that would not exceed adopted thresholds of significance, violate any air quality standard or contribute substantially to an existing or projected air quality violation.	LTS-	PS	PS-
AIR-3. The project may expose sensitive receptors to substantial pollutant concentrations.	LTS-	PS	PS-
Biological Resources			
BIO-1. The proposed project would have no impact on special-status plants but could have a substantial adverse effect on some special-status wildlife species during construction.	LTS-	PS	PS-
BIO-2. The proposed project could have a substantial adverse effect on riparian habitat or sensitive natural communities.	LTS-	PS+	PS-
BIO-3. The proposed project could have a substantial adverse effect on state or federally protected wetlands or waters.	LTS-	PS+	PS-
BIO-4. The proposed project could impede the use of native wildlife nursery sites by removing or causing abandonment of active native bird nests.	LTS-	PS	PS-

Table 4-1. Comparison of Alternatives

Project Impact	No Project	Roadway Alt.	Low Density Alt.
BIO-5. The proposed project could conflict with local policies or ordinances protecting oak trees.	LTS-	PS+	PS-
Cultural and Tribal Cultural Resources			
CUL-2. The project may cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.	LTS-	PS+	PS-
CUL-3. The project may disturb any human remains, including those interred outside of dedicated cemeteries.	LTS-	PS	PS-
CUL-4. The project may cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074.	LTS-	PS	PS-
Energy – No Significant Impacts			
Geology and Soils – No Significant Impacts			
Greenhouse Gas Emissions – No Significant Impacts			
Hazards and Hazardous Materials – No Significant Impacts			
Hydrology and Water Quality – No Significant Impacts			
Noise			
NOI-1. The proposed project could result in generation of a temporary or permanent increase in ambient noise levels in the vicinity of the project substantially above levels without the project or in excess of standards established in the County's general plan or noise ordinance, or applicable standards of other agencies..	LTS-	PS+	PS
Public Services and Recreation – No Significant Impacts			
Transportation			
TRA-2. The project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).**Project Impact is LTS.**	LTS	LTS or PS+	LTS
Utilities and Service Systems – No Significant Impacts			
Wildfire – No Significant Impacts			

LTS = Less Than Significant
PS = Potentially Significant
- Impact would be reduced
+ Impact would be greater

4.7 Environmentally Superior Alternative

CEQA Guidelines require that an EIR identify the environmental superior alternative (Section 15126.6 (e)(2)). If the environmentally superior alternative is the "No Project" Alternative, the EIR must identify an environmentally superior alternative from among the other alternatives.

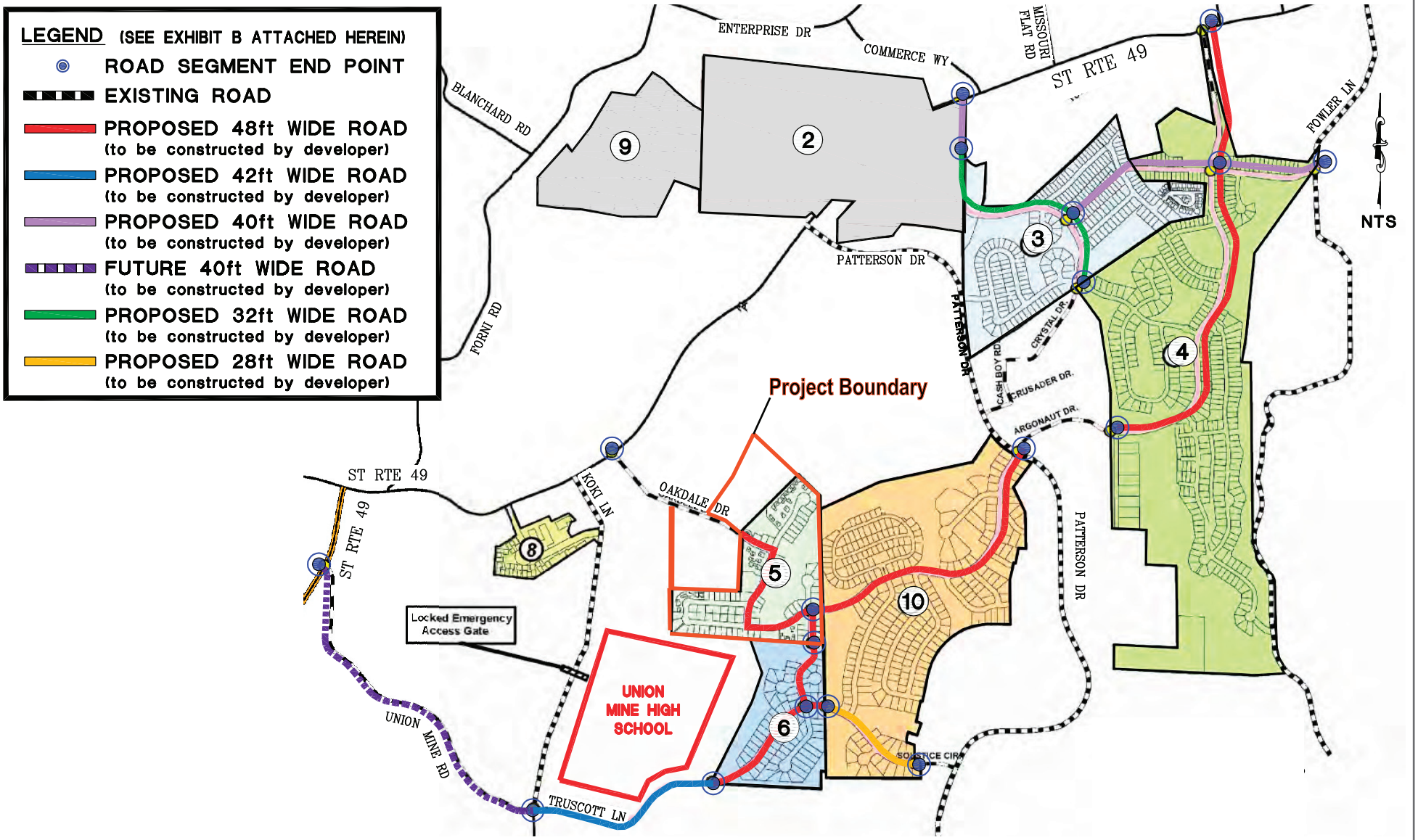
The No Project Alternative would avoid all potentially significant impacts, but would fail to achieve any of the project objectives except for protection of biological and cultural resources. Therefore, one of the "build" alternatives should be identified as the environmentally superior alternative.

