

5.1 Overview

This chapter contains the following discussions and analyses required by the California Environmental Quality Act (CEQA).

- Cumulative impacts
- Growth-inducing impacts
- Significant and unavoidable environmental impacts
- Significant irreversible environmental impacts
- Mitigation measures with the potential for environmental effects

In addition, this chapter also evaluates the potential indirect environmental effects of construction and occupancy of secondary dwelling units in the Village of Marble Valley Specific Plan (VMVSP; proposed project). The project applicant is not proposing secondary dwelling units and is not seeking entitlements for the units. Consequently, they are not part of the proposed project description. However, a proposed land use designation in the VMVSP provides for secondary dwelling units. Secondary dwelling units are allowed by right as provided in the County Code of Ordinances and do not in and of themselves require environmental review under CEQA. However, they are a reasonably foreseeable outcome of implementing the VMVSP and therefore require CEQA review as indirect (or secondary) effects of the proposed project.

5.2 Cumulative Impacts

The State CEQA Guidelines define a cumulative impact as two or more individual impacts that, when considered together, are significant or that compound or increase other significant environmental impacts. The incremental impact of a project may be considerable when viewed in the context of other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period of time (State CEQA Guidelines 15355).

State CEQA Guidelines Section 15130(b) indicates that an adequate discussion of significant cumulative impacts requires consideration of either of the following.

(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or

(B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan.

This environmental impact report (EIR) uses a combination of both approaches. That is, the cumulative analysis is based on the adopted general plan (the projections approach based on projected population of the planning horizon under the *El Dorado County General Plan* [County General Plan] [El Dorado County 2004]) supplemented by a list of additional projects that are not currently included in the County General Plan. This combined approach is used to determine whether significant cumulative impacts would occur.

In reaching a conclusion for each resource area (i.e., the topics analyzed in Chapter 3, *Impact Analysis*), five factors were considered: (1) the geographic scope of the cumulative impact area for that resource, (2) the timeframe within which project-specific impacts could interact with the impacts of other projects, (3) whether a significant adverse cumulative condition presently exists for that resource to which project impacts could contribute, (4) the significance of the incremental project-specific contribution to cumulative conditions, and (5) whether any cumulative impact would be significant.

For the purpose of this EIR, significant cumulative impacts would occur if impacts related to the implementation of the VMVSP, combined with the environmental impacts of the planning horizon under the County General Plan and additional projects indicated below, would result in an adverse significant effect. For an impact to be considered cumulative, these incremental impacts and potential incremental impacts must be related to the types of impacts caused by the project and evaluated in Chapter 3, *Impact Analysis*.

5.2.1 Cumulative Scenario

The cumulative analysis considers impacts of the proposed VMVSP together with the planning horizon under the County General Plan and other reasonably foreseeable projects producing related impacts, as described below.

General Plan Updated Planning Horizon

The County General Plan, adopted in 2004, presents El Dorado County's (County) comprehensive, long-term vision for physical development and resource conservation. The County General Plan analyzed two scenarios, a 20-year planning horizon (estimated to be 2025 at the time of preparation of the 2004 General Plan) and a maximum theoretical density buildout. The maximum theoretical density permitted under buildout of the County General Plan would result in the development of up to 78,692 new housing units beyond the 44,708 units existing in 1999, for a total of 123,400 dwelling units housing an estimated 317,692 people within the unincorporated west slope area (El Dorado County 2003). The maximum commercial and industrial development permitted at County General Plan maximum theoretical density buildout is estimated to be 6,684 acres, at a floor area ratio of 0.85, accommodating a total of 117,122 jobs (El Dorado County 2003, 2004). Practical constraints, such as slope, waterways, biological resources, and availability of roadways and infrastructure, make it unlikely that maximum theoretical density buildout could be achieved and especially not within the planning horizon of the County General Plan. In addition, the proposed project is anticipated to be built out within the planning horizon and therefore, the planning horizon is used as a basis for this cumulative scenario.

The County's forecasts for the 2004 County General Plan 2025 planning horizon calculated that growth to the planning horizon would be an additional 32,491 new housing units beyond the 44,708 units that existed in 1999, for a total of 77,199 units. Approximately 17,900 new housing units have

been built since 2000, leaving approximately 14,600 remaining housing units to be built in the planning horizon.

In 2013, the County updated the housing and employment growth projections to assist in the preparation of the updated County Travel Demand Model, which was used for the VMVSP traffic analysis (BAE Urban Economics 2013). These projections cover the western slope of El Dorado County (excluding Placerville) and examine growth from 2010 to a planning horizon (now labeled 2035). Growth allocations based on the distribution of new development in the County between 2000 and 2011 and development applications from 2006 through present were used to extrapolate future growth. In 2010, there were 59,668 existing housing units. In 2035, it was projected that there would be 77,077 housing units. The 2013 study projects that by 2015, 62,803 housing units exist, leaving approximately 14,300 housing units to be built in the 2035 planning horizon. The 2035 planning horizon forecasts differ only slightly from the 2025 planning horizon forecasts done in 2002. This is largely a result of the housing crash in the late 2000s, and the resulting drastic reduction in the rate of growth in El Dorado County. Detail on the methodology for the forecasts is presented in the BAE memo, available on the County's website at https://www.edcgov.us/Government/LongRangePlanning/Travel_Demand_Model/Travel_Demand_Model_Phase_I.aspx.

Among the specific projects included in planning horizon for the County General Plan are those considered to be existing commitments—projects for which a tentative map or development agreement existed before approval of the 2004 County General Plan but that were not built out at the time the 2004 County General Plan was adopted. These projects have the potential to contribute 14,565 dwelling units to the County General Plan total (El Dorado County 2003). Since adoption of the County General Plan, several of the approved projects have decreased in size or were partially built out and are now expected to supply an additional 4,357 of the possible 14,300 new dwelling units. These projects include the Bass Lake Hills Specific Plan, Carson Creek Specific Plan, El Dorado Hills Specific Plan, Marble Valley Master Plan, Promontory Specific Plan, and Valley View Specific Plan (Table 5-1).

Table 5-1. El Dorado County Approved Projects, 2004 County General Plan

Project	Residential Uses (dwelling units)			Commercial and Industrial/ Research and Development Uses (acres)	Parkland and Open Space Uses (acres)
	Entitled	Built	Remaining		
Bass Lake Hills Specific Plan	1,458	162	1,296	0	31 – Park 151 – OS
Carson Creek Specific Plan	1,925	1,544	381	99	37 – Park 200 – OS
El Dorado Hills Specific Plan	6,162	4,929 ^a	1,233	301	60 – Park 808 – OS
Marble Valley Master Plan ^b	398	0	398	0	54 – Park 1,271 – OS
Promontory Specific Plan	1,100	752 ^c	348	7	35 – Park 101 – OS
Valley View Specific Plan	2,840	2,139	701	40	86 – Park 617 – OS
Total	13,883	9,526	4,357	447	303 – Park 3,148 – OS

Source: El Dorado County 2024.

OS = Open Space

^a As of 2024.

^b Tentative Map for Marble Valley Master Plan expired.

^c Includes 16–66 lots that are recorded but not yet built.

Bass Lake Hills Specific Plan

The 1,196-acre Bass Lake Hills Specific Plan area is approximately 3 miles east of the Sacramento/El Dorado county line, north of U.S. Highway (US) 50 between El Dorado Hills and Cameron Park, and abuts the El Dorado Hills Specific Plan (EDHSP) on the east. The Bass Lake Hills Specific Plan was adopted in 1995 and allows development of 1,458 dwelling units with 31 acres of parks and 151 acres of open space (El Dorado County 1995). As of February 2024, only 162 dwelling units had been constructed. Town and Country Village, a hotel and resort development, which is part of the Bass Lake Hills Specific Plan is currently under consideration.

Carson Creek Specific Plan

The Carson Creek Specific Plan, adopted in 1996 and amended in 1999, allows development of an approximately 710-acre area along the Sacramento County line, south of US 50 and adjacent to the El Dorado Hills Business Park. Buildout of the Carson Creek Specific Plan would allow 1,700 dwelling units, with approximately 1,544 constructed as of February 2024, up to 40,000 square feet of commercial uses, up to 449,605 square feet of research and development uses, 780,279 square feet of industrial uses, 37 acres of public parkland, and 200 acres of open space (El Dorado County 1999).

El Dorado Hills Specific Plan

The EDHSP allows development of up to 6,162 dwelling units, 301 acres of commercial uses, 60 acres of parks and public facilities, and 808 acres of open space uses on a 3,646-acre site north of US

50 and south of Green Valley Road, as well as approximately 158 acres of commercial land uses south of US 50 (El Dorado County Community Development Department 1988). Approximately 4,929 dwelling units have been constructed as of February 2024.

Marble Valley Master Plan

The Marble Valley Master Plan development, a 2,341-acre area south of US 50 between the Bass Lake Road and Cambridge Road interchanges, was approved by the County Board of Supervisors in 1998 for 398 dwelling units, 54 acres of parks and public facilities, and 1,271 acres of open space (El Dorado County 2003). However, the tentative map has expired, and this project was not constructed, and this proposed project, VMVSP, is proposed for this location.

Promontory Specific Plan

The Promontory Specific Plan allows development of an approximately 1,000-acre area, south of Folsom Reservoir and north of US 50, with up to 1,100 dwelling units, 7 acres of commercial and office uses, 35 acres of parks and public facilities, and 101 acres of public open space (El Dorado County 2003). As of March 2021, approximately 753 dwelling units have been constructed or lots have been recorded.

Valley View Specific Plan

The Valley View Specific Plan area covers 2,837 acres south of US 50 in the El Dorado Hills area. The Specific Plan allows development of up to 2,840 dwelling units, 40 acres of commercial uses, including mixed-use development, 86 acres of multi-use open space (parks and public facilities), and two schools, and the plan designates 617 acres for passive open space and buffer areas (El Dorado County 2003). As of February 2024, approximately 2,139 dwelling units have been constructed.

Other Projects

Other projects not specifically addressed in the County General Plan planning horizon assumptions include the Lime Rock Valley Specific Plan (LRVSP), Saratoga Estates residential development (formerly Rancho Dorado), and Tilden Park Project. In addition, the El Dorado Town Center Apartments, a four-story 214-unit apartment complex, approved by the County in 2018, and has been built out and is now occupied, was originally planned as a hotel project and was included as such in the planning horizon assumptions described above in the County General Plan. However, the change in use from hotel to residential results in higher density and required a general plan amendment. The locations of these proposed projects are shown in Figure 5-1. Residential and commercial development and parks and open space lands associated with these projects are described below and in Table 5-2.

Table 5-2. Other Projects

Project	Residential Uses		Commercial and Industrial/ Research and Development Uses (acres)	Parkland and Open Space Uses (acres)
	Dwelling Units	Acres		
El Dorado Hills Town Center Apartments	214	4.6	0	0
Lime Rock Valley Specific Plan	800	358	0	8 – Park 333 – OS
Saratoga Estates	317	70.98	0	5.42 – Park 37.04 – OS
Tilden Park	14	2.97	8.2	0 – Park 1.64 – OS
Montana de El Dorado	-	-	3.3	-
Subtotal	1,345	436.5	11.5	13.42 – Park 371.68 – OS
Combined Park/OS Total	-	-	-	385.1

Sources: El Dorado County 2020, 2021, 2012a, 2012b, 2013a, 2015, 2020, 2021; G3 Enterprises 2020.

OS = Open Space

Targeted General Plan Amendment/Zoning Ordinance Update

The Board of Supervisors adopted the TGPA/ZOU in December 2015. The TGPA/ZOU does not include any site-specific development proposals, although it does include adoption of guidelines for mixed-use development. Rather, it is limited to amendments to County General Plan policies and a comprehensive revision of the zoning ordinance. Policies pertinent to the proposed project include policies to increase the maximum density for the residential portion of mixed-use projects in Community Regions from 16 dwelling units per acre (du/ac) to 20 du/ac, to amend the Multifamily Residential (MFR) designation to encourage a full range of housing types, and to encourage infill projects.

El Dorado Hills Town Center Apartments Project

The Town Center Apartments project is a 214-unit apartment complex located at the northwest corner of Town Center Boulevard and Vine Street within the Town Center East Planned Development in El Dorado Hills. The site is within Village T of the EDHSP and was originally planned as a hotel, and as such is included in the County General Plan planning horizon. The project required an amendment to the County General Plan to increase residential density from 24 du/ac to 55 du/ac, amendments to the EDHSP, rezone, and revisions to the approved Town Center East Development Plan. The County approved the project in 2018. It is now fully built out and occupied.

Lime Rock Valley Specific Plan

The proposed LRVSP would allow development of up to 800 residential units on approximately 360 acres and an 8-acre neighborhood park with recreational amenities and would designate about 333 acres of public and private open space (El Dorado County 2013b). The project site is south of US 50, southwest of the Cambridge Road interchange, along Flying C Road. A portion of the site adjoins the proposed VMVSP project area. It is adjacent to the existing Cameron Estates subdivision on the north and the Royal Equestrian subdivision on the south. Preparation of an EIR is under way.

