Chapter 5
Cumulative Impacts

5.1 Overview

This chapter considers the cumulative impacts of past, present, and reasonably foreseeable future projects and the project's contribution to these impacts. *Past projects* are defined as those that were recently completed and are now operational. *Present projects* are defined as those that are under construction but not yet operational. *Reasonably foreseeable future projects* are defined as those for which a development application has been submitted or credible information is available to suggest that project development is a probable outcome at the time the Notice of Preparation was issued (March 8, 2021). The project list has also been updated since the Notice of Preparation to reflect additional *reasonably foreseeable future projects.*

The project's contribution to cumulative impacts would not be cumulatively considerable, including the following resources.

- Aesthetics and Visual Resources
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions and Climate Change
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise and Vibration
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

5.2 Cumulative Methodology

According to Section 15130(b) of the ~~State~~ CEQA Guidelines, cumulative impact analysis may be conducted using one of two methods: the *List Method*, which includes "a list of past, present, and probable activities producing related or cumulative impacts"; or the *Plan Method*, which uses "a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact." The cumulative analysis of near-term conditions that follows for a majority of issue areas uses the List Method. The Alpine Community Plan Update is one of the projects identified on the list so the cumulative analysis considers this document in the analysis. Additionally, the Transportation Impact Analysis for the project bases the 2050 future year conditions on the San Diego Association of Governments' (SANDAG's) Series 13 Travel Demand Model. Consequently, the cumulative analyses for transportation as well as traffic-related impacts on air quality, greenhouse gas (GHG) emissions, and noise and vibration use the Plan Method. Additionally, the cumulative analysis related to future water supply in the utilities and service systems chapter uses the Plan Method because it is based on the adopted 2015 Padre Dam Municipal Water District Urban Water Management Plan (UWMP).

5.2.1 Cumulative Project Lists

~~Two~~Four cumulative projects were identified for this analysis. The projects listed in the project's cumulative study area have had applications submitted or have been approved, are under construction, or have recently been completed. The cumulative projects identified in the study area are listed in Table 5-1. Generally speaking, the geographic scope of the area affected by cumulative effects varies according to the issue area. The study area for each issue area is described further under the respective resource headings that follow.

Table 5-1. Present and Reasonably Foreseeable Cumulative Projects

Project #	Name	Location	Description	Status
1	Rancho Nuevo Tentative Map	Eastern terminus of Via Tesoro in the Rancho Palo Verde Estates residential development	The project is a major subdivision to create 14 residential parcels on a 60.15-acre site; three additional lots are proposed for private roads that would be maintained in accordance with a Private Road Maintenance Agreement.	Approved
2	Alpine Community Plan Update	Alpine Community Planning area of unincorporated San Diego County	Regional planning document	In Progress
3	Rancho Sierra Tentative Map	South of Alpine Boulevard along South Grade Road	The development consists of 10 lots on an 11.52-acre site, which would range from 1.02 to 1.50 acres. The project site is currently undeveloped.	Approved

Project #	Name	Location	Description	Status
4	Marshall Road Tentative Map and Site Plan	Marshall Road and Marshall Way, Alpine	The applicant proposes a TM and STP on a 1.78-acre site for a residential development consisting of 23 condominium units on one common lot. The project site currently contains a single-family residence and accessory structures, all of which will be removed. The majority of the proposed units are duplexes with three standalone units near the back of the property.	Approved

5.3 Cumulative Impact Analysis

The discussion below evaluates the potential for the project to contribute to a cumulative adverse impact on the environment. For each resource area, an introductory statement is made regarding what would amount to a significant cumulative impact in that particular resource area.

The analysis that follows considers two separate impacts: the significance of the cumulative effect from past, present, and reasonably foreseeable projects; and, in the event a cumulative effect is identified, the project's incremental contribution to the identified cumulative effect. If it is determined that the project's contribution to the cumulative effect is cumulatively considerable, a cumulatively significant impact is identified, and feasible mitigation measures are identified.

The cumulative analysis that follows addresses the incremental contribution of the project to cumulative impacts associated with aesthetics and visual resources; agriculture and forestry resources; air quality and health risk; biological resources; cultural resources; energy; geology and soils~~,~~; GHG emissions and climate change; hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; noise and vibration; population and housing; public services; recreation; transportation and traffic; tribal cultural resources; utilities and service systems; and wildfire.

5.3.1 Aesthetics and Visual Resources

A cumulatively considerable impact on aesthetics and visual resources would result if the project would contribute to a significant cumulative impact related to a substantial and adverse change in the overall character of the area or cumulative view blockage that would affect the overall scenic quality of a resource, develop structures that substantially differ from the character of the vicinity, or result in the addition of a substantial cumulative amount of light and/or glare.

5.3.1.1 Geographic Scope

The geographic scope of analysis for cumulative aesthetics and visual resources impacts to which the project may contribute includes the set of viewsheds described in Section 4.1.2.4, *Other Public Views to the Project Site*, and the resultant Key Observation Points from which views into the project ~~site~~ are available, whether as part of a single view or a series of related views (e.g., a scenic route), and the general area within the community of Alpine. As such, the visual impact analysis area

generally encompasses public viewing sites along South Grade Road~~,~~ and visitors to the Wright's Field Preserve.

5.3.1.2 Cumulative Effects

Past development projects have changed the land in and around ~~the~~ San Diego County and ~~surrounding~~the Alpine community area from a natural and undeveloped setting to the rural, semi-developed setting defined by rural residential uses seen today. In addition, past projects, along with present and reasonably foreseeable future projects, have included~~,~~ and will continue to include development at or near the community of Alpine~~,~~ that ~~development~~ has cumulatively ~~altered~~contributed to altering the visual character of the area. However, these cumulative projects have been, and would continue to be, generally consistent with the visual character, size, scale, and bulk of the past development projects~~,~~ due to existing design and visual character regulations provided in the County's General Plan. Compliance with applicable plans and regulations would also limit future glare and light impacts.

Cumulative projects have continued to change the rural setting of the Alpine community, and reasonably foreseeable future projects would continue this path of development. Consequently, a cumulatively significant impact from past, present, and reasonably foreseeable future projects would potentially occur.

5.3.1.3 Project Contribution

The project would not result in a substantial adverse effect on a scenic vista and would not substantially damage scenic resources. As discussed in Section 4.1, *Aesthetics and Visual Resources*, the project would result in a substantial change to the rural character during construction (**Impact-AES-1**), substantially different than the existing view of expansive rural fields during operation (**Impact-AES-2**), result in a substantial change to the project site because the existing conditions are dark nighttime views with no lighting onsite and very little light spillover from adjacent offsite sources (**Impact-AES-3**), and result in new sources of glare. As noted in Section 4.1, **MM-AES-1** would reduce impacts (**Impact-AES-1**) on public views by requiring construction fence screening along the active park boundary in phases. Construction fencing would be installed in phases on the project site and would be sited only around the areas with active construction activities, equipment, and materials. Therefore, the construction fencing would allow for existing views where construction is not occurring to be visible during construction. **MM-AES-2** would reduce impacts (**Impact-AES-2**) on public views of the project site by requiring native vegetation along the boundaries of the site to provide a transition from the surrounding rural areas. With the implementation of **MM-AES-3**, **Impact-AES-3** would be reduced to less-than-significant levels because it will require the outdoor lighting to be turned off 1 hour after closing so that it will not adversely affect nighttime views. Therefore, impacts would be reduced to less-than-significant levels. Consequently, although the project would substantially alter the existing undeveloped site, thereby substantially degrading the existing public views of the rural character at the project site, implementation of mitigation would reduce impacts to a less-than-significant level. When combined with reasonably foreseeable projects, the project would not cumulatively contribute to degradation of the rural character of the community of Alpine and the project's contribution to aesthetics and visual resources impacts would not be cumulatively considerable.

5.3.1.4 Impact Determination

The project's incremental contribution to cumulative aesthetics and visual resources impacts would not be cumulatively considerable after implementation of ~~the~~ mitigation ~~noted above~~.

5.3.1.5 Mitigation Measures

No additional mitigation is required.

5.3.1.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative aesthetics impacts would not be cumulatively considerable and would be less than significant.

5.3.2 Agriculture and Forestry Resources

A cumulatively considerable impact on agriculture and forestry resources would result if the project would contribute to a significant cumulative impact related to conversion of farmland to non-agricultural use; a conflict with existing zoning for agricultural use, or a Williamson Act contract; a conflict with existing zoning for forest land or timberland; conversion of forest land to non-forest use; or other changes in the existing environment which, due to their location or nature, could result in conversion of farmland or forest land.

5.3.2.1 Geographic Scope

The geographic scope for cumulative impacts associated with agriculture and forestry resources consists of areas that could be affected by the implementation the project, as well as areas affected by the implementation of other projects whose activities could directly or indirectly affect the proposed activities on the project site. In general, properties adjacent to the project area were considered in this analysis.

5.3.2.2 Cumulative Effects

As discussed in Section 4.2, *Agriculture and Forestry Resources*, the project would convert approximately 55 acres of Farmland of Local Importance and 38 acres of Grazing Land to park and open space uses. However, the site is not currently being used for agriculture and does not contain agricultural resources that meet the Prime and Statewide soil criteria, as defined by the Farmland Mapping and Monitoring Program. Additionally, implementation of the project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

5.3.2.3 Project Contribution

~~The project would affect and extremely small amount of agricultural land subject to conversion. Further, the site has not been in production for a substantial amount of time and does not appear to be desired for such use.~~

No cumulatively significant impact on agriculture and forestry resources would result from implementation of the project.

5.3.2.4 Impact Determination

~~For the reasons stated above, a cumulatively significant impact~~The project's impacts on agriculture and~~/or~~ forestry resources would not ~~result from implementation of the project.~~ be cumulatively considerable.