The Alternative Site Plan would reduce most impacts, although not necessarily to a level of less than significant (and would thus still require mitigation measures). This alternative would be the environmentally superior alternative.

4.8 References

California Governor's Office of Planning and Research (OPR). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA.* December 2018. Accessed March 7, 2023 at http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

El Dorado County Transportation Commission 2014. Diamond Springs and El Dorado Area Mobility and Livable Community Plan. February 28, 2014



SOURCE: Roach & Campbell 2022

DUDEK

FIGURE 4.1

Roadway Alternative

Diamond Springs Community Park Project

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SOURCE: Roach & Campbell 2022

FIGURE 4.2

Low Density Plan

Diamond Springs Community Park Project

DUDEK

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5 Other CEQA Considerations

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. The environmental impact report (EIR) must discuss (1) significant environmental effects of the proposed project and mitigation measures proposed to minimize the significant effects, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, (4) growth-inducing impacts of the proposed project, and (5) alternatives to the proposed project. The EIR shall also contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR CEQA Guidelines Section 15128).

This chapter summarizes the significant environmental effects that cannot be avoided if the project is implemented (i.e., significant unavoidable impacts). It also addresses growth inducement and whether significant irreversible environmental changes of the project are required to be evaluated. An evaluation of the significant environmental effects of the Proposed Project, applicable mitigation measures, the level of impact significance before and after mitigation, and evaluation of cumulative impacts, is provided in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures. Chapter 4, Alternatives, addresses alternatives to the proposed project.

5.1 Effects Not Found To Be Significant

The Initial Study prepared as part of the Notice of Preparation (NOP) identified several topics that were not expected to result in a significant impact. These topics identified in the Initial Study were not discussed in scoping comments received by the lead agency, and are not further evaluated in the EIR. These topics include:

- **Agricultural Resources.** The project site does not contain farmland, nor is it subject to a Williamson Act contract or zoned for agricultural uses. The project site does contain oak woodlands, which are discussed as part of biological resources.
- **Land Use.** The project site is designated residential in the general plan and in the County zoning ordinance. Community recreational facilities are allowed under the general plan land use and zoning. The project would not divide an existing community.
- **Mineral Resources.** The project site is not identified as having state or regionally important mineral resources.
- **Population and Housing.** The project would neither displace, nor result in the construction of housing.

5.2 Significant Unavoidable Impacts

The CEQA Guidelines require a description of any significant impacts, including those that can be mitigated but not reduced to a level of insignificance (Section 15126.2[c]). Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described. This EIR identified no significant unavoidable impacts.

5.3 Significant Irreversible Environmental Changes

The CEQA Guidelines require a discussion of significant irreversible environmental changes with project implementation, including uses of nonrenewable resources during the initial and continued phases of the project (Section 15126.2[d]). However, CEQA Guidelines Section 15127 indicates that information concerning irreversible changes needs to be included only in EIRs prepared in connection with:

A. The adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency;
B. The adoption by a Local Agency Formation Commission of a resolution making determinations; or
C. A project which will be subject to the requirement for preparing an environmental impact statement pursuant to the requirements of the National Environmental Policy Act of 1969, 42 United States Code Sections 4321–4347.