Saratoga Estates (Rancho Dorado) Residential Development

The approved Saratoga Estates (formerly Rancho Dorado) residential project, currently under construction, includes development of 317 residential units, 5.42 acres of public parkland, 37.04 acres of open space, and 8.4 acres of public roads in the El Dorado Hills area (El Dorado County 2015). The site is north of US 50 and 0.5 mile west of the intersection of US 50 and El Dorado Hills Boulevard. The first phase of the development has been built out and the second phase is underway.

Tilden Park Subdivision

The proposed Tilden Park subdivision consists of a proposed residential and commercial development on a 12.01-acre site north of Wild Chaparral Drive and 500 feet west of Crosswood Drive in Shingle Springs just north of US 50. The Tilden Park subdivision proposes development of three residential parcels, and a total of 38,550 square feet of commercial development within three commercial lots that would include retail, grocery, restaurant and office uses as well as an 80-unit hotel (El Dorado County 2012b).

Montano De El Dorado Phase I and II Master Plan

The proposed Montano De El Dorado Phase I and II Master Plan, approximately 16.8 acres, would expand the existing Montano de El Dorado retail center (Phase I) to include additional retail space, an office building, hotel, and a small amphitheater. Phase II would consist of a total of 10 buildings for a total floor area of approximately 75,400 square feet and 143,900 square feet of commercial and office uses. The project would also include the provision of outdoor special events within existing Phase I and within the proposed amphitheater and parking lots within Phase II.

Folsom South of US 50

One other project considered in the cumulative analysis assumes buildout of the grazing land south of US 50 and north of White Rock Road that was annexed to the city of Folsom in 2012 and is slated for suburban development.

5.2.2 Analysis of Potential Cumulative Impacts

Aesthetics

The El Dorado National Forest serves as a natural resource area that is generally protected from, and therefore limits, the eastward expansion of mixed-use development that is occurring and is likely to occur in the western portion of the county. Therefore, the cumulative context for aesthetics is western El Dorado County, which comprises the central region of the county slated for development; the forested areas to the east would remain largely untouched. The projects occurring in the western county include those identified in the planning horizon of the County General Plan and other projects (El Dorado Town Center Apartments, LRVSP, Saratoga Estates residential development, and Tilden Park subdivision), which all combine to affect visual resources in the western county. Cumulative impacts for aesthetics would occur where a project, when combined with cumulative projects, would contribute to the substantial degradation or alteration of the existing visual character of the vicinity and regional context, associated scenic vista views, and views from scenic highways. Such views can be altered by extensive vegetation removal and landform alteration and the introduction of incompatible anthropogenic features, all of which act to transform

the visual landscape of the vicinity and the region as a whole. In addition, new sources of light can create light pollution and ambient glow that can affect nighttime views, for example, by reducing the amount of visible dark sky and stars and introducing nuisance light spill.

Development of the VMVSP would result in the impacts on visual resources identified in Section 3.1, *Aesthetics*, and would contribute to cumulative visual impacts in the area. These cumulative impacts consist of temporary visual changes as a result of construction activities, changes to scenic resources along important public scenic viewpoints along US 50, changes in visual character and quality at the project site, and changes in light and glare at the project site and vicinity introduced from new lighting sources.

The land use changes associated with the cumulative scenario, including those anticipated within the planning horizon of the County General Plan and other projects (El Dorado Town Center Apartments, LRVSP, Saratoga Estates residential development, and Tilden Park subdivision) have the potential to affect aesthetic and visual resources in several ways. These impacts would result from construction activities; development of roadways, parking areas, and buildings; alteration of the area's visual character, and the introduction of new light sources that would change the visual resources in the area.

While construction activities associated with cumulative projects are likely to be temporary, they would require the removal of mature vegetation and, likely, native oak trees in areas that are largely undeveloped. Construction of many of the cumulative projects would occur near sensitive visual receptors surrounding project sites and could be seen from US 50 and from vantages north of US 50. Although the proposed project and other projects are required to be designed in a manner that would retain large portions of oak woodlands to comply with County ordinances, the quality of available views would be affected by construction activities on undeveloped land, removal of mature oak trees, and grading that would result in negative visual impacts.

This area of El Dorado County has rolling terrain and affords high-quality scenic vistas, and the cumulative projects, including the proposed VMVSP, would be visible on hillsides and in vista views. The proposed project would also affect views from important public scenic viewpoints along US 50 (particularly eastbound US 50) because, although there would be open space area to buffer views of development, development in the interior of the site would be visible, as depicted in Figure 3.1-4 in Chapter 3, *Impact Analysis*.

The cumulative projects would result in an overall increase in light and glare. Like the proposed project, most of the cumulative projects are in unlit open space and the surrounding area is minimally lit. Therefore, lighting associated with these developments would substantially increase the amount of glare and nighttime lighting and would result in a cumulative impact related to ambient light glow and light pollution in the area. The proposed project would increase the amount of glare and nighttime lighting and would result in a considerable contribution to this cumulative impact.

The proposed project would contribute to the transformation of undeveloped, natural open space into mixed-use, suburban developments and associated infrastructure and would alter the existing visual character and quality of the site. The project design retains much of the project site in open space, uses design measures to reduce impacts on onsite natural resources that also serve as a visual amenity, and implementation of mitigation measures would reduce the visual prominence of the proposed project, making it blend within its existing visual environment. However, even with these measures, the proposed project would permanently convert the site from scenic natural open space

to one that is well-lighted and developed with buildings, infrastructure, and utilities. This conversion would reduce the visual quality of views associated with the site and the project vicinity. Therefore, the proposed project's contribution would be cumulatively considerable. This impact would be significant and unavoidable.

Air Quality

The County does not currently attain the national ambient air quality standards (NAAQS) or California ambient air quality standards (CAAQS) for ozone, the NAAQS for fine particulate matter (PM_{2.5}), or the CAAQS for coarse particulate matter (PM₁₀). Certain individuals residing in areas that do not meet the ozone or particulate matter ambient air quality standards, including El Dorado County, could be exposed to pollutant concentrations that cause or aggregative acute and/or chronic health conditions (e.g., asthmas, lost workdays, premature mortality). El Dorado County Air Quality Management District (EDCAQMD) has developed project-level thresholds that are derived from region-specific modeling that demonstrates the air basin can cumulatively accommodate project emissions below the threshold levels without affecting attainment of the health-protective NAAQS or CAAQS, as required by the local air quality plans.

As discussed in Section 3.2, *Air Quality*, the VMVSP Sustainability Element includes several policies that would contribute to criteria pollutant reductions during construction and operation. However, construction, operation, and combined construction and partial operation of new buildings would result in emissions in excess of EDCAQMD's significance thresholds (see Section 3.2, Impacts AQ-2b and 2c). Accordingly, build-out of the VMVSP would contribute to the existing regional cumulative air quality impacts before mitigation. Mitigation Measures AQ-2a through AQ-2f, GHG-1, and TRA-2 would reduce construction emissions to below EDCAQMD's thresholds, but operational and combined construction and operations emissions would still be cumulatively considerable even after implementation of all feasible mitigation.

New residents and adjacent sensitive receptors could be exposed to significant health risks from toxic air contaminants (TAC) during buildout of the CEDSP. VMVSP Policy 9.59 and Mitigation Measures AQ-2b, AQ-2c, and GHG-1 would reduce health risks to new receptors and help control TAC emission during construction. However, there may be instances where project-specific conditions preclude the reduction of health risks below EDCAQMD thresholds, indicating that the proposed project's contribution to existing ambient TAC health risks would be cumulatively considerable during construction. Operational sources of TAC would be minor and limited to new commercial uses developed under the project. VMVSP Policy 9.59 would also reduce cumulative exposure of new residents to ambient source of DPM. Accordingly, the project's contribution to operational TAC impacts would be less than cumulatively considerable, and this cumulative impact would be less than significant.

New and existing residents may also be exposed to naturally occurring asbestos (NOA) during construction, which might occur during the same period as other projects in the county. Possible cumulative NOA impacts as a result of these combined activities would be addressed by the standard EDCAQMD measures that apply to construction projects (e.g., Rule 223-2), in addition to project-level mitigation strategies identified for each project, including Mitigation Measure AQ-3. Accordingly, the project's contribution to NOA impacts would be less than cumulatively considerable, and this cumulative impact would be less than significant.

Vehicle trips from build-out of the VMVSP, in combination with existing and future traffic volumes, would not result in local cumulative impacts with respect to CO hot spots. CO hot spots are typically observed at heavily congested roadway intersections where a substantial number of gasoline-powered vehicles idle for prolonged periods throughout the day; however, modeling conducted at intersections with the highest traffic volumes and worst congestion shows that CO concentrations at these intersections would not be in excess of the CAAQS and NAAQS (see Section 3.2, *Air Quality*, Impact AQ-3c). Therefore, the cumulative impact would be less than significant.

Buildout of the VMVSP would not result in new or worsened odors that would affect a substantial number of people. Odors from diesel exhaust, architectural coatings, and cooking would be similar to those generated by the surrounding environment, which includes adjacent residential and commercial land uses, as well as traffic on US 50. Implementation of the project would not exacerbate existing odors associated with wastewater treatment at the Deer Creek WWTP. Accordingly, the project's contribution to odor impacts would be less than cumulatively considerable, and this cumulative impact would be less than significant.

Biological Resources

The Eldorado National Forest generally limits the eastward expansion of mixed-use development that is occurring and is likely to occur in the western portion of the County. Because the National Forest to the east would remain largely undeveloped, the cumulative context for biological resources would include only western El Dorado County in areas slated for development. The projects occurring in the western County include those identified in the County General Plan buildout and other projects (El Dorado Town Center Apartments, LRVSP, Saratoga Estates residential development, and Tilden Park subdivision). In combination, these projects will affect sensitive biological resources within the western county. Cumulative impacts for biological resources would occur where a project, when combined with cumulative projects, would contribute to a substantial loss of a sensitive biological resource, including sensitive natural communities, waters of the United States, and special-status species. Substantial loss can occur due to removing vegetation, filling drainages and wetlands, removing special-status plants, and take of special-status wildlife.

Implementation of the proposed project would result in direct, significant impacts on oak woodlands, riparian woodland, chaparral, annual grassland, and waters of the United States and in potential impacts on special-status plants and animals and their habitats. Simultaneous construction of other development projects in the vicinity of the project site could also result in significant impacts on oak woodland and the common wildlife that use this habitat. At the project level, impacts of other projects could be mitigated to a less-than-significant level by implementing mitigation measures similar to the proposed project. Impacts on riparian woodland, waters of the United States, and special-status plants would not be cumulatively considerable. However, the long-term loss of oak woodland, chaparral, and annual grassland habitats for special-status wildlife species would be cumulatively considerable.

It is estimated that by the year 2035, approximately 6,442 acres of oak woodland would be lost from build out under the General Plan (Biological Resources Policy Update and Oak Woodland Resources Management Plan Draft EIR Table 6-6, El Dorado County 2017a). Considering past, present, and future development in this region and the expected loss of more than 6,442 acres of oak woodlands because of projects in the county, there would be cumulative impacts on oak woodland, and the proposed project could result in a considerable contribution to cumulative impacts on oak

woodlands in the region. Based on criteria in the *Oak Resources Management Plan* (El Dorado County 2017b), the proposed project would remove 689.4 acres of oak woodland but would avoid 63.5% of oak woodland within the open space/avoided areas (approximately 1,198 acres) and would incorporate measures to retain additional oak woodland within the development footprint. The project, and all future projects, would also be required to replace individual native oak trees based on an inch-to-inch replacement standard, and Heritage Tree replacement based on a 3:1 ratio standard. As a result, project compliance with CEQA and the County General Plan would reduce the project's contribution to cumulative effects on oak woodlands and the associated wildlife species. However, the planted trees would require many years to attain maturity and to function similarly to the existing oak woodland. Because of the large extent of oak woodland that would be removed and the long-term impact because of the time for planted trees to mature, the project would result in a considerable contribution to this cumulative impact, and the cumulative impact on oak woodland would be significant and unavoidable.

The proposed project would also result in the removal of up to 4.809 acres of riparian woodland, which provides habitat for nesting birds, tree-roosting bats, and other native wildlife species; however, avoidance, minimization, and compensatory mitigation for this impact would reduce the project impact to a less-than-significant level. Many of the past, present, and future development projects would also result in loss of riparian habitat, resulting in a cumulative impact. However, because the project would affect a relatively small acreage of riparian habitat and mitigation would fully compensate for the loss, the project would not make a considerable contribution to this cumulative impact.

The proposed project would also result in the removal of chaparral and grassland habitat for special-status species, including Blainville's horned lizard, and other native wildlife species despite mitigation measures that would reduce the direct impact. Many of the cumulative projects would result in impacts on the same type of habitat, resulting in a cumulative impact. Because the project would affect considerable acreage and would contribute to potential Blainville's horned lizard mortality from the introduction of domestic animals to the area, the project's contribution to this cumulative impact would be cumulatively considerable. This impact would be significant and unavoidable.