5.3.3 Air Quality and Health Risk

Potential cumulative air quality impacts would result when the cumulative projects' emissions would combine ~~with emissions from other sources~~ to~~: (a)~~ degrade air quality conditions ~~to~~ below attainment levels for the San Diego Air Basin (SDAB), ~~or (b)~~ delay attainment of air quality standards, ~~or(d)~~ affect sensitive receptors, or ~~(e)~~ subject surrounding areas to objectionable odors. The ~~County of San Diego's~~County's screening level thresholds are used for the analysis of impacts related to emissions for project construction and operations~~, and the results areevaluated~~ evaluated within the context of buildout of the past, present, and reasonably foreseeable future plans listed in Table 5-1.

5.3.3.1 Geographic Scope

The SDAB, which covers 4,260 square miles of Southern California and is contiguous with San Diego County, represents the cumulative geographic scope for air quality impacts related to consistency with air quality plans and air quality threshold levels because plans and thresholds are established at the air basin-wide level to attain air quality standards that are assigned for the entire air basin, which in this case is ~~the entire county.~~San Diego County. Cumulative impacts on sensitive receptors and odors are considered at a more localized level due to the more limited area of dispersion, and include the surrounding neighborhoods and areas close to the source of the emission and odor sources, respectively. Localized air quality conditions are influenced by a variety of ~~factors;~~ sources, and several lead agencies, including the Bay Area Air Quality Management District and the California Air Resources Board (CARB) (2005), recommend analyzing the effects of emissions from sources within 1,000 feet of proposed new emission sources or proposed new receptor locations.

5.3.3.2 Cumulative Effects

Past projects within the SDAB have involved the emissions of ozone precursors (reactive organic gases [ROG] or volatile organic compounds and nitrogen oxides [NO_X]), particulate matter 10 microns or less in diameter (PM_{10}), and particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), resulting in nonattainment status for 8-hour ozone under the National Ambient Air Quality Standards (NAAQS) and nonattainment status for ozone, PM_{10}, and $PM_{2.5}$ under the California Ambient Air Quality Standards (CAAQS). Therefore, the emissions of concern within the SDAB are ozone precursors (ROG and NO_X), PM_{10}, and $PM_{2.5}$.

The ~~current~~ nonattainment status for ~~the entire county~~San Diego County is a consequence of past and present projects; the cumulative contribution of development associated with reasonably foreseeable future plans, such as those listed in Table 5-1, could result in continued nonattainment.

Because past and present projects have resulted in the current nonattainment status for ozone (ROG and NO_X), PM_{10}, and $PM_{2.5}$, and reasonably foreseeable future projects would continue to contribute to the nonattainment status and potentially affect sensitive receptors, impacts related to the cumulative contribution of nonattainment pollutants (ozone precursors, PM_{10}, and $PM_{2.5}$) and the

exposure of sensitive receptors to substantial pollutant concentrations would be considered cumulatively significant.

5.3.3.3 Project Contribution

The project includes development of an approximately 25-acre community park for "community recreation" use. Implementation would involve construction and operation of multi-use turf areas, a baseball field, an all-wheel park, a bike skills area, recreational courts, fitness stations, a leash-free dog area, an administrative facility/ranger station, equestrian staging and a corral, a nature play area, a community garden, picnic areas, and multi-use trails. As discussed under Threshold 1 of Section 4.3, *Air Quality and Health Risk,* while the project would result in new trips to the site, it is expected to serve residents and visitors from the surrounding community and would not induce unplanned population growth. ~~The~~As such, the project is not anticipated to result in population or employment growth beyond what was projected in the applicable air quality plans. In addition, the project would be compliant with applicable SDAPCD rules and regulations consistent with the Regional Air Quality Strategy and ozone State Implementation Plan, including Rule 55 regarding fugitive dust control. Consequently, the project would not conflict with or obstruct implementation of the Regional Air Quality Strategy or State Implementation Plan.

As discussed under Threshold 2 of Section 4.3 and shown in Table 4.3-5, construction of the project would contribute emissions to the cumulative condition. However, emissions would be below thresholds for all pollutants during construction activity. As discussed in Section 4.3, thresholds are designed to be health-protective and are thus both project level and cumulative in nature. Accordingly, while the effects from past, present, and reasonably foreseeable future projects are considered cumulatively significant, the project's incremental contribution from construction emissions~~, because they would be kept below the established thresholds,~~ would be less than cumulatively considerable.

As discussed under Threshold 2 of Section 4.3 and shown in Table 4.3-6, operational-related emissions would be ~~even less than during construction and would be~~ below threshold levels for all pollutants, as operational emissions would be minimal and limited primarily to park visitor vehicle trips. As with the construction phase, the effects from past, present, and reasonably foreseeable future projects are considered cumulatively significant, but the project's incremental contribution from operational emissions would not result in a net increase in nonattainment pollutants as emissions would not exceed thresholds that are designed to assess both project level and cumulative effects. Consequently, the project's incremental contribution to cumulative air quality impacts during its operational stage would be less than cumulatively considerable.

As discussed under Threshold 3 of Section 4.3, neither construction nor operation of the project would expose sensitive receptor locations to substantial toxic air contaminant concentrations, ~~such as~~including diesel particulate matter ~~or~~and asbestos-containing materials. Similarly, additional traffic created by the project would not result in carbon monoxide concentrations in excess of the NAAQS or CAAQS. As discussed under Threshold 4 of Section 4.3, odors emitted during construction and operation would likewise not result in nuisance odors that would violate San Diego Air Pollution Control District (SDAPCD) Rule 51. However, equestrian areas in the northern portion of the project site have the potential to generate objectionable odors due to manure. Improper handling and storage of manure, along with odor migration, may lead to offsite nuisance violations (**Impact AQ-1**). With implementation of **MM-AQ-1**, which would require the preparation and implementation of a Manure Management Plan, impacts would be reduced to less-than-significant levels. Accordingly,

while the effects from past, present, and reasonably foreseeable future projects are considered cumulatively significant, the project's incremental contribution to cumulative health risks and odor emissions would be less than cumulatively considerable.

5.3.3.4 Impact Determination

The project's contribution to a cumulative air quality impact would be less than cumulatively considerable after implementation of mitigation.

5.3.3.5 Mitigation Measures

No additional mitigation is required.

5.3.3.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative air quality impacts would not be cumulatively considerable and would be less than significant.

5.3.4 Biological Resources

A significant cumulative impact on biological resources would result if the project would contribute to the degradation of the quality of the environment, substantially reduc~~inge~~ the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal species.

5.3.4.1 Geographic Scope

The geographic scope of this cumulative impact analysis for biological resources is the area encompassed by the Multiple Species Conservation Program (MSCP), which consists of 582,243 acres, of which 43% (252,132 acres) is in unincorporated areas under the jurisdiction of ~~San Diego~~the County.

5.3.4.2 Cumulative Effects

County Guidelines state that if the appropriate study area is entirely within the ~~MSCP~~boundary of County's MSCP Subarea Plan, a project may rely on the MSCP to determine that the project's impacts are not cumulatively considerable on biological resources (County of San Diego 2010).

5.3.4.3 Project Contribution

The project is entirely within the boundary of the County's MSCP~~.~~ Subarea Plan. The project would be consistent with the County's MSCP Subarea Plan and the Biological Mitigation Ordinance, which implements the County's MSCP Subarea Plan. Therefore, any project impact would not be ~~considered~~ cumulatively considerable.

~~As discussed under Threshold 1 of Section 4.4, *Biological Resources*, occupied QCB habitat would be affected by construction and maintenance of the project (**Impact-BIO-1**). With implementation of **MM-BIO-1**, which would require the County to obtain federally listed species permitting, **Impact-BIO-1** would be reduced to a less-than-significant level. Of~~As discussed in Section 4.4, *Biological*

Resources, of the eight sensitive plant species found within the Biological Survey Area, two would be permanently and directly affected by implementation of the project: decumbent goldenbush and Palmer's grappling hook. As a result, the project has the potential to contribute to the regional long-term decline of th~~i~~ese species (**Impact-BIO-~~2~~1**). With implementation of **MM-BIO-~~2~~1**, which would require ~~the~~ County DPR to replace at a 1:1 mitigation ratio any affected decumbent goldenbush individuals, impacts would be reduced to less-than-significant levels.

Approximately 0.94 acre of the project is within the Engelmann oak root protection zone where grading/site preparation (e.g., compaction) and construction of park infrastructure would occur. Impacts would occur within the root protection zone, but not within the canopy/dripline, of approximately 25 Engelmann oak trees, including one individual that appears to be dying. These oaks are at risk of injury or mortality if construction activities damaged the root zones or aboveground portions of the trees (**Impact-BIO-~~3~~2**). With implementation of **MM-BIO-~~3~~2**, which would require the implementation of Engelmann oak avoidance and minimization measures, **Impact-BIO-~~3 would be reduced to a less-than-significant level. Construction of an active park would have permanent direct impacts and indirect impacts on avian species endemic to the region. Cooper's hawk, a California Species of Special Concern; red-shouldered hawk, a County Group I species; and western bluebird, a County Group 2 species were observed in the Biological Survey Area and are expected to be affected by the project. Approximately 22.3 acres of avian foraging habitat for these species would be permanently affected when construction occurs within grassland and scrub habitat areas (**Impact-BIO-4**). With implementation of **MM-BIO-4**, which would require County DPR to avoid and minimize impacts on special-status avian species and other birds protected under the Migratory Bird Treaty Act, impacts would be reduced to less-than-significant levels. Loss of approximately 22.3 acres of pallid bat foraging habitat would result in a significant impact on the pallid bat (**Impact-BIO-5**). With implementation of **MM-BIO-5**, which would require the County DPR to work with a bat expert to design and install bat boxes to attract pallid bat prior to vegetation removal activities commencing on site, impacts would be reduced to less-than-significant levels. Habitat-based mitigation for permanent direct impacts on sensitive habitats will be satisfied through a combination of onsite preservation for Tiers I, II, and III and purchase of credits and/or land acquisition. Mitigation for loss of foraging habitat and sensitive natural communities is provided for in **MM-BIO-6**. In addition, the County will establish the Alpine Park Preserve, and managed in perpetuity in accordance with a Resource Management Plan (**Applicant Proposed Measure [APM]-1**), as required by the County's MSCP Subarea Plan~~**2** would be reduced to a less-than-significant level.