As the proposed project is not one of the above project types, this EIR is not required to include an analysis of significant irreversible environmental changes.

5.4 Growth Inducement

The CEQA *Guidelines* require that an EIR evaluate the growth-inducing impacts of a proposed action (Section 15126.2[d]). A growth-inducing impact is defined by the CEQA *Guidelines* as:

> [T]he ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth.... It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have direct and/or indirect growth-inducement potential. Direct growth inducement could result if a project involved construction of new housing. A project can have indirect growth inducement potential if it would establish substantial new permanent employment opportunities (e.g., commercial, industrial or governmental enterprises) or if it would involve a substantial construction effort with substantial short-term employment opportunities and indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, under CEQA, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. Increases in population could tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA *Guidelines* also require analysis of the characteristics of projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The timing, magnitude, and location of land development and population growth is based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Because general plans define the location, type, and intensity of growth within a given jurisdiction, they are the primary means of regulating development and growth in California.

The growth inducing impacts analysis addresses the potential of the project for growth inducement in the project vicinity or broader area. Under CEQA, a project is generally considered to be growth-inducing if it results in any one of the following:

1. Extension of urban services or infrastructure into a previously unserved area;
2. Extension of a transportation corridor into an area that may be subsequently developed; or
3. Removal of obstacles to population growth (such as provision of major new public services to an area where those services are not currently available)

5.4.1 Extension of Urban Services or Infrastructure

The project does not include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand. Consequently, the project would not induce growth in the project vicinity or broader area due to extension of urban services or infrastructure.

5.4.2 Extension of Transportation Corridors

The project site is served by existing roadways. Regionally, SR 49 serves the project site, while Oak Dell Road provides direct access, and Snoopy Road secondary access. The project would include minor improvements to the intersection of SR 49 and Oak Dell Road. However, these improvements are to improve turn movements for visitors to and from the park, rather than increasing the capacity of the existing transportation corridor. The project would also provide for resurfacing a portion of Snoopy Road. This improvement would serve the park site, and would not increase the capacity of the roadway. Consequently, the project would not induce growth in the project vicinity or broader area due to extension of transportation corridors.

5.4.3 Removal of Obstacles to Population Growth

Section 15126.2(d) of the CEQA *Guidelines* states that an EIR should discuss "the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Growth can be induced in a number of ways, including through the elimination of obstacles to growth, through the stimulation of economic activity within the region, or through precedent-setting action. CEQA requires a discussion of how a project could increase population, employment, or housing in the areas surrounding the project as well as an analysis of the infrastructure and planning changes that would be necessary to implement the project.

Projects that are characterized as having significant impacts associated with the inducement of growth are frequently those that would remove obstacles to additional growth, such as the expansion of sewer or water facilities that would permit construction of more development in the service area covered by the new facilities. The proposed project would not remove obstacles to additional growth in this manner, as it would be undertaken in an area that currently is served by all utilities and services. Similarly, if a project would overburden existing infrastructure so as to require construction of new facilities that could result in significant impacts, then the project may be deemed to have a significant growth-inducing impact. As discussed in the Section 3.13, *Utilities and Service Systems*, the project would not require such additional public service facilities.

The project would provide a public facility (community park) that would serve both existing and future residents. It may be considered, then, to accommodate future growth. However, there is currently no such facility within the

Diamond Springs community or surrounding area. The project would primarily meet unmet demand in the area. In addition, it is not likely that the presence of a park would induce substantial growth that would not otherwise occur.

Section 3.14 in the Initial Study, *Population and Housing*, analyzes the project's overall effect on population and housing, including growth-inducing considerations. In terms of housing, the Diamond Springs Community Park Project would not provide any residential housing. Therefore, it could be assumed that the proposed project would result in zero population growth. Consequently, the project would not induce substantial population growth.

5.4.4 Conclusions

The proposed project would not develop residential land uses, increase or affect population growth, and/or expand infrastructure systems beyond what is needed. Although new on-site infrastructure would occur as part of the proposed project, the project would have limited facilities and would connect to existing infrastructure. There would be no amendments made to the General Plan land use designations nor any changes to zoning-designations at the project site. The project does not include extensions or expansions of infrastructure systems or roads beyond what is needed to serve project-specific demand. Consequently, the project would not induce growth in the project vicinity or broader area due to extension of urban services or infrastructure. For the above-described reasons, the project would not cause a new impact related to a substantial increase in population growth and would be in line with the projected growth planned for the area as defined in the El Dorado County General Plan.

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