Implementation of the proposed project would further restrict wildlife movement between fragmented patches of suitable habitat in El Dorado County. The cumulative projects in the area would also restrict wildlife movement in the same way, resulting in a cumulative impact. The project area is large and although open space is planned for the southern portion of the project area, a large area would be developed. Therefore, the project's contribution to this cumulative impact would be cumulatively considerable, despite implementation of mitigation measures. This cumulative impact on wildlife movement corridors would be significant and unavoidable.

The project would result in removal of vegetation and grading of portions of the site, thereby creating the potential to contribute to the cumulative loss of sensitive biological resources in the region. Therefore, combined with other past, present, and probable future projects and programs in the region, construction associated with the project could result in a cumulative impact on oak woodland, riparian woodland, waters of the United States, and special-status species and their habitats. Although implementation of the mitigation measures identified in this EIR to protect and compensate for loss of these sensitive biological resources would ensure that the project's contribution to the cumulative impact would not be considerable for some sensitive biological

resources, the large extent and long-term effects on oak woodland, Blainville's horned lizard, and wildlife movement corridors would remain cumulatively considerable.

Cultural Resources

The area considered for cumulative impacts on cultural resources is based on past cultural boundaries and can vary depending on the period. Generally, for Native American resources, the area examined for cumulative impacts can be defined as the ethnographic area of the Native American groups most likely associated with potential resources. For this project, the ethnographic area consists of the drainages of the lower Feather, Yuba, Bear, and American Rivers, between the Sacramento River and the crest of the Sierra Nevada range. For historic resources, the cultural area could be somewhat narrower, comprising the foothills of the Sierra Nevada, extending to the city of Sacramento.

Implementation of the project would potentially result in direct impacts on two cultural resources districts (Marble Valley Archaeological District [MVAD] and Marble Valley Historic Limestone Mining District) and three known archaeological resources that are historical resources. In addition, there is the potential for currently unknown cultural resources to be adversely affected by the project. These impacts, however, would be avoided or minimized through project design and implementation of mitigation measures requiring preparation of further studies that would result in data collection and reduce these project-level impacts to a less-than-significant level. Although direct impacts on the contributing elements of the archaeological district would be avoided, development of the area around them would result in impacts to the setting, feeling, and association of the resource.

Construction of other development projects in the vicinity of the project could potentially result in significant impacts on archaeological resources that meet the criteria for historical resources and on human remains should they be present within the project site or the vicinity of the project site. Based on the landscape of the cumulative projects and their undeveloped nature, it is likely that resources similar to the MVAD would be located within the boundaries of these projects. Although each project would seek to identify and evaluate cultural resources and implement mitigation measures designed to reduce project-level effects to a less-than-significant level, a cumulative impact would still result. Although direct impacts would be minimized, it is likely that similar indirect effects on the integrity of the resources would result through impacts on setting, feeling, and association. Therefore, a cumulative impact on prehistoric cultural resources exists in this area of the foothills.

Despite the implementation of regulations required by state law and protection measures for cultural resources in the County General Plan and Zoning Ordinance, there would be a cumulative impact on cultural resources because of the size and scope of the cumulative projects, the largely undisturbed nature of their locations, and the likelihood of resources similar to MVAD and impacts on them. Although the contributing elements would be preserved, the area between them that provide the setting, feeling, and association for the California Register of Historic Resources and National Register of Historic Places-eligible district would be affected. Even with the implementation of mitigation measures to reduce the VMVSP's direct impacts to a less-than-significant level, the project would result in a cumulatively considerable contribution to a cumulative impact on cultural resources, and the cumulative impact would be significant and unavoidable.

Geology, Soils, Minerals, and Paleontological Resources

Geology and Soils

The proposed project has a variety of site-specific geological and soil concerns. These include seismicity, soil erosion, expansive soils, and potentially fracturing bedrock to create appropriate conditions for construction and foundations. All of these individual impacts can be reduced to a less-than-significant level by project-specific geotechnical investigation, seismic design standards promulgated by the County building codes and ordinances, and mitigation measures. For cumulative projects, as in the proposed project, the geology, mine hazard and soil impacts are specific to the geographic location of the physical resource and can be mitigated depending on those site-specific conditions. Because these impacts are specific to their geographic locations, they typically do not combine to create a cumulative impact. Past, present, and future development impacts would not accumulate with the site-specific impacts of the proposed project.

For individual projects, site-specific soil erosion would be reduced to a less-than-significant level by development and implementation of a stormwater pollution prevention plan (SWPPP) during construction, adherence to the applicable El Dorado County Grading Ordinance, Subdivision Ordinance, Design and Improvement Standards Manual, and Drainage Manual requirements, adherence to the recommendations to minimize erosion, runoff, and sedimentation contained in the required site-specific geotechnical report, and the National Pollutant Discharge Elimination System (NPDES) Municipal Small Separate Storm Sewer System (Small MS4) Permit for post-construction runoff. See *Hydrology, Water Quality, and Water Resources* below for additional information. The cumulative impact would be less than significant.

Minerals

The area considered for cumulative impacts on mineral resources is the immediate project area. Implementation of the proposed project would not result in the loss of availability of important mineral resource sites designated in a land use plan. Implementation of the proposed project could potentially affect known important mineral resources of value to the region or residents of the state, although at a less-than-significant level. Effects of future development on mineral resources that are currently being extracted are unlikely because these sites are identified in the County General Plan and have established buffer zones. New mineral resources might be found in mineral resource zones (MRZ) with MRZ-3 and MRZ-4 designations where new and unanticipated mineral development could be proposed. New mineral resource development would undergo environmental and public review, which might prevent or substantially reduce their development. Consequently, there is the potential for a cumulative impact relative to the availability of important mineral resources. However, the potential for the proposed project to impede access to important mineral resources would be minimal as described in Section 3.5, *Geology, Soils, Minerals, and Paleontological Resources*. Therefore, the proposed project would not result in a considerable contribution to a cumulative impact. The cumulative impact would be less than significant.

Paleontological Resources

The area considered for cumulative impacts on paleontological resources is the immediate project area. Implementation of the proposed project could contribute to regional impacts on paleontological resources. Construction would take place in geologic units sensitive for paleontological resources, such as the limestone deposits and Quaternary alluvium, which are the

units of highest sensitivity in the project area. More than 3,000 records of vertebrate fossils are known from limestone caves in El Dorado County, and three records of vertebrate fossils are known from Quaternary units in El Dorado County (University of California Museum of Paleontology 2013). Although the cave fossils were not discovered in connection with construction, the discovery of fossils in the Quaternary units likely occurred during construction activities and likely indicates that past development has encountered paleontological resources. Excavation for future development can be reasonably expected to damage or destroy important paleontological resources. The greater the extent of excavation, the greater the potential impact on paleontological resources.

The project would result in grading and excavation of portions of the site, thereby creating the potential to contribute to the cumulative damage or destruction of important paleontological resources in the region, if drainages are altered or modified in a manner that would involve substantial disturbance or if caves are encountered. Therefore, combined with other past, present, and probable future projects and programs in the region, construction associated with the project could result in a cumulative impact on paleontological resources. However, implementation of the mitigation measures to protect paleontological resources identified in this EIR would ensure that the project's contribution to any cumulative impact would not be considerable. The cumulative impact would be less than significant.

Greenhouse Gas Emissions

Climate change is a global problem, and GHGs are global pollutants, unlike criteria air pollutants (such as ozone precursors, which are primarily pollutants of regional and local concern). Given their long atmospheric lifetimes, GHGs emitted by numerous sources worldwide accumulate in the atmosphere. No single emitter of GHGs is large enough to trigger global climate change on its own. Rather, climate change is the result of the individual contributions of past, present, and future sources. Therefore, GHG impacts presented in Section 3.6, *Greenhouse Gas Emissions*, are inherently cumulative.

As discussed in Section 3.6 although the VMVSP has a diverse suite of strategies that target area and energy source emissions, many of the measures are voluntary, and there is no guarantee that the action would be incorporated into the project design of all future development. Development under the VMVSP would also generate new vehicle trips, which could conflict with the state's goal to reduce regional per-capita VMT. Construction would result in annual GHG emissions from equipment and vehicles.

Mitigation Measures GHG-1, GHG-2, TRA-2, AQ-2b, and AQ-2c are required to reduce GHG emissions generated during construction and operation of the VMVSP. The purpose of these measures is to require specific project GHG emission reductions consistent with California GHG-reduction targets required in SB 32 for 2030, and to support long-term reductions consistent with the need to eventually reach carbon neutrality statewide pursuant to AB 1279. However, because of the long-term buildout of the project, the availability, affordability, and enforceability of specific GHG reduction strategies (including GHG credits) in the future is unknown. Thus, this EIR conservatively finds that the contribution of GHG emissions associated with the project to cumulative GHG emissions would not be reduced to a less-than-significant impact and could substantially contribute to a significant cumulative impact. This impact would be significant and unavoidable.

Hazards and Hazardous Materials

The area considered for cumulative impacts on hazards and hazardous materials is the immediate project area. Construction of development projects requires use of heavy construction equipment (e.g., excavators, backhoes, grading machines, asphalt machines), the operation and maintenance of which would involve the use and handling of hazardous materials, including diesel fuel, gasoline, lubricants, and solvents. Simultaneous construction of the proposed project and other development projects in the vicinity could potentially result in significant hazards to the public through the routine transport, use, or disposal of hazardous materials, or the release of hazardous materials into the environment. However, compliance with best management practices (BMP), and federal, state, and county regulations regarding hazardous materials would minimize the potential for an accidental release of hazardous materials during construction or operation of the proposed project and other anticipated projects. As discussed in Section 3.7.2, *Environmental Impacts*, the project would have a less-than-significant impact, or less-than-significant impact with mitigation for potential impacts from hazards and hazardous materials. Other cumulative projects would also be subject to the same BMPs, and federal, state, and County regulations regarding hazardous materials; therefore, with the implementation of standard safety measures, no cumulative impact would result.

The El Dorado Hills area is at a moderate to high risk for wildland fire hazards. The proposed project adjoins the proposed LRVSP to the east, and the existing Valley View development to the west, creating a large area surrounded by undeveloped ridgelines. The proposed project and the cumulative projects would introduce new fire hazards or risk to people and structures in the project area. Existing regulations would be in place to minimize fire hazards. To comply with the County's General Plan and Fire Hazard ordinances, development projects are required to take steps to minimize fire risk. These steps include maintaining defensible space and meeting state and local fire code requirements, as well as ensuring adequate water supply and preparing a wildfire safety plan. Project development would generally be limited to slopes less than 30%, and winds are generally mild; therefore, the project would not exacerbate wildfire risks. Because the proposed project, along with all other development projects, would be required to comply with County General Plan Goals 5.7 and 6.2 (which require that projects address protection of life and property through minimization of fire hazards and risks in wildland and developed areas), the El Dorado County Fire Hazard Ordinance, the Vegetation Management and Defensible Space Ordinance (Adopted April 30, 2019), no cumulative impact would result and therefore, there is no cumulative impact to which the project could contribute.

Hydrology, Water Quality, and Water Resources

The cumulative context for hydrology, water quality, and water resources effects (both construction and long-term effects) is the greater Cosumnes and American River watersheds for drainage, flooding, and water quality effects and the South American and Cosumnes River subbasins for groundwater. Most of the approved specific plans and other projects drain to creeks that are tributary to the Cosumnes River. The Promontory Specific Plan is drained by creeks that are tributary to the American River.

Hydrology

Cumulative development would alter drainage patterns through the conversion of undeveloped land to developed uses. This would result in an increase in impervious surfaces, which would change the rate and volume of stormwater runoff across the project site, as well as contribute flows to local

creeks and streams that drain the various locations. Increased water levels in local creeks and streams resulting from stormwater runoff have the potential to cause flooding. In locations where a 100-year flood hazard risk exists, flooding could be exacerbated. The County's Subdivision Ordinance requires drainage plans be submitted prior to the approval of tentative maps. The drainage analysis must include an analysis of upstream, onsite, and downstream facilities, and offsite drainage facilities. Tentative maps must include details on the location and size of proposed drainage structures. The County's Drainage Manual provides standards for design of drainage improvements. As a performance standard, measures must be implemented to 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. The County also regulates development within the 100-year floodplain under its Flood Damage Prevention Ordinance to ensure development does not increase flood risk or expose new uses to flood hazards. All cumulative projects would be required to comply with these requirements and standards.

The proposed project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems because the project includes detention or retention facilities onsite to attenuate peak stormwater runoff to a level that does not affect downstream facilities. All of the flood attenuation will be done at the most downstream road crossing over Marble Creek. The crossing is needed for development, and the temporary storage upstream of the road embankment is readily available. This crossing provides adequate attenuation for stormwater runoff from all of the VMVSP development to ensure it would not contribute to downstream conditions along Deer Creek, which is subject to flooding. If the LRVSP is developed, the onsite system at VMVSP would also provide sufficient attenuation for LRVSP flows, in combination with VMVSP flows. Cumulative hydrology impacts would be less than significant, and the project's contribution would not be cumulatively considerable.