Occupied Quino checkerspot butterfly (QCB) habitat would be affected by construction and maintenance of the project (**Impact-BIO-~~1~~ through ~~Impact-BIO-5~~3**). With implementation of **MM-BIO-3**, which would require the County to obtain federally listed species permitting, **Impact-BIO-3** would be reduced to a less-than-significant level.

One seasonally inundated basin (AP-7) within which western spadefoot eggs were observed in 2019 would be filled in during construction of the active park. This impact could limit the ability of western spadefoot within the core breeding habitat on Wright's Field to expand territory during wet years. This could cause declines in the core population over time because it would restrict locations where breeding activities could occur and reduce breeding refugia sites. These impacts could potentially be significant, absent mitigation (**Impact-BIO-4**). To mitigate these impacts, the County will create three permanent basins to support western spadefoot breeding. The County will also develop a Western Spadefoot Habitat Mitigation and Monitoring Plan to describe requirements for the basin. All spadefoots found within the project area will be captured and translocated by the

spadefoot biologist to the nearest suitable habitat outside of the work area. Upon completion of these surveys and prior to initiation of construction activities, the spadefoot biologist will report the capture and release locations of all spadefoots found and relocated during these surveys to the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS). With implementation of **MM-BIO-4**, impacts would be reduced to less-than-significant levels ~~after implementation of **MM-BIO-1**~~.

Impacts on eight special-status reptile species (California glossy snake, coast patch-nosed snake, coast horned lizard, coastal western whiptail, Coronado skink, orange-throated whiptail, red-diamond rattlesnake, and Southern California legless lizard) could potentially be significant, absent mitigation. Coast horned lizard and orange-throated whiptail are MSCP covered species that are considered adequately conserved with implementation of the South County MSCP. The larger open space being assembled with implementation of the South County MSCP affords the remaining six species (not covered under the MSCP) additional regional conservation benefits because these species are generalists and can utilize a wide variety of habitats that are permanently protected under the MSCP (**Impact-BIO-5**). After implementation of **APM-BIO-1** and **MM-BIO-9**, impacts would be reduced to less-than-significant levels.

Impacts on 22.4 acres of foraging and/or breeding habitat for special-status avian species could potentially be significant, absent mitigation. Southern California rufous-crowned sparrow and ferruginous hawk are MSCP covered species that are considered adequately conserved with implementation of the South County MSCP. The larger open space being assembled with implementation of the South County MSCP affords some of these generalist species (e.g., Cooper's hawk, red-shouldered hawk, white-tailed kite) additional conservation benefits at a regional level because these species are generalists and can utilize a wide variety of habitats that are permanently protected under the MSCP (**Impact-BIO-6**). After implementation of **APM-BIO-1** and **MM-BIO-9**, impacts would be reduced to less-than-significant levels.

Impacts on the nesting success of any bird protected by the Migratory Bird Treaty Act, such as removal of an active nest during construction or the loss of eggs or chicks from construction noise or human presence, would be significant (**Impact-BIO-7**). To mitigate for potentially significant impacts on sensitive nesting birds and raptors, County DPR shall avoid ground-disturbing activities during the bird breeding season to keep the project in compliance with State and federal regulations regarding nesting birds (i.e., the federal Migratory Bird Treaty Act and California Fish and Game Code). The bird breeding season is defined as January 15 to September 15, which includes the tree-nesting raptor breeding season of January 15 to July 15, the ground-nesting raptor breeding season of February 1 to July 15, and the general avian breeding season of February 1 to September 15. If removal cannot be avoided during the bird and/or raptor nesting season, a nesting bird survey shall be conducted no more than 72 hours prior to ground-disturbing activities by a qualified avian biologist within 500 feet of proposed ground- or vegetation-disturbing activities. Biologists will also survey for raptor nests up to 1,500 feet from proposed ground- or vegetation-disturbing activities. This is necessary to definitively ascertain whether raptors or other migratory birds are actively nesting on the project site or in a vicinity that could be indirectly affected by work activities (i.e., through noise or visual disturbances). Special attention will be paid to determining the presence of nesting grassland-endemic bird species, such as grasshopper sparrow, that may be nesting within the dense grasses present within the proposed development footprint. If any active nests are detected, the area shall be flagged and mapped on construction plans, along with a buffer, as recommended by the qualified biologist. The buffer area(s) established by the qualified biologist shall be avoided until the nesting cycle is complete or it is determined that the nest is no longer

active. The qualified biologist shall be a person familiar with bird breeding behavior and capable of identifying the bird species of San Diego County by sight and sound. The biologist shall determine if alterations to behavior have occurred as a result of human interaction. Buffers may be adjusted, based on observations by the biological monitor of the response of nesting birds to human activity. After implementation of **MM-BIO-5**, **Impact-BIO-7** would be reduced to less-than-significant levels.

Although not documented as breeding on site, burrowing owl could begin breeding within areas proposed for construction in the future. Potential impacts on breeding burrowing owl during construction would be significant (**Impact-BIO-8**). For this impact, **MM-BIO-6** has been prepared. Prior to initiation of project clearing, grading, grubbing, or other construction activities, pre-construction surveys for the presence of burrowing owl, to verify species absence, will be conducted, including surveying suitable habitat within the project footprint and a 300-foot buffer by a qualified biologist; no grading shall occur within 300 feet of an active burrowing owl burrow. The pre-construction surveys shall follow the take avoidance survey methods outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The first survey shall be conducted within 30 days of initial site disturbance, and the second survey shall occur within 24 hours of initial site disturbance. Following the initial pre-grading survey, the project site will be monitored for new burrows each week until grading is complete. Subsequent pre-construction surveys will be required if lapses in the project occur that exceed 72 hours. If present in the project construction footprint or within 300 feet of the project site, coordination with CDFW and USFWS shall occur to establish measures to avoid potential impacts on burrowing owl. Such measures will be decided in coordination with the CDFW and USFWS and follow the "Strategy for Mitigating Impacts to Burrowing Owls in the Unincorporated County" (Attachment A of the County's Report Format and Content Requirements – Biological Resources). Following the first pre-construction survey within 30 days of initial site disturbance, the qualified biologist will submit a Pre-Grading Survey Report to the County, CDFW, and USFWS within 14 days of the survey and include maps of the project site. If any burrowing owls are observed, the burrowing owl locations on aerial photos and in the format described in the mapping guidelines of the County's Report Format and Content Requirements – Biological Resources will be included. A qualified biologist will attend the pre-construction meeting to inform construction personnel about the burrowing owl requirements. After implementation of **MM-BIO-6**, impacts would be less than significant.

Impacts on 22.4 acres of prime foraging habitat for raptors would be significant (**Impact-BIO-9**). After implementation of **APM-BIO-1** and **MM-BIO-9**, impacts would be reduced to less-than-significant levels.

Impacts on up to 22.4 acres of habitat for special-status bats would be significant absent mitigation due to the small home ranges and specialized foraging habits for some of these species, lack of coverage for these species in the MSCP, and the California Species of Special Concern and/or Group I status for most of these species, indicating their relative rarity in the County (**Impact-BIO-10**). **MM-BIO-7** states County DPR shall work with a bat expert to design and install bat boxes that attract pallid bat prior to vegetation removal activities commencing on the site. These bat boxes should be designed to accommodate both solitary individuals and maternal roost sites. Bat box design should reflect the best practices at the time of installation and be specific to larger-sized bats like pallid bat with respect to roost chamber sizes, etc. Design and placement of bat boxes should also consider how to best maintain proper roost temperature. When possible, the bat boxes should be placed along the edges of the wooded areas on the site. Final design, numbers, and placement of bat boxes will be determined by the bat expert in consultation with County DPR using the best practices known at the time. Monitoring of the bat boxes shall be conducted quarterly for the first 2 years and

twice-yearly during years 3 through ~~**MM-BIO-6**~~5 after installation. Any problems that are noted (e.g., mortality, predation) shall be addressed in consultation with the bat expert. Occupancy status, including species, numbers, etc., shall be documented to the extent possible without disturbing the occupants. If, after the first 2 years, a bat box remains unoccupied by any bat species, County DPR and the bat expert will discuss if the bat box needs to be repositioned on the site or redesigned. An annual report shall be prepared by the bat expert or designee to document the findings of the monitoring visits. The County will provide copies of this annual report to CDFW and also include updates on the bat box monitoring on the site in the County's annual report for the MSCP. After implementation of **APM-BIO-1**, **MM-BIO-7**, and **MM-BIO-9**, impacts would be reduced to less-than-significant levels.

Impacts on any bat species roost sites, such as rock crevices or oak trees, could result in direct mortality of adults and possibly juvenile bats. Even if direct impacts on these sites do not occur, roosting females may be negatively affected by increased noise and disturbance within proximity of their roost sites, which could result in increased mortality of young or similar reduction in fecundity. Furthermore, roosting bats may be very difficult to detect; therefore, it would be hard to know if impacts on roost sites were occurring, absent detailed studies using mist nesting, tracking, and telemetry. Direct or indirect impacts on roost sites causing mortality or reproductive decline in special-status bats would be significant, absent mitigation (**Impact-BIO-11**). Because of the difficulty in detecting all potentially occurring roosting bats (e.g., the western red bat within the Engelmann oaks, pallid bats within rock crevices), no construction activities that could disturb maternal roost site will occur during the pupping season (typically April 1 through August 31). This measure specifically precludes high-frequency surveying as well as ~~**APM-1**, which~~intensive noise-generating activities (e.g., jack-hammering, etc.) anywhere on the project construction footprint as well as a 200-foot buffer around the project construction footprint~~within 200 feet of any Engelmann oaks or rock outcrops~~ during the pupping season.