Water Quality

Construction activities in the Marble Creek and Deer Creek watersheds could cumulatively increase sediment loading, thereby negatively affecting water quality if measures are not implemented to control the amount of sediment potentially carried to waterways. New development activities in this watershed, including the proposed project, would involve soil disturbance through activities such as vegetation removal, grading, and excavation. These disturbances would expose the native soil to wind- and water-generated erosion, most likely at accelerated rates. Consequently, surface runoff could transport increased sediment loads. Sediment from erosion can have short- and long-term water quality effects. These effects could include increased turbidity that could result in adverse impacts on fish and wildlife habitat, reduced efficacy of diversion structures, impaired recreation and aesthetic values, and increased downstream flood hazards due to a decrease in channel capacity. Erosive conditions created during grading activities can persist well into the post-construction timeframe. The amount and rate of erosion is variable and depends on factors such as soil characteristics (e.g., susceptibility to erosion), the time of year of construction activities, the intensity and duration of precipitation, the amount of vegetative cover, and other variables. Other potential sources of water quality impairment during construction activities would be the accidental release of petroleum-based fluids used in heavy equipment and machinery, and construction materials that contain hazardous materials or heavy metals.

Post-construction cumulative water quality effects could be expected from continued development in the Marble Creek and Deer Creek watershed. These developments could cumulatively increase

urban contaminant loading, which would adversely affect water quality. Cumulative development in the Marble Creek and Deer Creek watershed, including the proposed project, would result in an increased amount of impervious surfaces that would increase the rate and amount of runoff and which, in turn, would adversely affect existing water quality. The primary sources of pollution would include runoff from roadways and parking lots, runoff from landscaped areas, industrial activities, non-stormwater connections to local drainage systems, accidental spills, and illegal dumping.

All project applicants under existing approved plans and other projects would be required to apply for coverage and comply with the various federal, state, and local permit requirements described in the *Regulatory Setting* section of Section 3.8, *Hydrology, Water Quality, and Water Resources*. These include a *General NPDES Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-006-DWQ)* (Construction General Permit), which requires the development and implementation of a SWPPP. The applicant would be required to prepare and retain a SWPPP at each construction site, describing the characteristics of the site, erosion and sediment control strategies, means of waste disposal, implementation of approved local plans and permit requirements, control of post-construction sediment and erosion control measures and maintenance responsibilities, and non-stormwater management controls. In addition, other federal and state permit requirements (including Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems General Permit No. CAS000004 [Order 2013-001-DWQ] [Small MS4 Permit]) regulate water quality impacts. Other cumulative projects would be “Regulated Projects” as defined in Section E.12 of the order and would be required to comply with the standards provided in the order. Before approving any tentative map, the County (as permittee) will be responsible for ensuring the site design of cumulative projects includes measures required under Section E.12.a (Site Design Measures), E.12.d (Source Control Measures), E.12.e (Low Impact Development Design Standards), and E.12.f (Hydromodification Measures). Other sections of E.12 address the County’s responsibilities for documenting compliance with the MS4 Permit. Finally, local ordinances (including the County Grading, Erosion, and Sediment Control Ordinance [Grading Ordinance]) require minimization of impacts from site modification activities. The County’s authority to enforce the requirements of the Small MS4 Permit is established in the Stormwater Quality Control Ordinance No. 5022, adopted in May 2015.

The VMVSP contains several policies that require measures be implemented during construction and operation to minimize the potential for adverse water quality impacts, as described in Section 3.8, *Hydrology, Water Quality, and Water Resources*, Impacts WQ-1 and WQ-3iii. Implementation of these policies, along with the County’s requirements described above, would reduce the proposed project’s contribution to potential water quality impacts and the project’s incremental contribution to cumulative water quality impacts would not be cumulatively considerable. Cumulative water quality impacts would be less than significant.

Water Resources

Water supply for the cumulative projects would be supplied by the El Dorado Irrigation District (EID), which currently does not use groundwater as a supply source. There would be no depletion of groundwater supplies or interference with groundwater recharge because the proposed project area is underlain by bedrock and groundwater recharge potential would be limited. In addition, the proposed project would not utilize groundwater resources. There would be no cumulative impact on groundwater resources. For the analysis of cumulative water supply effects associated with surface water supplies, see *Public Services and Utilities*.

Land Use Planning and Agricultural Resources

The area considered for cumulative impacts on land use planning and agricultural resources is western El Dorado County. Build-out of the VMVSP would result in the development of urban and suburban uses on a presently undeveloped site, largely surrounded by undeveloped land and rural residential land uses. The project site is currently zoned for low-density residential development, but the area is currently undeveloped. As described in Section 3.9, *Land Use Planning and Agricultural Resources*, because the project site is not now within a Community Region, the proposed project would be inconsistent with the General Plan goals of focusing development within Community Regions. However, General Plan Policy 2.1.1.6 provides that the boundaries of existing Community Regions may be modified through the General Plan amendment process, and the proposed project includes a General Plan amendment to expand the boundaries of the El Dorado Hills Community Region to include the project site. Therefore, the project's incremental contribution to cumulative General Plan land use inconsistency impacts associated with the development of lands outside Community Regions would not be cumulatively considerable.

The project site is not subject to any habitat conservation plan or natural community conservation plan; therefore, the proposed project would not contribute to cumulative conflicts with applicable habitat conservation plans or natural community conservation plans.

The project site does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance and as discussed in Section 3.9, *Land Use Planning and Agricultural Resources*, the project would not result in conversion of offsite farmlands to nonagricultural uses. For these reasons, the proposed project would not contribute to cumulative impacts related to agriculture.

No forest land or timberland exists on the project site or vicinity. The proposed project would not contribute to the cumulative loss or conversion of forest land to non-forest uses. Overall, the project's contribution to cumulative land use and agricultural resources impacts would not be cumulatively considerable.

Noise and Vibration

Construction noise and vibration would be localized and, because of the physical nature of how noise dissipates from its source, would primarily affect the land uses in the immediate vicinity of the construction equipment. Thus, no cumulative impact from project-related construction noise is anticipated.

Table 5-3 summarizes traffic noise modeling results under cumulative conditions with and without the project and shows the incremental increase in traffic noise associated with the project. In almost all cases, traffic noise exceeds the County's land use compatibility standards for residential uses (day-night sound level [L_{dn}] 60 decibels [dB] for low density and L_{dn} 65 for high density). As such, significant cumulative traffic noise impacts could occur along these roadways where there are adjacent proposed new residential uses, because the existing noise levels already exceed the compatibility standards and the project would result in additional new sensitive land uses being exposed to excessive noise. Mitigation Measure NOI-1b would reduce the amount of cumulative noise exposure for new sensitive land uses within the project site to a less-than-significant level. Therefore, the proposed project would not result in a cumulatively considerable contribution of noise on new sensitive land uses constructed as part of the project.

In some locations the project is predicted to reduce traffic noise levels. In other locations the project is predicted to increase traffic noise by up to 4.3 dB. An increase of 4.3 dB is expected on Marble Valley Road, east of Marble Ridge Road, where there is a single existing residence adjacent to the roadway. The next highest increase in noise would be 0.8 dB. An increase of 3 dB is generally considered to be the threshold of a perceptible increase in noise, while an increase of 5 dB is considered clearly noticeable. An increase of 4.3 dB therefore would be perceptible but not to all people. However, as discussed in Section 3.10, *Noise and Vibration*, County Policy 6.5.1.12 sets the noise increments that would be considered significant. Because the cumulative noise at Marble Valley Road, east of Marble Ridge Road, without the project would be above 65 dB, the significant noise increment for this location would be 1.5 dB. The increase of 4.3 dB would exceed 1.5 dB and, therefore, would be considered a significant increase. Thus, the project's incremental contribution to significant cumulative noise impacts would be cumulatively considerable.

Table 5-3. Cumulative Traffic Noise on Roadway Segments in the Project Area Vicinity

Roadway	Segment Location	Cumulative L _{dn} (dBA) at 50 Feet from Roadway Centerline	Cumulative + Project L _{dn} (dBA) at 50 Feet from Roadway Centerline	Change in Traffic Noise due to Specific Plan Generated Traffic (dBA)
Bass Lake Road	Green Valley Road to Bridlewood Drive	65.4	65.4	0.0
	Bridlewood Drive to Serrano Parkway	67.6	67.7	0.1
	Serrano Parkway to Hollow Oak Drive	70.8	70.6	-0.2
	Hollow Oak Drive to Country Club Drive	73.0	72.9	-0.1
	Country Club Drive to US 50	73.4	73.3	-0.1
Cambridge Road	Green Valley Road to Oxford Road	63.7	63.8	0.1
	Oxford Road to Knollwood Drive	65.5	65.7	0.2
	Knollwood Drive to Country Club Drive	65.8	66.0	0.2
	Country Club Drive to US 50	68.2	69.0	0.8
Cameron Park Drive	Green Valley Road to Alhambra Drive	68.3	68.3	0.0
	Alhambra Drive to Oxford Road	70.6	70.7	0.1
	Oxford Road to Hacienda Drive	71.7	71.7	0.0
	Hacienda Drive to US 50	72.5	72.5	0.0
Country Club Drive	Bass Lake to Merry Chase Drive	67.4	66.9	-0.5
	Merry Chase Drive to Knollwood	64.2	63.8	-0.4
	Knollwood to Cambridge Road	63.7	63.3	-0.4
	Cambridge Road to Royal Drive	60.1	60.1	0.0
	Royal Drive to Cameron Park Drive	60.9	60.9	0.0
Durock Road	US 50 to Business Drive	67.0	67.3	0.3
	Business Drive to S. Shingle Road	65.1	65.3	0.2
Marble Valley Road	East of Marble Ridge Road	69.2	73.5	4.3
US 50	West of Latrobe/El Dorado Hills	83.7	83.8	0.1
	Between El Dorado Hills and Silva Valley	83.2	83.4	0.2
	Between Silva Valley and Bass Lake	83.4	83.5	0.1
	Between Bass lake and Cambridge Road	82.9	82.9	0.0
	East of Cambridge Road	83.2	83.4	0.2

Source: ICF International and Federal Highway Administration Traffic Noise Model 2.5 Lookup Tables.

Population and Housing

Implementation of the VMVSP would result in development of up to 3,236 residential units, housing approximately 9,227 residents. As described under *General Plan Updated Planning Horizon* in Section 5.2.1, *Cumulative Scenario*, development within the planning horizon of the County General Plan is expected to result in an unincorporated county population of 317,692 people. Using the existing household size of 2.59 persons, the other projects would be expected to increase the county's population by up to 9,441 additional residents, resulting in a cumulative total population, without the proposed project, of 327,133 in unincorporated El Dorado County. Replacing the population associated with the expired 398-unit Marble Valley development agreement—housing an estimated 1,218 people (3.06 people per household as described in the County General Plan EIR)—with the proposed project's 3,236 units (9,902 people) would result in a total project-plus-cumulative population of approximately 337,035. The proposed project would result in an incremental contribution to cumulative population growth in El Dorado County. However, population growth in and of itself does not constitute a physical environmental impact. As described in this chapter, household and population increases would make substantial contributions to cumulative physical environmental impacts on other resources, including increased light and glare; conversion of open space resources; criteria pollutant emissions in excess of EDCAQMD's thresholds; loss of oak woodland, riparian woodland, and chaparral and grassland habitat; impacts on Blainville's horned lizard; restriction of wildlife movement corridors; loss, disturbance, or interference with prehistoric archaeological resources; and decreased effectiveness of the transportation system.

The project area currently contains no housing units. Therefore, development of the project site as proposed would not contribute to the cumulative displacement of existing housing units and people or necessitate the construction of replacement housing elsewhere.

Public Services and Utilities

Fire and Police Protection, Schools, and Libraries

The area considered for cumulative impacts for public services and utilities is the service area for these providers. Buildout of the proposed project would result in the construction of up to 3,236 housing units, including both single-family and multifamily units. The project would not result in substantial adverse physical impacts associated with new governmental facilities or a need for new governmental facilities, including potential impacts on fire and police protection, schools, and libraries.

The proposed project in conjunction with the cumulative projects would increase demand for fire and sheriff services. Given the size of the projects, it is possible that new facilities would at some point in the future need to be constructed. However, it is not possible at this time to determine where or when such a facility would be constructed or how large it would be. The construction of a typical fire or sheriff facility would result in temporary air quality and noise impacts during construction, potential impacts on biological, cultural, and paleontological resources depending upon the location, and minimal traffic and access impacts during operation. Consequently, the proposed project would contribute to this cumulative impact, but it is not possible to determine the extent of the project's contribution. Additionally, construction of any new facilities would be subject to independent CEQA review. Although a cumulative impact likely exists, the degree to which the

proposed project would contribute is speculative and any associated physical impacts would be captured and analyzed in a separate CEQA review process.

The proposed project is expected to result in 3,236 households, which could generate approximately 2,181 school-age children, as described in Section 3.12, *Public Services and Utilities*. Although other anticipated projects would also result in an increase in population within the school districts, which would likely include school-age children, all development incurs taxes to compensate for increased population and expansion of school facilities. The El Dorado Union High School District and the Buckeye Union School District collect taxes via the El Dorado Schools Financing Authority Community Facilities District, which provides funds for capital facilities to serve students generated from the new development (SchoolWorks 2018). It is possible that the proposed project in conjunction with cumulative projects could require the construction of a new school. It is not possible at this time to determine when or where a new facility would be needed or how large it would be. Generally, impacts associated with a typical school include construction-related air quality and noise impacts and operational traffic and access impacts. The construction and operation of schools is the responsibility of the school district. Although the proposed project could contribute to a cumulative impact related to schools, it is not possible to determine the extent to which the project would contribute to the cumulative impact. Additionally, construction of any new facilities would be subject to independent CEQA review. Although a cumulative impact likely exists, the degree to which the proposed project would contribute is speculative and any associated cumulative physical impacts would be captured and analyzed in a separate CEQA review process.

The cumulative impact area for libraries includes the communities of El Dorado Hills and Cameron Park, as library use is generally local. As described in Section 3.12, *Public Services and Utilities*, the typical standard threshold used for planning purposes is a minimum of 0.5 square foot of library space per capita (El Dorado County 2003; Amos pers. comm.). Within El Dorado County, the library square footage per capita of 0.35 falls below the planning standard of 0.50. However, within the project vicinity of El Dorado Hills, the library square footage per capita of the El Dorado Hills and Cameron Park libraries average 0.50, which meets the planning standard. The proposed project would decrease the standard library planning ratio in the area from a current ratio of 0.50 square foot per capita to 0.37 square foot per capita, which would fall below the ratio standard ratio. The addition of more than 9,000 residents to the existing 18,370 people served by the Cameron Park Library would decrease the library's current service ratio from 0.68 to a deficient 0.46 square foot per capita, though still exceeding the countywide average of 0.35. Even if half of the residents used the Cameron Park Library and half used the El Dorado Hills Library, the square footage would be 0.55 and 0.30 square foot per capita, respectively; the El Dorado Hills library would be below the service ratio. With cumulative projects, including the EDHSP, the ratio would be reduced further. However, the reduction of library square footage does not constitute an environmental impact. The standard ratio is not a legal requirement or in the County General Plan, so there is no requirement for the proposed project to meet this standard. As described above for schools and additional students, increased population and potential library patrons would be a social impact (*Goleta Union School District v. Regents of U.C.* 1995). Because the proposed project does not include construction of a new library, there is no physical impact. The project area is located close to the El Dorado Hills Library, a relatively new facility. The proposed project and other development projects within El Dorado Hills and Cameron Park would not likely result in the physical degradation of library facilities, and therefore no cumulative impact is anticipated.

Water Supply

As shown in Table 3.12-13, in Section 3.12, *Public Services and Utilities*, the proposed project is expected to require 2,177 acre-feet of water per year (AFY). The proposed project, combined with existing and proposed development in the EID service area, would result in a total projected demand for 67,295 acre-feet of water in 2035. Excluding recycled supplies, EID's secured water rights and entitlements available for the proposed project total 67,190 acre-feet, which would be insufficient to serve the future demand of the proposed project and all planned future projects. However, in addition to the secured water rights and entitlements, EID has planned water assets. These consist of two additional water supplies for use within its service area to make available for the proposed project: (1) water under the El Dorado–Sacramento Municipal Utility District (SMUD) Cooperation Agreement, in cooperation with the El Dorado Water and Power Agency, and (2) a Central Valley Project water entitlement derived from the El Dorado County Water Agency (EDCWA) Fazio water supply. Upon approval by the State Water Resources Control Board, the El Dorado–SMUD Cooperation Agreement would provide EID with 30,000 AFY of water through 2025 and 40,000 AFY thereafter. The EDCWA Fazio water could provide EID with an additional 7,500 AFY of water from Folsom Reservoir; however, with EID's existing water rights, there is no near-term plan to use the Fazio water (Appendix H, *Water Supply Assessment*:4-8). At some point in the future EID may enter into an Agreement with EDCWA to use up to 7,500 AFY of that water. These planned water assets, although partially secured, are not yet fully available for EID's use. In normal years, the water supplies under these planned assets total 37,500 AFY. In dry years, the water supplies under these planned assets total 10,625 AFY (Appendix H, *Water Supply Assessment*:4-15). EID's water supplies associated with the entire secured and planned water assets total 110,290 acre-feet per year. See the *Water Supply, Conservation, and Wastewater Service* section of Section 3.12, *Public Services and Utilities*, for additional details about EID's existing and planned water supplies. Therefore, considering the planned water assets, the water supply assessment (WSA) (Appendix H, *Water Supply Assessment*) concludes that EID should have sufficient water available to meet the needs of the proposed project and all other demands in its service area through 2035 and that no new or expanded entitlements would be needed. Therefore, the project's contribution would not be cumulatively considerable.

Wastewater

EID would provide wastewater service for the project site and therefore, the cumulative analysis focuses on proposed development within the EID service area, which corresponds to the central portion of west slope El Dorado County served by the Deer Creek WWTP. EID projects that the Deer Creek WWTP will approach permitted capacity of 3.6 million gallons per day (mgd) in 2022 under the low growth scenario and in 2032 under the high growth scenario, based on County General Plan planning horizon (2025), estimates of areas for future known densities, and estimate of areas for future unknown densities (El Dorado Irrigation District 2013a). EID has determined a capacity of 5.0 mgd for the Deer Creek WWTP will be necessary to accommodate future flows and currently plan to have the expanded facility operational by 2029 (El Dorado Irrigation District 2013b:151).

The expected future flows into the Deer Creek WWTP include zoning for the existing project area, which totals 0.29 mgd, as described in Section 3.12, *Public Services and Utilities*, Impact PSU-2. After subtracting that, adding in the 0.79 mgd expected under the VMVSP, and the projected wastewater that would be generated from the other projects listed in Table 5-2 that would also be treated at the Deer Creek WWTP, total wastewater generation would total 5.94 mgd (Table 5-4). This would exceed the planned and permitted capacity of 5.0 mgd. As an industry standard practice, EID

monitors growth and plans to meet future demands generated by authorized development. If the VMVSP is approved by the County Board of Supervisors, the next revisions to the EID *Wastewater Facilities Master Plan* will reflect updated future demand calculations, and general plan amendments will be reviewed and used as a basis for analysis of future needs to identify what improvements would be required to accommodate additional flows and the timing for when such improvements would be necessary. EID’s current estimate for plant expansion to 5.0 mgd by 2029 is within the facility planning assumptions evaluated in the certified Deer Creek WWTP Expansion Project EIR, which assumed expansion up to 10.0 mgd. Although the proposed project would contribute incrementally to the need for expansion, it would not result in changes to the construction and operational assumptions and associated environmental impacts beyond those identified in the Deer Creek WWTP Expansion EIR. In addition, mitigation measures identified in the Deer Creek WWTP Expansion Project EIR to reduce or avoid potential impacts of expansion would be implemented by EID. The project’s contribution to the demand for wastewater facilities would not be the sole reason for WWTP expansion and would be less than cumulatively considerable.

Table 5-4. Future Wastewater Generation for Deer Creek WWTP

Land Use	Wastewater for Deer Creek WWTP (mgd)
Existing ADWF	2.64
Future unplanned density ADWF	2.25
Future planned density ADWF (including 0.09 for Marble Valley 395 EDUs)	0.11
Expected total for 2025	5
Proposed VMVSP (3,236 EDUs, 87 acres Industrial, 57 acres Commercial, as described in Table 3.12-12)	0.79
Expected total with VMVSP	5.79
Other projects from Table 5-2	0.45
Total expected wastewater in 2025	5.94

Source: El Dorado Irrigation District 2013b:93.

- ADWF = average daily wastewater flow
- EDU = equivalent dwelling unit
- gpd = gallons per day
- mgd = million gallons per day
- WWTP = wastewater treatment plant

Solid Waste

The area examined for cumulative conditions for solid waste is El Dorado County. Construction of cumulative projects and the proposed project would result in solid waste generation. The County’s existing Construction and Demolition Debris Diversion Ordinance requires project applicants and their construction contractors to reuse or recycle a minimum of 50% of the construction and demolition debris, and Policy 9.29 of the VMVSP requires project applicants and their construction contractors to reuse or recycle a minimum of 65% of their construction and demolition debris.

As described in Impact PSU-6 in Section 3.12, *Public Services and Utilities*, the proposed project could generate a total of 64,037 tons of solid waste per year (or approximately 175 tons per day), which would be diverted to the Diamond Springs Material Transfer Facility in El Dorado County, with the remaining waste that could not be diverted sent to either Lockwood Landfill or Potrero Landfill. The Diamond Springs material recovery facility can process 400 tons of waste per day, and currently

processes approximately 70 tons per day (Ross pers. comm.). Therefore, the additional 193 tons expected from proposed and expected projects would still be well below capacity for this facility. The Potrero Hills Landfill can accept 4,330 tons per day. In 2012, it processed an average of 1,096 tons per day (Potrero Hills Landfill 2013). The additional 193 tons expected from the proposed project and other projects would still be well below that capacity. The Lockwood Landfill processes about 5,000 tons of waste per day (Nevada Division of Environmental Protection 2013). It is permitted for a capacity of approximately 265 million cubic yards, or between 371 and 530 million tons (Eckert pers. comm.). As of May 2014, it had approximately 268 million cubic yards remaining, or between 375 and 536 million tons (Eckert pers. comm.). Therefore, the additional 193 tons per day would, would not exceed the landfill's capacity. Additionally, these estimates are conservative because they do not include recycling waste that would not be diverted, and it is unlikely that all waste from these projects would go to only one landfill. In summary, solid waste generated from the proposed project would be less than cumulatively considerable, and when combined with other anticipated projects, would not result in a cumulative impact.

Electricity/Natural Gas and Energy Conservation

Since energy legislation adopted by California and local governments is intended to conserve statewide and regional energy consumption, projects that conflict with applicable plans and policies would contribute to a cumulative energy impact. Accordingly, for the purposes of this analysis, the proposed project would result in a significant cumulative impact if it conflicts with applicable state or local energy standards; as such, the project-level and cumulative impact determinations are identical. As discussed in Section 3.12, *Public Services and Utilities*, the proposed project would incorporate energy-saving measures required by state and local energy policies, including the California Green Building Standards Code and Title 24, enacted since the 1970s to improve energy efficiency and reduce waste. Policies outlined in the VMVSP would also further reduce energy consumption beyond state recommendations. Therefore, the proposed project would assist the region in meeting energy reduction targets established in statewide legislation. Because the proposed project would not conflict with applicable state or local energy standards, it would not result in a cumulative contribution to a significant cumulative impact.

Recreation

The area examined for purposes of analyzing cumulative impacts on parks and recreational facilities consists of the area within the El Dorado Hills Community Services District (CSD) and the adjacent Cameron Park CSD. As described in Section 3.13, *Recreation*, the El Dorado Hills CSD provides parks and recreation facilities and services to residents of the El Dorado Hills area, including the VMVSP, and a small section of the Cameron Park CSD's southwestern boundary borders the project site's northern boundary.

The El Dorado County General Plan EIR states that projected residential development in conformance with the County General Plan would increase demand for parks and recreation facilities, constituting a significant impact on the deterioration of such facilities. Mitigation included in the County General Plan EIR and adopted and incorporated into the 2004 County General Plan, consists of Policy 9.2.2.2 and Policy 9.2.2.5, which ensure funding mechanisms for the development, operation, and maintenance of park facilities. Implementation of these policies reduces the stated impact to a less-than-significant level and requires, in addition to Quimby Act obligations, that new developments fund park and recreation improvements and acquisition of parklands to meet minimum neighborhood, community, and regional park standards.

Buildout of the other projects that comprise the remainder of the cumulative development conditions would add 4,026 housing units to those anticipated under the County General Plan, as well as approximately 40 acres of parkland (Table 5-2). Compliance with County General Plan Policies 9.2.2.2 and 9.2.2.5, as well as Quimby Act requirements as implemented by County Code Section 16.12.090, would be required of these projects; this compliance would ensure that the individual projects meet minimum park standards and result in less-than-significant impacts on the physical deterioration of parks and recreational facilities.

Implementation of the proposed project would result in the construction of up to 3,236 housing units, including 1,963 single-family and 1,209 multifamily units, as well as 50 residential units in the Village Commercial district and 14 units in Agri-Tourism. Using the County's park planning ratios of 3.3 park users per single-family unit and 2.1 park users per multifamily unit, project implementation would increase the park-user population by approximately 9,168 in an area currently deficient in village and community parkland acreage and trigger Quimby Act, County General Plan, and El Dorado Hills and Cameron Park CSD requirements as described in Section 3.13, *Recreation*. However, the VMVSP includes development of parkland in excess of those requirements, as well as additional open space, a pedestrian trail network, a network of Class I bike paths and, if LRVSP is approved, connection to the El Dorado Trail through the LRVSP project area. Because the proposed project would establish open space and active recreational opportunities that exceed the parkland dedication requirements of the Quimby Act, the County General Plan, and the El Dorado Hills and Cameron Park CSDs, implementation of the VMVSP would not be expected to contribute to any cumulative deterioration of existing park facilities.