If construction activities must occur ~~within this 200-foot avoidance buffer~~ during the pupping season, the County will conduct definitive bat roost surveys to determine the presence or absence of maternal day-roost and/or night-roost locations~~ within the 200-foot avoidance buffer that overlaps the construction footprint~~. These surveys will be conducted throughout the entirety of the project construction footprint as well as a 400-foot buffer around the project construction footprint. The bat biologist(s) who conduct these surveys shall have the appropriate education, training, and experience. The bat roost survey methodology will be described in a Bat Roost Management, Monitoring, and Mitigation Plan, which will be prepared at least 30 days prior to the start of construction and provided to CDFW. Bat roost survey methods may include mist netting and tracking individual bats using telemetry and/or additional acoustic surveys that are timed to determine if individual Engelmann oaks or rock outcrops on or within 400 feet of the project construction footprint~~the 200-foot avoidance buffer are~~ support~~ing~~ bat roost sites. Surveys will be conducted for at least one hour after sunset to monitor for emergence. If any maternal roost sites ~~within the 200-foot avoidance buffer~~ are identified, an appropriate construction avoidance buffer of at least 200 feet shall be established around that roost site in accordance with the requirements established in the Bat Roost Management, Monitoring, and Mitigation Plan. Avoidance buffer distances will account for the ability of that individual bat species to tolerate specific types of low- and high-frequency construction noise and other human disturbance associated with the project. No construction activities that could disrupt the roost site will be permitted within the established construction avoidance buffer. Additionally, any roost identified during the bat roost survey will have at least a 400-foot buffer from light sources without shields and at least a 250-foot buffer from

any stationary exhaust source present for more than two minutes. Bat biologists will monitor construction activities occurring adjacent to the avoidance areas for the bat roost sites in accordance with the Bat Roost Management, Monitoring, and Mitigation Plan. Monitoring frequency and duration also will conform to the Bat Roost Management, Monitoring, and Mitigation Plan and be used to determine that the established bat roost avoidance buffers are large enough to prevent maternal roost site impacts, including, but not limited to, roost site abandonment. Avoidance buffers will be expanded if any stress or disturbance to the maternal roost site is observed during monitoring. In years 1, 3, and 5 following construction completion, the County will conduct bat surveys, including maternal bat roost surveys, within the areas originally surveyed prior to construction. If the maternal bat roost sites previously observed prior to and during construction are still observed during these monitoring surveys, no additional mitigation will be required. If any maternal roost sites observed prior to or during construction are no longer present (i.e., are not observed in any of the three post-construction surveys), the County will mitigate for the loss of the maternal roost site at a 2:1 ratio using methods agreed upon in the Bat Roost Management, Monitoring, and Mitigation Plan. This may include planting additional Engelmann oaks within the proposed open space if the affected maternal roost site utilized Engelmann oak trees or by building artificial bat roosts specifically for the affected bat species. After implantation of **MM-BIO-8**, **Impact-BIO-11** would be reduced to less-than-significant levels.

Impacts on special-status mammal species would be significant, absent mitigation. The larger open space being assembled with implementation of the South County MSCP affords these species some conservation benefits at a regional level because these species are generalists and can utilize a wide variety of habitats that are permanently protected under the MSCP. However, these species are not covered under the MSCP, and as such, impacts on these species would be significant, absent mitigation (**Impact-BIO-12**). After implementation of **APM-BIO-1** and **MM-BIO-9**, impacts would be reduced to less-than-significant levels. Operation of the project may result in reduced numbers of special-status species due to an increase in mortality rates as well as a decrease in use of habitat immediately surrounding the project footprint. These impacts on Group I Wildlife Species/California Species of Special Concern could potentially be significant, absent mitigation. After implementation of **APM-BIO-1** and **MM-BIO-9**, impacts would be reduced to less-than-significant levels.

Operation of the project may result in reduced numbers of special-status species due to an increase in mortality rates as well as a decrease in use of habitat immediately surrounding the project footprint. These impacts on Group I Wildlife Species/California Species of Special Concern could potentially be significant, absent mitigation (**Impact-BIO-13**). After implementation of **APM-BIO-1** and **MM-BIO-9**, impacts would be reduced to less-than-significant levels.

Direct impacts on up to 22.3 acres of Tier I, II, and III sensitive natural communities (i.e., Valley needlegrass grassland, flat-topped buckwheat stands, and nonnative grasslands) would be significant. The project would directly and permanently affect Engelmann oak woodland, Valley needlegrass, nonnative grassland, and flat-topped buckwheat within a Biological Resource Core Area. Engelmann oak woodland and Valley needlegrass are listed as Tier I vegetation communities, flat-topped buckwheat is listed as a Tier II vegetation community, and nonnative grassland is listed as a Tier III vegetation community in Attachment K of the Biological Mitigation Ordinance. Impacts on Tier I through Tier III vegetation communities would be significant, absent mitigation (**Impact-BIO-14**). **MM-BIO-10** states impacts on 14.79 acres of Valley needlegrass grassland will be mitigated at a 2:1 ratio through preservation of 10.60 acres of Valley needlegrass grassland and 6.88 acres of open Engelmann oak woodland on site, in addition to 4.84 acres of restoration of non-native grassland to Valley needlegrass grassland within the County's parcel and 7.41 acres of restoration

on Wright's Field Preserve. All restoration will be in accordance with a Habitat Restoration and Enhancement Plan approved by the Wildlife Agencies (USFWS and CDFW). Success criteria established in that the Habitat Restoration and Enhancement Plan will include achieving at least a 5 percent absolute cover of purple needlegrass within restoration areas while retaining cover and species composition similar to that of the native forbs currently present within non-native grassland areas on site. If restoration does not meet the restoration goals, the County will implement adaptive management measures, to be approved by the Wildlife Agencies. After implementation of **APM-BIO-1**, **MM-BIO-9**, and **MM-BIO-10**, impacts would be reduced to less-than-significant levels.

The project would potentially conflict with the County's Consolidated Fire Code—specifically, the provision to prevent impacts within a biological open space contained in Section 4907.2, Fuel Modification (f). Impacts would be potentially significant, absent mitigation (**Impact-BIO-15**). After implementation of **APM-BIO-1** and **MM-BIO-9**, impacts would be reduced to less-than-significant levels.

Impact-BIO-1 through **Impact-BIO-13** would be reduced to less-than-significant levels after implementation of **MM-BIO-1** through **MM-BIO-7** as well as **APM-BIO-1** and the habitat-based mitigation described under **MM-BIO-9**.

The planned Alpine Park Preserve, to be created with implementation of the project, contains all key habitat components required by QCB, including significant host plant populations, nectaring resources, and hilltops and ridgelines. The Alpine Park Preserve is also contiguous with existing conserved lands within Wright's Field Preserve. When combined, 98 percent of the known individual host plants associated with the Alpine Occurrence Complex would be conserved between the two preserves. Similarly, the permanent protection of habitat for special-status plant and wildlife species within the Alpine Park Preserve would add an additional 67.5 acres to the approximately 380 acres of open space (including Wright's Field and privately held open space land, some of which is permanently protected through conservation easements) in the immediate vicinity. Furthermore, pre-construction nesting bird surveys would be conducted in accordance with **MM-BIO-5** to avoid direct mortality of eggs, chicks, or adults during the breeding season. As a result, **MM-BIO-1** through **MM-BIO-9** would reduce the project's impacts on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations~~, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service,~~ or by CDFW or USFWS to a less-than-significant level.

5.3.4.4 Impact Determination

The project's contribution to a cumulative biological resources impact would be less than cumulatively considerable after implementation of mitigation.

5.3.4.5 Mitigation Measures

No additional mitigation is required.

5.3.4.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative biological resource impacts would not be cumulatively considerable and would be less than significant.

5.3.5 Cultural Resources

A significant cumulative impact on cultural resources would result if the project would contribute to cumulative impacts on significant historical resources, archaeological resources, and/or inadvertently discovered human remains.

5.3.5.1 Geographic Scope

The geographic scope of analysis for cumulative cultural resource impacts depends on the type of resource, but generally includes Alpine and surrounding communities in the foothills of eastern San Diego County. For instance, prehistoric resources could be located within any natural landforms surrounding the project, including areas within the valley area and adjacent slopes or oak woodlands adjacent to water courses. Historic-period archaeological resources could be present within the surrounding artificial soils and fill. Impacts on buried archaeological resources generally occur from ground-disturbing activities, such as grading and excavation, while impacts on the historic built environment typically result from modification, relocation, and demolition of existing buildings or structures, substantial visual changes to the setting of a historical resource, and/or noise impacts on a historical resource.

5.3.5.2 Cumulative Effects

Like the project site, portions of the surrounding area contain archaeological resources and known built environment historical resources. Past development in Alpine and adjacent communities has resulted in impacts on cultural resources primarily due to ground-disturbing activities during construction. As development continues to occur within the community, providing increased density and additional commercial opportunities for residents, existing structures that may be eligible for inclusion in the California Register of Historical Resources (CRHR) or for local designation could be demolished to create developable land, and excavation activities associated with new development could disturb archaeological resources. However, discretionary projects are required to undergo CEQA review, and, where there is a potential to affect cultural resources, CEQA (Sections 15064.5 and 15126.4(b)), the Health and Safety Code (Section 7050.5), Alpine Community Plan, Alpine Community Plan Update, and County General Plan contain policies and regulations that pertain to cultural resources, and their protection, preservation, and/or avoidance. These would continue to apply to present and reasonably foreseeable future projects within the cumulative study area. Consequently, a cumulatively significant impact from past, present, and reasonably foreseeable future projects is not present.