The proposed project would provide new parkland within the VMVSP that would accommodate existing and project-related residents in the El Dorado Hills and Cameron Park CSDs and would not require the construction of additional parks and recreations facilities. Therefore, the project would not contribute to cumulative impacts related to the construction of new park facilities.

Transportation

Under cumulative conditions, the proposed project could contribute to transportation impacts.

Vehicle Miles Traveled

Under cumulative conditions in 2040, without the proposed project, residential VMT is projected to be 17.1 per capita and commercial VMT is projected to be 12.0 per employee (Tables 5-5 and 5-6). With the project, residential VMT is projected to be 14.6 per capita, which is more than 14.5 or 85% of 17.1. Therefore, the proposed project would exceed thresholds for residential VMT efficiency under cumulative conditions. Commercial VMT is projected to be 6.9 per employee, which is less than 10.2 or 85% of 12.0. The proposed project would not exceed VMT thresholds for commercial VMT efficiency under cumulative conditions. VMT efficiency impacts are considered to be a combination of the residential and commercial components. Therefore, the proposed project would contribute to a cumulative impact. However, implementation of Mitigation Measure TRA-1 to shift some land use to commercial retail identified in this EIR would ensure that the project's contribution to any cumulative impact would not be cumulatively considerable.

Table 5-5. Village of Marble Valley Specific Plan’s VMT, Residential Component (Cumulative)

Scenario	Analysis Geography	VMT	Total Population	VMT per Capita
2040 Baseline	Unincorporated El Dorado County	3,102,953	181,914	17.1
2040 Baseline Plus Project	Project Area	139,252	9,537	14.6
VMT Threshold Exceeded?				Yes

Source: Fehr & Peers 2021.

Table 5-6. Village of Marble Valley Specific Plan’s VMT, Commercial Office Component (Cumulative)

Scenario	Analysis Geography	VMT	Total Employment	VMT per Employee
2040 Baseline	Unincorporated El Dorado County	675,594	56,413	12.0
2040 Baseline Plus Project	Project Area	11,775	1,704	6.9
VMT Threshold Exceeded?				No

Source: Fehr & Peers 2021.

Mitigation Measure TRA-2: Shift 25,000 square feet of commercial office land use to commercial retail land use

Pedestrian and Bicycle Circulation

Implementation of the proposed project, along with other nearby projects, will increase demand for pedestrian and bicycle facilities. Bicycle network improvements are planned within the study area. Figure 3.14-4 in Chapter 3, *Impact Analysis*, identifies planned bikeways presented in the El Dorado County Active Transportation Plan and the 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy. In addition to these improvements in the area, the proposed project includes a number of additional bicycle and pedestrian facilities, as shown in Figure 2-8 in Chapter 2, *Project Description*, including a Class I multi-use path on Marble Valley Parkway, Marble Lake Boulevard, and Lime Rock Valley Road, and a network of gravel trails and unpaved hiking trails. The proposed Class I path along Lime Rock Valley Road would connect through the proposed LRVSP area to the El Dorado Trail (if the County approves the LRVSP). Additionally, sidewalks may be provided on one or both sides of local residential streets.

The provision of these facilities would support County General Plan Goal TC-4 and policies related to providing safe routes to school (specifically, Policies TC-4a and TC-4i) by providing new bicycle lanes or multi-use paths or trails along Marble Valley Road, Marble Lake Boulevard, Lime Rock Valley Road, and other areas within the VMVSP area, which will provide bicycle and/or pedestrian access from residential areas to the proposed elementary or middle schools on the north side of the project area.

These improvements, along with improvements associated with future cumulative conditions, would connect and integrate with existing and planned facilities adjacent to the project, and there would be no cumulative impact related to conflicts with adopted policies, plans, or programs regarding bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Therefore, the project could not contribute to a cumulative impact.

Transit

The project would provide a 100- to 120-space park-and-ride lot. To accommodate possible future public transit service, transit stops, and bus shelters may be provided in the project area on Marble Valley Parkway and Marble Lake Boulevard near the intersection of Lime Rock Valley Road.

As described in Section 3.14.1, *Existing Conditions*, demand exceeds capacity at the El Dorado Hills park-and-ride lot and existing capacity available at the Cambridge Road park-and-ride lot would likely be exceeded after accounting for additional development associated with cumulative conditions. Therefore, this would be a significant cumulative impact. About one annual commute trip is generated per El Dorado Hills resident, assuming a population of 42,100 (U.S. Census Bureau 2010) in El Dorado Hills. Assuming a household population of 2.6 persons, the project's 3,236 dwelling units could result in demand for about 8,400 annual commute trips, or about 32 commute trips per weekday. Because trips are counted as one-way and because at least 100 parking spaces would be provided for park-and-ride use, the proposed project would not be anticipated to have an effect on existing park-and-ride capacity. If this capacity is provided prior to the half-way point of development of the project, its impact related to transit would not be cumulatively considerable. If, however, additional park-and-ride capacity of 16 or more parking stalls were not provided prior to project development, this would result in a considerable contribution to a significant cumulative impact. Implementation of Mitigation Measure TRA-1, which requires park-and-ride facilities, would reduce the proposed project's contribution to this impact such that it would be less than cumulative considerable.

Mitigation Measure TRA-1: Provide alternative park-and-ride facilities

Emergency Access

The proposed project would provide two main points of access from the US 50/Bass Lake Road and US 50/Cambridge Road interchanges, and an emergency vehicle access point to the west toward the Valley View Specific Plan area. A third access point to the east toward Deer Creek Road would become an extension Lime Rock Valley Road upon implementation of the LRVSP. All roads would comply with the 2019 California Fire Code, California Code of Regulations, Title 24, Part 9, Chapter 5, Section 503 and Title 14, California Code of Regulations, Division 1.5, Chapter 7, Subchapter 2, Article 2, and Emergency Access, Section 1273.01 of the Fire Safe Regulations and County Design and Improvement Standard. The proposed project would also improve emergency connections to the existing controlled emergency vehicle access points, where feasible and as required by emergency responders. Additionally, emergency access to and through the project area would be maintained during construction activities associated with the project. Therefore, there would not be a significant cumulative impact associated with emergency access.

5.3 Growth-Inducing Impacts

Section 21100(b)(5) of CEQA requires an EIR to discuss how a project, if implemented, may induce growth and disclose the impacts of that induced growth (see also State CEQA Guidelines 15126). CEQA requires the EIR to discuss specifically "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" (State CEQA Guidelines 15126.2(d)). The State CEQA Guidelines do not provide specific criteria for evaluating growth inducement and state that growth in any area is not

“necessarily beneficial, detrimental, or of little significance to the environment” (State CEQA Guidelines 15126.2(d)). CEQA does not require separate mitigation for growth inducement as it is assumed that these impacts are already captured in the analysis of environmental impacts (see Chapter 3, *Impact Analysis*). Furthermore, Section 15126.2(d) of the State CEQA Guidelines requires that an EIR “discuss the ways” a project could be growth inducing and to “discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment.”

According to the State CEQA Guidelines, a project would have potential to induce growth if it would result in either of the following.

- Remove obstacles to population growth (e.g., through the expansion of public services into an area that does not currently receive these services), or through the provision of new access to an area, or a change in a restrictive zoning or County General Plan land use designation.
- Result in economic expansion and population growth through employment opportunities and/or construction of new housing.

In general, a project could be considered growth inducing if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way. However, the State CEQA Guidelines do not require a prediction or speculation of where, when, and in what form such growth would occur (State CEQA Guidelines 15145).

5.3.1 Remove Obstacles to Growth or Provide New Access

The proposed project includes an amendment of the County General Plan and would connect the project area to existing public services, including wastewater and water service, through offsite improvements. New roadways and connections to existing roadways would be constructed to accommodate the proposed project. These infrastructure improvements, combined with the project’s County General Plan amendment and rezoning, would remove an existing obstacle to growth at the project site and would allow the conversion of more acreage to urban use than is currently allowed. The proposed project is currently surrounded by rural, low-density residential development. The proposed project’s infrastructure and connections to services and facilities would generally be proportionate to the level necessary to accommodate the project and, therefore, would not in themselves increase development potential of properties outside of the project site that were not planned for development in the project description or the County General Plan. However, some offsite improvements, such as the water and wastewater connections that would exceed capacity necessary for the project or roadways that would be “overbuilt,” would provide additional capacity. These facilities would be constructed to accommodate future needs assessed by EID based on the County General Plan and estimates of future known and unknown densities, or the County and would accommodate cumulative conditions anticipated at the County General Plan planning horizon but would not be a catalyst for new growth.

The proposed project also includes an amendment to the El Dorado Hills Community Region to include the plan area. This results in an island area between the proposed VMVSP and Valley View that is completely surrounded by the El Dorado Hills Community Region. There is no requirement by the County that this island area be incorporated into the community region. This area is currently developed and consists of large lots supplied with onsite utilities (septic systems and wells) and these residences are not anticipated to require services. Therefore, it is unlikely that expansion of

the El Dorado Hills Community Region to include the VMVSP would result in the island area being forced to be included in the El Dorado Hills Community Region. Therefore, the project would not induce further growth in the already developed island area.

5.3.2 Economic, Population, and Housing Growth

The proposed project would directly affect the population and housing growth in the project area by increasing the number of housing units by 3,236, representing an additional 9,000+ people. The existing adopted plans designate the project area as open space and low-density residential (5-acre lots). Current entitlements and land use designations for the project site would allow development of up to 398 low-density residential units that would house an estimated population of 1,218. The proposed project would require, among other things, an amendment to the County General Plan, rezoning, and rescission of the existing Marble Valley Master Plan and tentative maps; however, the proposed VMVSP land use would remain consistent with the residential land use plan for the area. El Dorado County's population is anticipated to increase by more than 20,000 from 2010 to 2020, and by more than 50,000 from 2010 to 2030; these projections indicate a trend of continuing growth in unincorporated El Dorado County. The additional housing units and population associated with the proposed project would directly contribute to population growth in El Dorado County.

5.4 Significant and Unavoidable Impacts

Public Resources Code Section 21067 and State CEQA Guidelines Sections 15126(b) and 15126.2(b) require that an EIR describe any significant impacts, including those that can be mitigated but not reduced to a less-than-significant level. 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 also be described.

A significant and unavoidable impact is one that would cause a substantial adverse effect on the environment and for which no mitigation is available to reduce the impact to a less-than-significant level. Most of the impacts of the VMVSP would be less than significant or would be mitigated to a less-than-significant level. The impacts below are those that would remain significant and unavoidable after mitigation.

Aesthetics

- Impact AES-1: Temporary visual impacts caused by construction activities
- Impact AES-2: Have a substantial adverse effect on a scenic vista
- Impact AES-3: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings along a scenic highway
- Impact AES-4: In non-urbanized 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, conflict with applicable zoning and other regulations governing scenic quality
- Impact AES-5: Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area

Air Quality

- Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan
- Impact AQ-2b: Result in a cumulatively considerable net increase of any criteria pollutant during operation for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard
- Impact AQ-2c: Result in a cumulatively considerable net increase of any criteria pollutant during combined construction and operation for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard
- Impact AQ-3a: Expose sensitive receptors to substantial toxic air contaminant concentrations and health risks from equipment and vehicle exhaust
- Impact AQ-3c: Expose sensitive receptors to substantial criteria pollutant concentrations

Geology, Soils, Minerals, and Paleontological Resources

- Impact GEO-7: Be located on a subterranean mine that has a shaft, vent, or adit open to the surface

Greenhouse Gases

- Impact GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
- Impact GHG-2: Conflict with applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases

Noise and Vibration

- Impact NOI-1a: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the County General Plan or noise ordinance as a result of construction activities
- Impact NOI-1b: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the County General Plan or noise ordinance from project-generated traffic within the VMVSP project area
- Impact NOI-4: Result in noise impacts due to activities associated with project offsite improvements

Population and Housing

- Impact POP-1: Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)

In addition to the significant and unavoidable direct impacts listed above, the project also would result in considerable contributions to significant and unavoidable cumulative impacts in the following resource areas, as described in Section 5.2.2, *Analysis of Potential Cumulative Impacts*.

- Aesthetics
- Air Quality

- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Noise and Vibration
- Population

5.5 Significant Irreversible Environmental Changes

Section 15126.2 (c) of the State CEQA Guidelines requires that an EIR address any significant irreversible changes that would result from a proposed project and provides the following direction for the discussion of irreversible changes.

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to ensure that current consumption is justified.

The State CEQA Guidelines describe three distinct categories of significant irreversible changes, specifically changes in land use that would commit future generations to specific uses; irreversible changes from environmental actions; and consumption of nonrenewable resources.

The construction of residential development and associated amenities would result in the development of undeveloped land, which is a long-term commitment. Although more than half of the project area would remain in open space, 797 acres of currently undeveloped land would be developed in low-, medium- and high-density residential uses, another 87 acres in parks and public facilities, 57 acres in commercial uses, and 61 acres in roads and landscaped lots. Therefore, a total of 1,057 acres of previously undeveloped land would be developed. Because of the large commitment of capital and infrastructure necessary for site development, it is improbable that the site, once developed, would revert to its current, primarily undeveloped, open space use in the future.

Irreversible environmental changes would result from the actions associated with the conversion of a largely undeveloped site to suburban uses. Implementation of the proposed project would include construction of structures, roads, and other infrastructure, which would be composed of a variety of nonrenewable (e.g., metal, gravel, concrete), or slowly renewable resources (wood) and would be fueled using primarily nonrenewable fossil fuel sources. In addition, consumption of resources would continue in association with the land uses allowed under the VMVSP. Residential, park, public facilities, and commercial uses would use energy and public utilities. However, the proposed Sustainability Element of the VMVSP outlines and requires the execution of a number of sustainable development strategies. These strategies include recycling and reuse of construction materials, exceeding energy efficiency standards for building, encouraging alternate means of transportation through design, and incorporating energy and water conservation techniques. Implementation of these strategies would minimize the proposed project's consumption of nonrenewable resources.

5.6 Mitigation Measures with the Potential for Environmental Effects under CEQA

Section 15126.4(a)(1)(D) of the State CEQA Guidelines provides that, “[i]f a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but, in less detail, than the significant effects of the project as proposed.” For each impact considered significant in this EIR, mitigation measures have been designed that would reduce the severity of the impact. However, some of these mitigation measures have the potential to result in significant impacts. In general, these measures require construction activities and/or ground disturbance. The following sections provide an impact analysis of those mitigation measures.

5.6.1 Geology, Soils, and Paleontological Resources Mitigation Measures

Mitigation Measure GEO-1: Incorporate mitigation measures identified in geotechnical reports and use standard engineering practices to mitigate for non-engineered fill slope instability around the North Quarry

Under this measure, it may be necessary to remove fills and replace them with engineered fills, which could result in environmental impacts.

Mitigation Measure GEO-3c: Ensure stability of South Quarry pit (Monolith Event Center)

Under this measure, it may be necessary to stabilize the sides of the quarry (Marble Lake), which could result in environmental impacts.

Potential Environmental Effects of Geology, Soils, and Paleontological Resources Mitigation Measures

Removal and replacement of fills would include activities such as excavation, grading, and recontouring, which could cause environmental effects through ground disturbance, noise, air emissions, and traffic disruptions. The ground-disturbing activities would be concentrated in the vicinity of the North and South Quarry pits. These ground-disturbing activities, depending on their location and magnitude, could create short-term or long-term adverse effects related to species habitats; cultural resources; geology, soils, and paleontological resources; or developed and undeveloped land uses. Disturbances would be minimized by implementing Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-2, BIO-3a, BIO-3b, BIO-7, BIO-8, BIO-10a, BIO-10b, BIO-11a, BIO-11b, CUL-1b, CUL-1d, CUL-3, GEO-3a, GEO-3b, GEO-3c, GEO-3d, GEO-10a, GEO-10b, and GEO-10c.

Increased noise would result from excavation, grading, and recontouring, which would have the potential to expose sensitive receptors and noise-sensitive land uses to excessive noise. However, construction-related noise impacts would be minimized and reduced through implementation of Mitigation Measure NOI-1a and by adopting practices to reduce effects on noise-sensitive land uses.

Increased criteria pollutants and GHGs would result from the operation of excavation equipment, as well as from use of trucks hauling materials. Mitigation Measures AQ-2b, AQ-2c, AQ-2d, AQ-2e, and GHG-1 would be available to address emissions associated with implementing these improvements.

Traffic may also be disrupted as a result of construction traffic. As described in Impact TRA-4 in Section 3.14, *Transportation and Circulation*, Mitigation Measure TRA-4 would be available to reduce the severity of this impact. Overall, impacts associated with implementation of these mitigation measures would be less than significant.

5.6.2 Hazards and Hazardous Materials Mitigation Measures

Mitigation Measure HAZ-2c: Conduct additional sampling and analysis of soils containing Total Petroleum Hydrocarbons

Under this measure, it may be necessary to remediate contaminated soils, which could result in environmental impacts.

Potential Environmental Effects of Hazards and Hazardous Materials Mitigation Measures

Remediation activities would include activities such as excavation, grading, and recontouring, which could cause environmental effects through ground disturbance, noise, air emissions, and traffic disruptions. Ground-disturbing activities, depending on their location and magnitude, could create short-term or long-term adverse effects related to species habitats; cultural resources; geology, soils, and paleontological resources; or developed and undeveloped land uses. Disturbances would be minimized by implementing Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-2, BIO-3a, BIO-3b, BIO-7, BIO-8, BIO-10a, BIO-10b, BIO-11a, BIO-11b, CUL-1b, CUL-1d, CUL-3, GEO-3a, GEO-3b, GEO-3c, GEO-3d, GEO-10a, GEO-10b, and GEO-10c.

Increased noise would result from excavation, grading, and recontouring, which would have the potential to expose sensitive receptors and noise-sensitive land uses to excessive noise. However, construction-related noise impacts would be minimized and reduced through implementation of Mitigation Measure NOI-1a and by adopting practices to reduce effects on noise-sensitive land uses.

Increased criteria pollutants and GHGs would result from the operation of excavation equipment, as well as from use of trucks hauling materials. Mitigation Measures AQ-2b, AQ-2c, AQ-2d, AQ-2e, and GHG-1 would be available to address emissions associated with implementing these improvements.

Traffic may also be disrupted as a result of construction traffic. As described in Impact TRA-4 in Section 3.14, *Transportation and Circulation*, Mitigation Measure TRA-4 would be available to reduce the severity of this impact. Overall, impacts associated with implementation of these mitigation measures would be less than significant.

5.6.3 Transportation Mitigation Measures

Mitigation Measure TRA-1: Provide alternative park-and-ride facilities

Under this measure, it may be necessary to provide for or contribute to the provision of 16 additional parking stalls at an existing park-and-ride facility.

Mitigation Measure TRA-2: Shift 25,000 Square Feet of Commercial Office Land Use to Commercial Retail Land Use

Under this measure, the county will require the applicant to change their development plans to include shifting 25,000 square feet of commercial office land use to commercial retail land use.

Potential Environmental Effects of Transportation Mitigation Measures

Activities associated with these mitigation measures, such as grading or installing new or reconstructed surface treatments, could cause environmental effects through ground disturbance, noise, air emissions, and traffic disruptions. Ground disturbances would result from activities such as grading and reconstruction. These ground-disturbing activities, depending on their location and magnitude, could adversely affect species habitats both in the short and long terms. Disturbances would be minimized by implementing Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-7, BIO-8, BIO-10a, BIO-11a, BIO-1, BIO-12, BIO-13, BIO-14.

Increased noise would result from grading and reconstruction, which would have the potential to expose sensitive receptors and noise-sensitive land uses to excessive noise. However, construction-related noise impacts would be minimized and reduced through implementation of Mitigation Measure NOI-1a and by adopting practices to reduce effects on noise-sensitive land uses.

Increased criteria pollutants and GHGs would result from the operation of excavation equipment at the existing park-and-ride facility, as well as from use of trucks hauling materials. Mitigation Measures AQ-2b, AQ-2c, AQ-2d, AQ-2e, and GHG-1 would be available to address emissions associated with implementing these improvements. The redesignation of 25,000 square feet among land use types (commercial office to commercial retail) may have some slight changes in non-mobile source emissions levels (e.g., energy consumption), but the overall magnitude or intensity would not be significant because the total square footage of non-residential land use would remain the same. The proposed mitigation would reduce VMT, resulting in a commensurate reduction in operational GHG and criteria pollutant emissions from mobile sources. Traffic volumes may experience an increase of up to 20 and 68 vehicles during the AM and PM peak hours, respectively, with the largest increase occurring at the project site. Intersections further from the project site would experience less increase. However, the increase in peak hour trip generation would not result in congested conditions and consequently, would not result in a new (or more severe) localized carbon monoxide impact.

Traffic may also be disrupted as a result of the proposed park-and-ride facility caused by associated roadwork. As described in Impact TRA-1 in Section 3.14, *Transportation and Circulation*, Mitigation Measure TRA-1 would be available to reduce the severity of this impact. Overall, impacts associated with implementation of these mitigation measures would be less than significant.

5.7 Potential Indirect Effects Associated with Secondary Dwelling Units

5.7.1 Background

The VMVSP Land Use Diagram identifies 10 land use designations that are consistent with the El Dorado County General Plan. Three residential designations that provide for 3,172 units (single-family and multi-family combined) accommodate a variety of housing types and each residential designation establishes an average density. The residential component of the VMVSP includes three land use designations to achieve the vision of housing diversity. The VMVSP supports the development of small and large conventional-style detached units, and higher-density attached and detached product types to appeal to the aging population and changing demographics. Of the three residential land use designations, the Village Residential - Low (VRL) land use designation creates neighborhoods composed of individually owned, single-family detached homes. Under the proposed VMVSP, up to 1,963 dwelling units could be constructed in this designation. The VRL designation allows one single-family dwelling and one secondary dwelling unit per legal lot. The VMVSP does not propose secondary dwelling units nor is the applicant requesting entitlements for secondary units.

General Plan Housing Element Policy HO-1.24 encourages second dwelling units to provide housing that is affordable to very low-, low- and moderate-income households. The current Housing Element (2021–2029) has established, among other objectives to meet regional housing needs, a goal of 584 second dwelling units (Housing Element Measure HO-9). County Code of Ordinances Chapter 130.31, Affordable Housing Density Bonus, further establishes specific requirements to implement Housing Element provisions. Section 130.40.300, Secondary Dwellings, states that the County implements California Government Code Section 65852.150 et seq. regarding secondary dwellings. If the VMVSP is approved, it is therefore reasonably foreseeable that secondary dwelling units would likely be constructed within the VMVSP. There is no County requirement, however, that the income level restrictions be applied to the secondary dwelling units.

The County Code of Ordinances Section 130.24.030 sets forth the development standards for secondary dwelling units on a lot with a single-family dwelling. These standards identify maximum floor areas for secondary dwellings relative to the size of the primary dwelling, setbacks, height limits, lot coverage, and other requirements of the zone in which it is located. The secondary dwelling may be attached to the primary dwelling or detached. Typically, the secondary dwelling units range from a studio to one or two bedrooms (much like an apartment).

5.7.2 Secondary Dwelling Unit Development Potential in VMVSP

Not all of the 1,963 lots within the VRL designation in the VMVSP would have a secondary dwelling unit. Secondary dwelling units would only be permitted on certain size lots, and the amount of land remaining to develop a secondary dwelling unit would depend on the primary house size. This information is not available at this stage of the planning process. However, the historical number of secondary dwelling permits issued by the County relative to all single-family building permits issued, including the applicant's Serrano development, is an indicator of the potential number of units. During the period 2008-2014, the County issued 70 secondary dwelling unit permits countywide. There were no permits issued for parcels within the Serrano development. Compared

to the total number of single-family residential permits countywide during the same time period (1,411), the number of secondary dwelling units represents approximately 5% of residential permits on a countywide basis.

The VMVSP proposes a total of 1,963 units within the VRL land use designations. Based on an assumption that 5% could have secondary dwelling units on the same lot, this would be approximately 98 units.

5.7.3 Regulatory Considerations Pertaining to CEQA Review

State law (Government Code 65852.150) requires local agencies to provide a ministerial approval option for secondary dwelling units. Through its adoption of Section 130.40.300 of the County Code of Ordinances, the County has established that secondary dwelling units may be approved as a ministerial action. Section 130.40.300.B of the code states that in all zones that permit single-family residential development, the construction of a new structure for the purpose of creating a secondary dwelling is allowed by right in most situations. That is, the issuance of a building permit for a secondary dwelling is a ministerial, not discretionary action. Public Resources Code Section 21080 and State CEQA Guidelines Section 15268(a) establishes that ministerial projects are exempt from the requirements of CEQA.

As noted above, the project applicant is not requesting any entitlements for secondary dwelling units. However, it is reasonably foreseeable that secondary dwelling units could be constructed within the VMVSP because it provides a land use designation that would allow such use. Consequently, this is considered an indirect (or secondary) effect of the proposed project, which does require evaluation under CEQA (State CEQA Guidelines 15126.2(a)).