5.3.5.3 Project Contribution

No buildings are within the cultural resources study area that qualify as historical resources under CEQA. Implementation of the project could also result in a significant impact on archaeological resources (**Impact CUL-1**), including undiscovered prehistoric and historic-period refuse deposits with potential to yield important information~~, although there is no evidence or expectation of encountering such deposits. In addition~~. However, implementation of **MM-CUL-1**, **MM-CUL-2**, and **MM-CUL-3** would reduce impacts to less-than-significant levels ~~should such deposits be found~~ (see Section 4.5, *Cultural Resources*). Therefore, impacts on historical or archaeological resources, when considered with other past, present, and reasonably foreseeable future projects, are not anticipated to contribute to a cumulative adverse impact on these resources.

5.3.5.4 Impact Determination

The project's contribution to a cumulative cultural resources impact would be less than cumulatively considerable after implementation of mitigation.

5.3.5.5 Mitigation Measures

No additional mitigation is required.

5.3.5.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative cultural resources impacts would not be cumulatively considerable and would be less than significant.

5.3.6 Energy

A significant cumulative impact on energy would result if the project would contribute to cumulative impacts related to a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation, or conflict with or obstruct a ~~s~~State or local plan for renewable energy or energy efficiency.

5.3.6.1 Geographic Scope

Energy use is a regional issue, and the geographic scope for cumulative impacts includes the San Diego Gas & Electric Company (SDG&E) service area, which is ~~the entire county,~~San Diego County and surrounding vicinity.

5.3.6.2 Cumulative Effects

A cumulative energy consumption impact would occur if development associated with projects identified in Table 5-1 or within the geographic scope of the cumulative impact analysis for energy use combined with the project would increase energy consumption throughout the region. The cumulative projects listed in Table 5-1 would result in development within areas that are currently served by SDG&E~~;~~, and the development of the cumulative projects would not result in an expansion of SDG&E's service area. However, the cumulative projects would result in increases in energy demand compared to existing conditions, especially for those projects on an undeveloped site that would result in new energy demand.

As required by the California Public Utilities Commission, California utilities, including SDG&E, are required to file long-term energy resources plans with the California Public Utilities Commission. SDG&E's most recent long-term procurement plan was filed in October 2014, and includes plans and strategies to meet the future energy demands of its customers, including a plan addressing the closure of the San Onofre Nuclear Generating Station. SDG&E would continue to import electricity and natural gas to meet regional demand; however, an increase in imported energy to meet demand could result in high energy prices and ~~potentially also an~~ unreliable supply. SANDAG adopted a Regional Energy Strategy in 2009 to specifically address regional energy supply. The Regional Energy Strategy includes proposed Early Actions to promote long-term energy efficiency and availability in the region. If the cumulative projects would not support the implementation of applicable Early Actions from the Regional Energy Strategy, a cumulative impact could occur. The cumulative projects would be required to comply with the Title 24 energy efficiency standards

~~(included as part of Early Actions), which would,~~ which promote energy efficiency and reduce inefficient, wasteful, and unnecessary consumption of energy, as well as any other County ~~of San Diego~~ -specific requirements. Therefore, energy impacts from past, present, and reasonably foreseeable future projects would not be cumulatively significant.

5.3.6.3 Project Contribution

As discussed under Threshold 1 of Section 4.6, *Energy,* ~~because the project would adhere to applicable regulations,~~ neither construction nor operation of the project would result in wasteful, inefficient, or unnecessary consumption of energy resources. In addition, the project does not have the potential to conflict with or obstruct a ~~s~~State or local plan for renewable energy or energy efficiency. The project would be consistent with statewide and local renewable energy and energy efficiency plans. When combined with the cumulative projects listed in Table 5-1, which would also be required to be designed in compliance with the building energy efficiency standards of the Title 24 building codes and to comply with any applicable ~~s~~State plans for renewable energy or energy efficiency to the extent required by law, cumulative impacts would be less than significant, and the project's contribution to cumulative energy impacts would not be cumulatively considerable.

5.3.6.4 Impact Determination

The project's incremental contribution to cumulative impacts related to energy would be less than cumulatively considerable.

5.3.6.5 Mitigation Measures

No mitigation is required.

5.3.6.6 Level of Significance After Mitigation

After mitigation, the project's incremental contribution to cumulative energy impacts would not be cumulatively considerable and would be less than significant.

5.3.7 Geology and Soils

Potential cumulative geology and soils impacts would result when the project~~'s~~ impacts associated with geotechnical hazards and soil conditions (such as soil erosion ~~-related~~ of damage to paleontological resources) ~~would~~ contribute to a cumulative impact when evaluated within the context of past, present, and reasonably foreseeable future projects.

5.3.7.1 Geographic Scope

The geographic scope of the cumulative impact analysis for geology is limited to the immediate ~~project~~ area of the geologic constraint, with the exception of some geologic impacts that are regional, such as earthquake risk.

5.3.7.2 Cumulative Effects

A cumulative impact would occur if development associated with projects identified in Table 5-1 or within the geographic scope of the cumulative impact analysis for geology and soils impacts combined with the project would result in geotechnical hazards. The cumulative projects listed in

Table 5-1 would result in development within the Alpine community; however, development of the cumulative projects would not result in exacerbating geology or soil hazards. The cumulative projects would be required to comply with the California Building Code, which provides minimum standards regulating a number of aspects of construction that are relevant to geology and geologic hazards. Therefore, geology and soils impacts from past, present, and reasonably foreseeable future projects would not be cumulatively significant.

5.3.7.3 Project Contribution

Implementation of the project would not directly or indirectly cause potential substantial adverse effects related to the potential rupture of a known earthquake fault, strong seismic ground shaking, or seismic-related ground failure, such as liquefaction, or landslides and would not result in substantial soil erosion or loss of topsoil. The project would be located on soil that is unstable, but the project would not exacerbate the condition. With the implementation of the Ninyo & Moore *Geotechnical Evaluation* recommendations as well as adherence to applicable laws and regulations, including the requirements of the California Building Code, project construction would not result in a geologic unit or soils that would become unstable as a result of the project, and potentially result in on- or offsite lateral spreading, subsidence, or collapse. The project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, but would not create substantial direct or indirect risks to life or property. The project would not involve soils incapable of adequately supporting the use of septic tanks or alternative ~~wastewater~~waste water disposal systems. The optional construction and operation of a septic system as part of the project would comply with the existing regulations and approval process and would not result in a significant impact related to onsite soils unsuitable for septic systems. The project would result in potential impacts on paleontological resources because ground-disturbing activities that would extend deep enough to encounter previously undisturbed deposits of the Lusardi Formation in the southern and western portions of the project site would have the potential to impact paleontological resources (**Impact-GEO-1**). With implementation of **MM-GEO-1**, which would require the implementation of a paleontological resource monitoring program, impacts would be reduced to less-than-significant levels. ~~In addition~~However, paleontological resources are localized and would therefore not contribute to a cumulatively considerable impact.

5.3.7.4 Impact Determination

The project's contribution to a cumulative geology and soils impact would be less than cumulatively considerable after implementation of mitigation.

5.3.7.5 Mitigation Measures

No additional mitigation is required.

5.3.7.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative geology and soil impacts would not be cumulatively considerable and would be less than significant.

5.3.8 Greenhouse Gas Emissions and Climate Change

There would be the potential for a cumulatively considerable GHG-related impact if the project, in combination with buildout of the past, present, and reasonably foreseeable future plans listed in Table 5-1 would be non-compliant with regulatory programs outlined in the 2017 Scoping Plan and adopted by CARB or other California agencies to reduce GHG emissions; or inconsistent with the reduction targets set forth through California Executive Order S-03-05 and Senate Bill (SB) 32.

5.3.8.1 Geographic Scope

The geographic scope for cumulative GHG emission impacts is global. Because climate change is the result of cumulative global emissions, no single project, when taken in isolation, can cause climate change—a single project's emissions are insufficient to change the radiative balance of the atmosphere. GHGs are emitted by innumerable sources worldwide and, therefore, cumulative GHG emissions that contribute to global climate change will have a significant cumulative impact on the natural environment as well as on human development and activity. The global increase in GHG emissions that has occurred and will occur in the future is the result of the actions and choices of individuals, businesses, local governments, states, and nations. The GHG analysis within Section 4.8 is inherently a cumulative analysis. However, a summary of the discussion is provided below.

5.3.8.2 Cumulative Effects

Past, present, and reasonably foreseeable future projects throughout the region, ~~s~~State, nation, and world, including, but not limited to those projects listed in Table 5-1, have contributed to, and will continue to contribute to, the cumulative impacts of GHG emissions. As with the project, all the projects in Table 5-1, along with all other projects within the county, region, and ~~s~~State, would be required to comply with all applicable federal, ~~s~~State, and local policies and regulations regarding GHG emission reductions (e.g., SB 32, Pavley 1, Advanced Clean Cars, Renewables Portfolio Standard, SB 350). However, changes from past, present, and reasonably foreseeable future projects have contributed to, and will continue to contribute to, a cumulatively significant impact in the project vicinity.

5.3.8.3 Project Contribution

As discussed in Section 4.8, the project would contribute GHG emissions to the cumulative condition. As shown in Tables 4.8-3 and 4.8-4 in Section 4.8, equipment and vehicles used during construction (e.g., on-road motor vehicles, and heavy equipment) and operations (e.g., landscape equipment, and passenger vehicles) would result in a net increase in GHG emissions over existing conditions. As discussed under Thresholds 1 and 2 of Section 4.8, the project would result in the generation of GHG emissions that could directly or indirectly have a significant impact on the environment because the project would not comply with the 2017 Scoping Plan (**Impact-GHG-1** and **Impact-GHG-2**). However, with implementation of **MM-GHG-1,** which requires use of best management practices during construction, impacts would be reduced to less-than-significant levels. Therefore, after mitigation, the project would not result in cumulatively considerable impacts related to GHG emissions because it would not impede achievement of ~~s~~State reduction targets.

5.3.8.4 Impact Determination

The project's incremental contribution to cumulative impacts related to GHG emissions would not be cumulatively considerable after implementation of mitigation.

5.3.8.5 Mitigation Measures

No additional mitigation is required.

5.3.8.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative GHG impacts would not be cumulatively considerable and therefore would be less than significant.

5.3.9 Hazards and Hazardous Materials

A significant cumulative impact on hazards and hazardous materials would result if the project were to make a cumulatively considerable contribution to cumulative impacts related to: ~~(a)~~ the creation of a significant hazardous materials impact on the public or environment; ~~(b)~~ hazardous materials emissions; ~~(c)~~ being located on a listed hazardous materials site; ~~(d)~~ safety hazards related to airport operations; ~~(e)~~ interference with an adopted emergency response plan; or ~~(f)~~ exposure to wildland fires when evaluated within the context of past, present, and reasonably foreseeable future projects.

5.3.9.1 Geographic Scope

The geographic scope for cumulative impacts associated with hazards and hazardous materials consists of areas that could be affected by the implementation the project, as well as areas affected by the implementation of other projects whose activities could directly or indirectly affect the proposed activities on the project site. In general, projects occurring within 0.25 mile of the project area were considered in this analysis due to the localized nature of potential impacts associated with the release of hazardous materials in the environment.

5.3.9.2 Cumulative Effects

Although development of sites that may contain hazardous materials may occur with some of the cumulative projects identified in Table 5-1, environmental effects from the release of hazardous materials would be fairly localized, would occur within the project site, and would not result in cumulative effects. Additionally, projects identified on the cumulative list have undergone or will undergo investigations similar to the project and would implement mitigation measures, as necessary, to remediate or otherwise avoid release of hazardous materials into the environment. Past, present, and reasonably foreseeable future development would be required to follow existing regulations regarding the investigation of the use of hazardous materials and any known or unknown hazardous materials releases.

5.3.9.3 Project Contribution

The project would not have a cumulatively considerable contribution to hazards and hazardous materials. The project site contains one hazardous materials site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, with

implementation of **MM-HAZ-1**, which would ensure preparation and implementation of a Soil Management Plan, impacts would be less than significant. The project would therefore not create a significant hazard to the public or the environment. The project's incremental contribution to cumulative impacts from hazards and hazardous materials, when combined with past, present, and reasonably~~e~~ foreseeable projects, would be less than cumulatively considerable.

5.3.9.4 Impact Determination

The project's incremental contribution to a cumulative hazards and hazardous materials impact would not be cumulatively considerable.

5.3.10 Hydrology and Water Quality

A significant cumulative impact on hydrology and water quality would result if the project were to~~:~~ ~~(a)~~ contribute to impacts related to water quality standard violations, waste discharge requirements, or degradation of surface or groundwater quality; ~~(b) alterdrainage~~alterations to drainage patterns leading to erosion or flooding; increased runoff in excess of available capacity; ~~(c) cause sbstantial~~substantial additional sources of polluted runoff; ~~(d)~~ in flood hazard or tsunami zones~~,~~ risk release of pollutants due to project inundation; or ~~(e)~~ conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. These are evaluated within the context of past, present, and reasonably foreseeable future projects. The project is not anticipated to result in impacts related to depletion of groundwater supplies or interference with recharge; as such, cumulative impacts related to these issues are not evaluated.

5.3.10.1 Geographic Scope

The geographic scope of analysis for cumulative impacts on hydrology and water quality includes the San Diego Watershed Management Area (WMA), which includes all of the projects listed in Table 5-1.

5.3.10.2 Cumulative Effects

Past projects within the San Diego WMA have contributed pollutants to San Diego Bay, as evidenced by the Clean Water Act Section 303(d) List of Water Quality Limited Segments Requiring Total Maximum Daily Loads. Current and future projects would be subject to ~~s~~State and local regulatory standards that must be achieved during construction and operation to reduce or avoid polluted runoff to the maximum extent practicable. These current and reasonably foreseeable future projects could also contribute pollutants such as oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens into the stormwater conveyance system and receiving waters.

Projects listed in Table 5-1 would involve at least 1 acre of grading. During construction of these projects, they would be required to comply with the National Pollut~~io~~ant Discharge Elimination System Construction General Permit, which requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) by a Qualified SWPPP Developer and implementation of best management practices (BMPs) by a Qualified SWPPP Practitioner to ensure runoff from individual projects meet current water quality standards. For projects under 1 acre, the Municipal Separate Storm Sewer System Permit (via the Jurisdictional Runoff Management Plan [JRMP]) requires minimum BMPs at all construction and grading projects. The minimum BMPs are required to ensure a reduction of potential pollutants from the project site to the maximum extent practicable and to effectively

prohibit non-stormwater discharges from construction sites to the Municipal Separate Storm Sewer System.

Present and reasonably foreseeable future projects would be subject to regulations that require compliance with water quality standards, including ~~s~~State and local water quality regulations and the County's JRMP, BMP Manual, Low-Impact Development (LID) Handbook, and Watershed Protection, Stormwater Management, and Discharge Control Ordinance (WPO). However, despite these regulations, cumulative development could incrementally contribute pollutants that, when combined, would still have the potential to degrade water quality and result in a cumulatively significant impact. Therefore, cumulative growth and development would ~~potentially~~ result in a significant cumulative impact associated with the violation of water quality standards and requirements.

5.3.10.3 Project Contribution

A cumulatively significant impact on ~~area~~ hydrology and water quality presently exists because of surface water within the San Diego Bay WMA and San Diego River WMA status as impaired waterbodies and the potential for present and future projects to further degrade water quality with the addition of similar pollutants as those already impairing nearby water resources.

The project would involve land-disturbing activities that would expose soils and, as such, would require compliance with the Construction General Permit. Compliance with the Construction General Permit would require development and implementation of a SWPPP by a Qualified SWPPP Developer, which would list BMPs that would be implemented by a Qualified SWPPP Practitioner to protect stormwater runoff and include a monitoring plan for measuring BMP effectiveness. At a minimum, BMPs would include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater. The SWPPP would specify properly designed, centralized storage areas that keep these materials out of the rain. The primary BMPs selected would focus on erosion control (i.e., keeping sediment in place) followed by sediment control (i.e., keeping sediment on the site). In addition to the SWPPP, implementation of construction BMPs identified in the County's JRMP and BMP Design Manual, as well as the LID Handbook and WPO would be required, which would reduce impacts on water quality during construction.

The project would result in an increase of impervious surfaces compared to existing conditions; however, any increases in peak flows for storm events would be managed through the use of LID features and stormwater pollutant control BMPs that are designed to retain (i.e., intercept, store, infiltrate, evaporate, and evapotranspire) stormwater runoff generated on the project site in compliance with the County's BMP Manual. Stormwater retention basins would be located throughout the active park. The basins would manage and treat stormwater and reduce polluted stormwater runoff from being conveyed into receiving waters. Further, project BMPs such as landscaped areas, berms, and stormwater retention basins would infiltrate and capture runoff such that an increase in impervious surfaces would not substantially change existing conditions. Although the project would result in an increase in impervious surfaces, stormwater runoff would continue to infiltrate. Therefore, the project would not result in substantial erosion or siltation or flooding on- or offsite. Impacts would be less than significant.

During operation, one proposed wastewater option includes the discharge of domestic waste to an Onsite Wastewater Treatment System (OWTS). Discharged wastewater must conform to the

Regional Water Quality Control Board's (RWQCB's) applicable standards, including the Regional Basin Plan and the California Water Code. California Water Code Section 13282 allows RWQCBs to authorize a local public agency to issue permits for OWTS "to ensure that systems are adequately designed, located, sized, spaced, constructed and maintained." The RWQCBs has authorized Department of Environmental Health and Quality (DEHQ) to issue certain OWTS permits throughout ~~the county~~San Diego County and within the incorporated cities. DEHQ will review the OWTS layout for the project pursuant to DEHQ, Land and Water Quality Division's, On-site Wastewater Systems: Permitting Process and Design Criteria. DEHQ would also be the approving body for the project's OWTS. Therefore, the onsite sewer advanced treatment system would not violate waste discharge requirements, as determined by the RWQCB-authorized local public agency, DEHQ.

In accordance with the WPO and BMP Manual, the County requires the development of a Stormwater Quality Management Plan to mitigate stormwater impacts by identifying effective LID features and permanent BMPs for implementation. The Stormwater Quality Management Plan is prepared for essentially all actions associated with increases in impervious surfaces and would be required for the project. Therefore, with implementation of these requirements, the project would not violate any water quality standards or waste discharge requirements, and, as such, impacts would be less than significant; no mitigation measures are required.

The project site is not located within a floodway or floodplain. Furthermore, the project site is not located within a designated tsunami hazard zone, and, therefore, visitors would not be subject to the risk of this hazard. The project is not located near a confined body of water on which a seiche could be expected to occur; therefore, visitors would not be subject to the risk of this hazard. Therefore, the project would not risk release of pollutants due to project inundation.

The project site is not within a recognized California Department of Water Resources groundwater basin; therefore, there is no applicable sustainable groundwater management plan. However, landscape band bioretention areas throughout the project site would treat runoff and allow for groundwater infiltration and groundwater recharge. Further, the project would be in compliance with County of San Diego groundwater ordinances. Therefore, the project would not be in conflict with or obstruct implementation of the applicable water quality management plans for the region.

The project's incremental contribution to significant cumulative hydrology and water quality impacts from past, present, and reasonably foreseeable future projects would be less than cumulatively considerable.

5.3.10.4 Impact Determination

The project's incremental contribution to cumulative hydrology and water quality impacts would not be cumulatively considerable.