5.7.4 Potential Environmental Effects of Construction and Occupancy of Secondary Dwelling Units

Secondary dwelling units may only be constructed on single-family residential lots in the VRL designation. Potential impacts that are associated with ground disturbance such as biological resources, cultural resources, geology/soils, construction site runoff, and hazardous materials use in equipment would be as described for the proposed project because they would occur within the same disturbance footprint as the single-family dwelling. If a proposed unit were to result in the need for oak tree or oak woodland removal, it would be subject to General Plan Policy 7.4.4.4 Option A or ORMP requirements, whichever is in effect at the time, which are described in Impact BIO-1 in Section 3.3, *Biological Resources*. The construction of secondary dwelling units would not result in new impacts or increase the severity of the impacts identified for the proposed project. If a secondary dwelling unit were to involve more than 250 cubic yards of soil disturbance, a grading permit would be required (also a ministerial action). The design of the unit must also comply with the County's post-construction stormwater runoff requirements to reduce urban pollutants in stormwater runoff.

Construction equipment would be a source of air emissions and GHGs. Only a few pieces of equipment would be needed to construct a second unit, and minimal emissions would be generated. Secondary dwelling units would not all be constructed at once. Historically in the County, the frequency that secondary dwelling units are constructed is limited to a few units per year, at most. Nevertheless, for the purposes of analysis, criteria pollutant and GHG emissions were estimated assuming all 98 units would be constructed at the same time during the first three years of VMVSP

construction, followed immediately by full occupancy. Because actual construction and operation would occur over several decades, the emissions analysis represents a worst-case assessment of potential air quality impacts.

The results of the emissions modeling are summarized in Tables 5-7 through 5-10. The analysis accounts for emissions benefits achieved from mandatory VMVSP policies, as discussed in Sections 3.2, *Air Quality*, and 3.6, *Greenhouse Gas Emissions*. CalEEMod defaults were assumed for construction and operational inputs, with the exception of the following:

- Each unit would be a maximum of 800 square feet (pursuant to VMVSP, the secondary units cannot exceed 30% of the square footage of the primary dwelling).
- The secondary dwelling units would result in a demand for approximately 17.6 AFY of potable water (discussed further below).

Table 5-7. Estimated Maximum Criteria Pollutant Emissions from Construction of Secondary Units (pounds per day) ^a

Year	ROG	NO _x	CO	PM10			PM2.5		
				Dust	Exhaust	Total	Dust	Exhaust	Total
Year 1	3	32	31	20	1	21	10	1	11
Year 2	1	10	15	<1	<1	1	<1	<1	<1
Year 3	71	10	15	<1	<1	1	<1	<1	<1
Threshold	82	82	-	BMPs	-	-	BMPs	-	-

Table 5-8. Estimated GHG Emissions from Construction of Secondary Units (metric tons per year)

Year	CO _{2e} ^a
Year 1	466
Year 2	368
Year 3	91

Source: Ascent 2024

^a Modeling does not account for implementation of Mitigation Measure GHG-1, as discussed in Section 3.6, *Greenhouse Gases*. Accordingly, the results are conservative and actual emissions would be less than presented in this table.

Table 5-9. Estimated Criteria Pollutant Emissions from Operation of Secondary Units (pounds per day) ^a

Location	ROG	NO _x	CO	PM10	PM2.5
Area Sources	5	2	28	3	3
Energy Sources	<1	1	<1	<1	<1
Mobile Sources	4	2	18	3	1
Total combined emissions	9	5	47	6	4
EDCAQMD threshold	82	82	CAAQS	CAAQS	CAAQS

Source: Ascent 2024.

^a Emissions account for reductions achieved by mandatory VMVSP Policies 9.50 and 9.51. Modeling does not account for implementation of Mitigation Measures AQ-2f or GHG-2, as discussed in Section 3.2, *Air Quality*. Accordingly, the results are conservative and actual emissions would be less than presented in this table.

Table 5-10. Estimated GHG Emissions from Operation of Secondary Units (metric tons per year)

Source	CO ₂	CH ₄	N ₂ O	HFC	CO ₂ e
Area sources	90	<1	<1	-	92
Energy use	182	<1	<1	-	182
Mobile	577	<1	<1	1	588
Waste generation	5	1	<1	-	19
Water consumption	2	<1	<1	-	7
Refrigerants	-	-	-	<1	0.1
Total combined emissions ^a	856	1	<1	1	889

Source: Ascent 2024.

CO₂ = carbon dioxide.

CH₄ = methane.

CO₂e = carbon dioxide equivalents.

GHG = greenhouse gas.

N₂O = nitrous oxide.

HFC = hydrofluorocarbons

^a Values may not add due to rounding. Modeling includes emissions benefits achieved by mandatory VMVSP Policies 99.16, 9.36, 9.42, 9.45, 9.50, and 9.51. Modeling does not account for implementation of Mitigation Measure GHG-2, as discussed in Section 3.6, *Greenhouse Gases*. Accordingly, the results are conservative and actual emissions would be less than presented in this table

As shown in Tables 5-7 and 5-8, construction of the secondary units would not individually exceed EDCAQMD thresholds. Implementation of Mitigation Measures AQ-2a through AQ-2f, GHG-1, or GHG-2 would further reduce construction related emissions. However, if secondary dwellings were constructed at the same time as part of the project, the emissions may result in a significant contribution to the overall emissions of a particular construction year, depending on emissions levels (see Table 3.2-5 in Section 3.2, *Air Quality*, and Table 3.6-4 in Section 3.6, *Greenhouse Gas Emissions*). Noise from construction equipment would be periodic and limited to a few pieces of equipment. An individual homeowner constructing a secondary dwelling unit would be required to comply with the County’s requirements pertaining to hours of operation (Table 3.10-7 in Section 3.10, *Noise and Vibration*).

In addition to meeting the County’s development standards pertaining to height, size, and setbacks (Section 130.40.300(C)), secondary dwelling units constructed in the VMVSP would also be subject to the VMVSP Homeowner’s Association design review process, which would address aesthetics impacts. The provision of necessary ingress/access, setbacks, and defensible space would also be reviewed by the County as part of the building permit approval process to ensure fire safety, particularly if a unit were to be constructed near open space. Applicable fire safety fees would be required prior to building permit issuance. Other restrictions may be established by the developer for specific lots, similar to the Serrano development.

Secondary dwelling units would consume energy and generate vehicle trips and VMT. Assuming a CalEEMod default trip rate, the 98 units would generate a maximum of 912 daily trips (Saturday). When added to the trips generated by the entire VMVSP project, this would not be enough additional trips, or VMT, to result in any new or more severe impacts because the incremental increase would represent approximately 2.4% of all trips. VMT efficiency, measured in VMT per capita would not change because secondary dwellings would be in the same location. At the time of preparation of

this Draft EIR, an applicant for a building permit for a secondary dwelling unit would be required to pay the applicable multi-family TIF fee in effect at the time of building permit issuance. However, the proposed update to the TIF program included an off-set program for secondary dwelling units. The CIP and TIF Program Final EIR was certified on December 6, 2016, and went into effect on February 13, 2017, as amended in 2018 and 2019.

The additional trips and energy consumption would generate criteria air pollutant and GHG emissions. As shown in Tables 5-9 and 5-10, operation of the 98 secondary units would not generate criteria pollutants in excess of EDCAQMD thresholds. However, these emissions would be additive with the proposed project's emissions. This Draft EIR has estimated VMVSP air pollutant emissions and has determined they would be significant and unavoidable. Emissions from secondary dwelling units would contribute to this impact. Mitigation Measures AQ-2e and GHG-2 through GHG-6 would be required to reduce criteria pollutant emissions. While minor, GHG emissions from the secondary units would contribute to the larger VMVSP impact before mitigation. Mitigation Measures GHG-1 through GHG-10 would be required to reduce and offset emissions, as applicable.

Secondary dwelling units would also create a demand for potable water. For a second unit, water demand would be almost entirely indoor demand. As stated in the WSA prepared for the VMVSP (Appendix H, *Water Supply Assessment:2-4*), based on EID meter data for the past several years, the annual indoor water use for a typical single-family residence is approximately 0.18 acre-feet per dwelling unit (af/du). The value is less for apartments (or in this case a secondary dwelling unit) as a result of less people living in each unit. The WSA does not state a specific indoor demand for apartments. The approximately 98 secondary dwelling units conservatively would result in a demand for approximately 17.6 AFY of potable water. When added to the VMVSP's water demand (1,927 AFY), the incremental additional demand (less than 0.1%) would have minimal effect on the overall water supply availability for the project, which the WSA has determined is sufficient. The secondary dwelling units would also generate wastewater. Because nearly all of the demand for water would be for indoor use, then a similar amount of wastewater would be generated on a per unit basis (approximately 160 gallons per day, or 0.00016 mgd). On an individual unit basis this would have no measurable effect on Deer Creek Wastewater Treatment Plant capacity. When the additional units are combined with VMVSP project flows (0.79 mgd), the total would only increase to 0.80 mgd. These flows when combined with existing flows treated the plant would still be within the 3.6-mgd plant capacity (see Impact PSU-3 in Section 3.12, *Public Services and Utilities*). Prior to issuance of a building permit, applicants for secondary dwelling units would be required to provide proof of service from EID and pay appropriate EID connection fees.

Occupancy of secondary dwelling units would be expected to result in school-age children who would attend local schools. The County requires payment of school impact fees at the time of issuance of building permit.

In summary, the construction and occupancy of secondary dwelling units would result in indirect environmental effects that would contribute to the impacts identified in this Draft EIR. However, the contribution would be minimal relative to the proposed project's impacts and would not result in new significant impacts or result in a substantial increase in the severity of an identified impact.

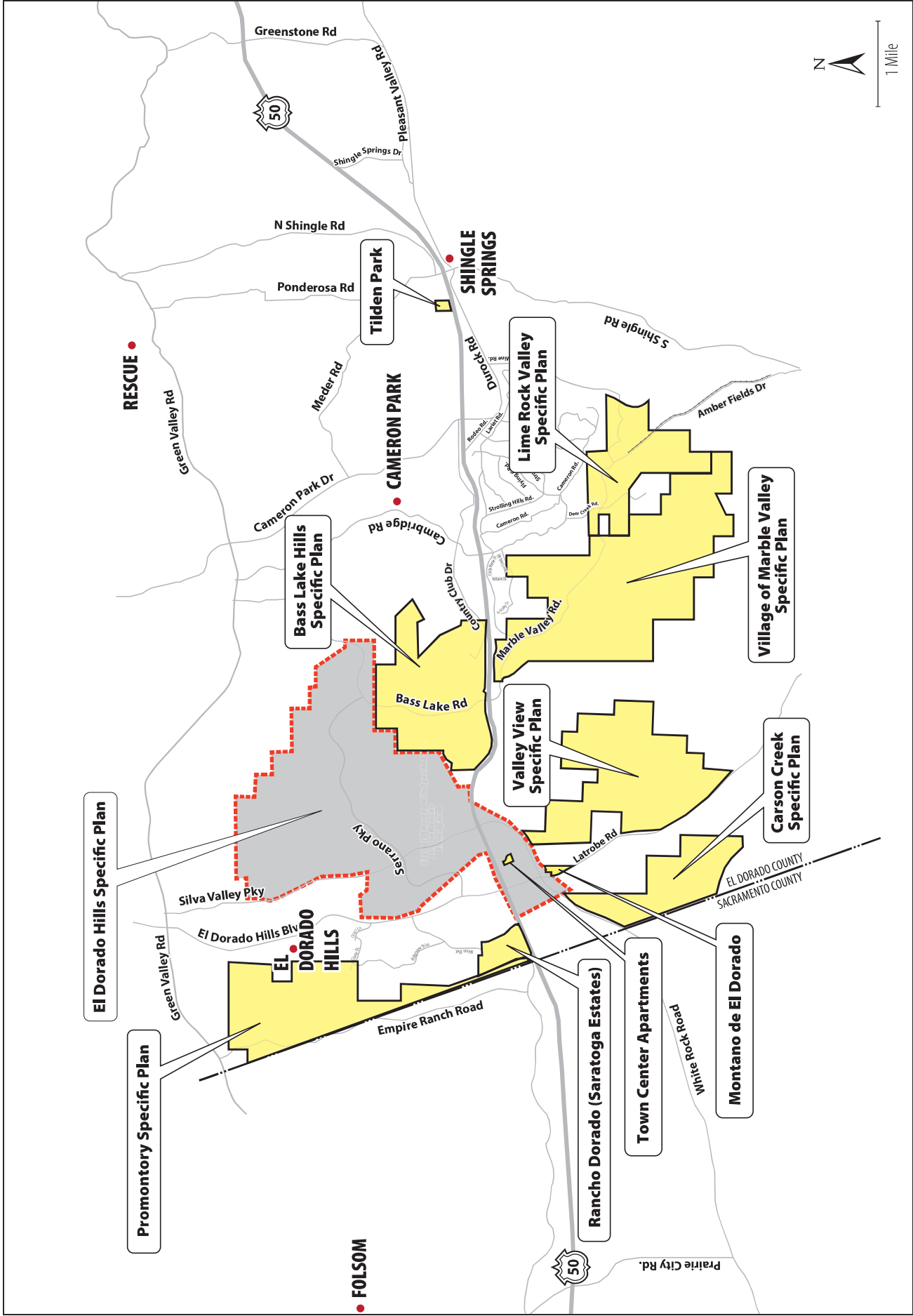


Figure 5-1
Locations of Cumulative Projects