5.3.10.5 Mitigation Measures

No mitigation is required.

5.3.10.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative hydrology and water quality impacts would not be cumulatively considerable and therefore would be less than significant.

5.3.11 Land Use and Planning

A significant cumulative impact on land use would result if the project would contribute to cumulative impacts related to physically dividing an established community or causing a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

5.3.11.1 Geographic Scope

The geographic scope of analysis for cumulative land use and planning impacts to which the project may contribute includes the San Diego region.

5.3.11.2 Cumulative Effects

SANDAG's Regional Plan establishe~~s~~d a long-range blueprint for the San Diego region's growth and development through the year 2050. Because the project would not include any components that would result in substantial unplanned population growth, it would be consistent with the 2050 Regional Transportation Plan. The project is also consistent with the County of San Diego General Plan, the Alpine Community Plan, the Alpine Community Trails and Pathways Plan, the San Diego Regional Air Quality Strategy, and the Water Quality Control Plan for the San Diego Basin.

5.3.11.3 Project Contribution

The project would not result in the division of an established community or conflict with applicable land use plans, policies, and regulations.

5.3.11.4 Impact Determination

A cumulatively significant land use impact does not exist, and the project would not result in an impact such that a cumulatively significant impact would be created.

5.3.11.5 Mitigation Measures

No mitigation is required.

5.3.11.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative land use and planning impacts would not be cumulatively considerable. There would be no impact.

5.3.12 Mineral Resources

A significant cumulative impact on mineral resources would result if the project would contribute to cumulative impacts related to the loss of availability of a known mineral resource that would be of value to the region and the residents of the ~~s~~State or result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

5.3.12.1 Geographic Scope

The geographic scope of cumulative impact analysis for minerals includes the community of Alpine and immediately adjacent areas, depending on the location of mineral deposits or operations.

5.3.12.2 Cumulative Effects

Construction and operation of cumulative projects in the vicinity of the project and within the San Diego region would have the potential to result in the loss of availability of known mineral resources. Urbanization and development could convert lands containing mineral resources to incompatible land uses, thereby reducing the availability of mineral resources in the region. It is also possible that reasonably foreseeable projects and the Alpine Community Plan Update would contain measures and policies to protect and preserve mineral resources and would not result in a cumulatively considerable contribution to impacts on mineral resources. However, because the type or extent of potential development are not currently known, it is possible cumulative growth and development would result in a significant cumulative impact associated with the loss of available mineral resources.

5.3.12.3 Project Contribution

The project site is located on lands classified as Mineral Resource Zone (MRZ)-3 and does not have mineral deposits or active mines present. The project proposes goals that are incompatible to future extraction of mineral resources on the project site. For example, three of the goals for this park are to preserve and protect natural resources, create a regional destination, and balance active and passive recreation. A future mining operation at the project site would likely create a significant impact on biological resources as a result of construction and operational activities of an active mine. In addition, potential noise, traffic, and air quality impacts resulting from an active mine could discourage visitors from utilizing the other recreational activities within the park. The project site is surrounded by developed land uses including rural residential, which ~~would preclude~~is incompatible to future extraction of mineral resources ~~in~~on the ~~surrounding area~~ project site (County of San Diego 2011a). ~~Moreover, the~~The project site is zoned as Limited Agriculture and mining is not a permitted use in this zone.

~~For the above reasons~~Therefore, the project would not result in the loss of availability of a known mineral resource that would be of value~~.~~ because the mineral resource has already been lost due to incompatible land uses. Furthermore, ~~there are~~ no potentially significant loss of availability of a known ~~-~~mineral resource of locally important mineral resource recovery (extraction) ~~sites, as~~site delineated on a local general plan, specific plan, or other land use plan ~~either on the~~ would result from project ~~site or in the surrounding area.~~ implementation. As such, the project's incremental contribution to significant cumulative impacts on mineral resources from past, present, and reasonably foreseeable future projects would be less than cumulatively considerable.

5.3.12.4 Impact Determination

The project would result in less-than-significant impacts associated with mineral resource availability and mineral resource recovery sites.

5.3.12.5 Mitigation Measures

No mitigation is required.

5.3.12.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative mineral resources impacts would not be cumulatively considerable and would be less than significant.

5.3.13 Noise and Vibration

A significant cumulative impact from noise and vibration would result if the project would contribute to an increase ~~of~~in noise or vibration ~~from an existing noise or vibration source that results in an exceedance~~in excess of a standard or threshold outlined in the County's ~~general plan~~General Plan or ~~municipal code~~Noise Ordinance.

5.3.13.1 Geographic Scope

The geographic scope of cumulative impact analysis for noise and vibration would be the general project area and some immediately adjacent areas.

5.3.13.2 Cumulative Effects

Construction and operation of cumulative projects in the vicinity of the project would have the potential to result in noise levels that would affect nearby noise sensitive receptors. Noise from nearby construction may result in a cumulatively considerable effect if the construction occurred in proximity to and concurrently with construction of the project. Additionally, operational impacts such as an increase in traffic noise would be cumulatively considerable (as discussed in Section 4.13, *Noise and Vibration*) if the project in conjunction with the cumulative projects identified in Table 5-1 would result in an increase in noise above codified standards in the ~~general plan.~~County's General Plan. Vibration from construction and noise and vibration from operations on the project site would not result in a cumulative effect.

5.3.13.3 Project Contribution

Construction

The predicted construction noise levels for the park would comply with the County's 8-hour equivalent noise level standard of 75 A-weighted decibels (dBA). However, construction associated with the extension of the sewer system would exceed the County's 8-hour threshold for construction noise. As identified in Section 4.13, *Noise and Vibration*, a number of best practices and operational controls would be in place during ~~both~~ the ~~construction and~~ operation of the Alpine Park and were assumed as part of the analysis. These are based on typical rules and regulations enforced at existing County parks. To ensure these best practices and controls are incorporated into the project, **MM-NOI-2** and **MM-NOI-3** would be required to reduce onsite operational noise impacts to less-than-significant levels. With the inclusion of **MM-NOI-1** through **MM-NOI-3**, **Impact NOI-1** and **Impact NOI-2** would be reduced to less-than-significant levels.

Cumulative projects that could occur during the same timeframe as the project are described in Table 5-1. The Rancho ~~Nuevo~~Sierra Tentative Map would be approximately ~~2,800~~1,200 feet ~~south of~~from the project site ~~at the terminus of the Via Tesoro.~~ Assuming that noise from construction ~~noise associated with the Rancho Nuevo development~~ would be similar in nature to ~~that expected at the Alpine Park construction sight,~~the project it is reasonable to assume that construction noise

levels could be as high as 86 dBA~~,~~ at a distance of 50 feet. Noise levels of this magnitude would attenuate by approximately ~~35~~28 decibels (dB) over a distance of ~~2,800~~1,200 feet~~, resulting in a projected noise level at the Park site of approximately 51 dBA, further assuing that both projects would be under construction at the same time. The reverse would be expected from Park construction at the Rancho Nuevo location.~~. As such, noise from ~~both~~ construction ~~sites~~ would not likely be audible ~~at either location~~ and would not be cumulatively considerable. Rancho Sierra Tentative Map is the closest cumulative project; as such, construction noise levels from any other cumulative project would not be cumulatively considerable.

Operational traffic noise increases are ~~also discussed~~included in Section 4.13. The traffic noise analysis includes the relevant traffic increases associated with reasonably foreseeable future projects. The analysis indicates that the project would result in an increase in traffic noise of no more than 1 dB (Table 4.13-11). The project-related traffic increase would ~~therefore~~ not result in traffic noise increase~~s~~ing above the 65 ~~dBA~~ Community Noise Equivalent Level standard outlined in the County's ~~general plan~~General Plan. Additionally, a 1 dB increase in noise would not likely be audible, as the general threshold of perception for noise increases is 3 dB or greater. Therefore, the increases in vibration and traffic noise would not be considered cumulatively considerable.

5.3.13.4 Impact Determination

The project's contribution to a cumulative noise impact would be less than cumulatively considerable after implementation of mitigation.

5.3.13.5 Mitigation Measures

No additional mitigation is required.

5.3.13.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative noise impacts would not be cumulatively considerable and would be less than significant.

5.3.14 Population and Housing

A significant cumulative impact on population and housing would result if the project would contribute to cumulative impacts that would induce substantial unplanned population growth or displace substantial numbers of existing people or housing.

5.3.14.1 Geographic Scope

The geographic scope for cumulative impacts associated with population and housing is ~~the~~ San Diego County ~~region~~. Factors that influence regional population and housing growth include, but are not limited to, large-scale land use changes (e.g., General Plan and Community Plan Updates); the effectiveness of the transportation system; and the availability of jobs, housing, and infrastructure.

5.3.14.2 Cumulative Effects

The determination of cumulative effects relies on both regional forecasted growth as well as regionally significant plans and programs. The projection approach is applicable as growth, land use change, and development across the region can substantially affect and modify population and

employment by supporting and facilitating the generation of jobs and population on a regional scale. In the San Diego region, SANDAG serves as the regional transportation planning agency ~~and is also~~ responsible for forecasting the region's population growth. The Series 13 Regional Growth Forecast, the most current growth forecast model in use, ~~reflects~~represents a combination of economic and demographic projections, existing land use plans and policies, and potential land use plan changes that may occur in the region between 2030 and 2050. According to the Series 13 Regional Growth Forecast, SANDAG projects the region's population will grow by approximately 710,000 people by 2035 and nearly 1,000,000 people by 2050 (SANDAG 2013).

5.3.14.3 Project Contribution

The project would not create permanent residential structures on the project site. As the site is currently subject to a Semi-Rural Residential (SR-2) land use designation, the use of the project site as a park with one permanent resident would not induce substantial unplanned population growth. The project would also not extend infrastructure such that it would indirectly induce substantial unplanned population growth. The project would ~~also~~ not displace people or housing.

5.3.14.4 Impact Determination

The project's incremental contribution to cumulative population and housing impacts would not be cumulatively considerable. Cumulative impacts would be less than significant.

5.3.14.5 Mitigation Measures

No mitigation is required.

5.3.14.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative population and housing would not be cumulatively considerable and would be less than significant.

5.3.15 Public Services

Cumulative impacts on public services could result when past, present, and reasonably foreseeable future projects combine to increase demand on public services such that additional facilities must be constructed to maintain acceptable levels of service, and the construction of such facilities would result in a physical impact on the environment.

5.3.15.1 Geographic Scope

The geographic scope of cumulative impacts for public services is based on the Plan Method, which considers growth associated with applicable land use plans and population growth projections. Therefore, the cumulative setting for public services includes the County of San Diego General Plan and the Alpine Community Plan. The geographic scope for cumulative public services includes the service area of the fire and police departments that serve ~~the county~~San Diego County and the community of Alpine.

5.3.15.2 Cumulative Effects

A project's contribution to a cumulative public service impact is relative to the additional demand a project would place on a public service for which a cumulatively considerable impact has been identified.

5.3.15.3 Project Contribution

As discussed in Section 4.15, *Public Services,* the project would not result in a need for new or ~~expanded~~physically altered governmental facilities to maintain acceptable service ratios, response times, or other performance objectives for fire protection, police protection, parks, schools, or other facilities.

5.3.15.4 Impact Determination

The project's incremental contribution to cumulative public services impacts would not be cumulatively considerable.

5.3.15.5 Mitigation Measures

No mitigation is required.

5.3.15.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative public services would not be cumulatively considerable and would be less than significant.

5.3.16 Recreation

Cumulative impacts on recreation could result when past, present, and reasonably foreseeable future projects combine to increase demand on recreation facilities such that additional facilities must be constructed to maintain acceptable levels of service, and the construction of such facilities would result in a physical impact on the environment.

5.3.16.1 Geographic Scope

Cumulative impacts for recreation are based on a list of projects that are currently underway, approved, or proposed and likely to be implemented within and near the community of Alpine and more generally within ~~the county.~~San Diego County. Therefore, the cumulative setting for recreation includes all projects listed in Table 5-1.

5.3.16.2 Cumulative Effects

Past projects have required new and expanded facilities as demand for recreational facilities has increased. Present and reasonably foreseeable future projects will continue to increase demand on recreation facilities and the need for new and expanded facilities. The reasonably foreseeable future projects listed in Table 5-1 involve similar uses compared to existing conditions and would not differ from existing rural development within the cumulative study area; however, development of the cumulative projects could result in additional density and other uses under the Alpine Community Plan update.

Potential cumulative recreational impacts would result when projects combine to place limitations on existing recreational facilities, or substantially increase demand on existing recreational facilities such that expansion of those facilities would be necessary and the expansion would result in a physical impact. The identified cumulative projects in Table 5-1 would potentially increase demand for recreational facilities. Reasonably foreseeable future projects within the Alpine Community Area would be required to pay in lieu fees in accordance with the Quimby Act that will be used to improve existing parkland or purchase additional parkland. Therefore, impacts related to parkland and recreational facilities from past, present, and reasonably foreseeable future projects would not be cumulatively significant.

5.3.16.3 Project Contribution

A project's contribution to a cumulative recreation impact is relative to the additional demand a project would place on recreational facilities for which a cumulatively considerable impact has been identified. The project does not have a permanent residential component and, therefore, would not add an incremental contribution to cumulative recreational impacts due to increased demand.

The project would increase the total recreational area available to local residents by approximately 25 acres, which would result in a cumulative benefit on recreation. ~~The~~While construction and/or operational activities of the project would result in significant impacts on aesthetics, air quality and health risk, biological resources, cultural resources, energy, geology and soils, GHG emissions and climate change, hazards and hazardous materials, noise, and utilities these individual impacts are all analyzed in their respective sections within Chapter 4. Importantly, however, the project would create more recreational space than what is currently available. As such, the project's contribution would not place limitations on existing recreational facilities or substantially increase demand on existing recreational facilities. Therefore, the project's contribution would not cause a cumulatively considerable addition to the effects on park and recreation from past, present, and reasonably foreseeable future projects.

5.3.16.4 Impact Determination

The project's incremental contribution to cumulative recreation impacts would not be cumulatively considerable.

5.3.16.5 Mitigation Measures

No mitigation is required.

5.3.16.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative recreation impacts would not be cumulatively considerable and would be less than significant.

5.3.17 Transportation and Traffic

Based on the changes to the ~~State~~ CEQA Guidelines initiated by the passage of SB 743, a project's impact on transportation is~~ to be~~ measured by the amount of vehicle miles traveled (VMT) that would be generated. By its nature, VMT is inherently a cumulative issue, as it is not likely that any single project would be large enough to prevent the region or ~~s~~State from meeting its VMT reduction targets, which correlate to the ~~s~~State's GHG reduction targets. Rather, a project's individual VMT

contributes to cumulative VMT impacts. Therefore, the methodology for determining a project's cumulative VMT impact is the same as that for direct VMT impacts (see Section 4.17, *Transportation and Circulation*).

Cumulative impacts on transportation, circulation, and parking could also occur if the project, when combined with past, present, and probable future projects, would conflict with applicable programs, plans, ordinances or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Additionally, cumulative impacts could occur if the project, when combined with past, present, and probable future projects, would result in substantial increases in hazards due to geometric design features or incompatible uses, or result in inadequate emergency access.

5.3.17.1 Geographic Scope

The geographic scope for cumulative VMT impacts includes the San Diego region. As such, the VMT analysis ~~presented in~~within Section 4.17 is inherently a cumulative analysis~~;~~. However, a summary of the discussion is provided below. The geographic scope of cumulative analysis for all other issues includes all past, present, and probable future projects identified within and near the community of Alpine that have affected, or would have the potential to, affect the same transit, roadway, bicycle, and pedestrian facilities as the project.

5.3.17.2 Cumulative Effects

Consistency with Applicable Programs, Plans, Ordinances, or Policies Addressing the Circulation System

Past, present, and probable future projects within the geographic scope have contributed to, and will continue to contribute to, degraded traffic operations from the generation of vehicle trips. The Transportation Impact Study prepared for the project included an analysis of the effect of project-generated traffic on the existing transportation facilities.

The degradation of traffic operations could be inconsistent with applicable programs, plans, ordinances, or policies addressing roadway facilities. However, with the adoption of SB 743, a project's effect on automobile delay no longer constitutes a significant environmental impact under CEQA (~~State~~ CEQA Guidelines Section 15064.3). Therefore, any inconsistency with applicable programs, plans, ordinances, or policies, as it relates to delay-based traffic operation metrics, is provided for informational purposes only and does not constitute a significant impact on the environment.

In addition to roadway facilities, cumulative effects on pedestrian, bicycle, and transit facilities could occur if past, present, and probable future projects would conflict with an applicable program, plan, ordinance, or policy addressing these facilities. Present and probable future projects would be required to demonstrate consistency with applicable programs, plans, ordinances, and policies related to pedestrian, bicycle, and transit facilities. Therefore, cumulative effects from past, present, and probable future projects would not be significant.

Vehicle Miles Traveled

The generation of VMT, which is a function of the number and distance of vehicle trips, is largely a cumulative impact by nature. VMT from past, present, and probable future projects have contributed

to, and will continue to contribute to, cumulative VMT impacts as well as similarly cumulative secondary physical environmental effects such as increased GHG emissions.

Cumulative present and probable future projects would be required to comply with SB 743 during project-specific environmental review. However, although compliance is required, it is not guaranteed each present and probable future project would be able to achieve a 15% reduction (or other applicable thresholds used by the relevant lead agency) below regional average VMT. Mitigation may reduce VMT for a project, but still may not reduce potential impacts to a less-than-significant level. Projects that cannot reach the VMT reduction goal of 15% below the regional average would contribute to increased VMT in the region, which would contribute to the prevention of the ~~s~~State and region reaching the established GHG reduction targets. Therefore, present and probable future projects in the region could result in a cumulatively significant VMT.

Hazards Due to Geometric Design Features and Incompatible Uses

Past, present, and probable future projects from Table 5-1 could involve modifications and improvements to transportation facilities within the geographic scope, some of which could include geometric design hazards or introduce incompatible uses. These improvements would be relatively minor and would not include any components that would substantially increase hazards due to geometric design features or incompatible uses. Therefore, cumulative effects from past, present, and probable future projects would not be significant.

Emergency Access

None of the past, present, and probable future projects from Table 5-1 within the geographic scope have included or would include components that could affect emergency access. Therefore, cumulative effects from past, present, and probable future projects would not be significant.

5.3.17.3 Project Contribution

The addition of project traffic would not cause a significant impact on the study area roadway segments and intersections when compared to both existing conditions plus the project, as well as future conditions (based on growth projections) plus the project. This indicates the project would not have a detrimental effect on the level of service of project area roadways and intersections, and would be consistent with the local policies governing target level of service thresholds, including but not limited to, the County of San Diego General Plan. Therefore, operation of the project would not conflict with the implementation of any programs, plans, ordinances, and policies addressing the circulation system.

As noted above, past, present, and probable future projects identified in Table 5-1 have not resulted in cumulative effects related to inconsistencies with applicable programs, plans, ordinances, and policies addressing the circulation system, including transit, roadway, pedestrian, and bicycle facilities; hazards due to geometric design features or incompatible uses; or inadequate emergency access. Therefore, the project would not have the potential to contribute to cumulative impacts related to these issues.

5.3.17.4 Impact Determination

The project's incremental contribution to cumulative transportation impacts would not be cumulatively considerable.

5.3.17.5 Mitigation Measures

No mitigation is required.

5.3.17.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative transportation impacts would not be cumulatively considerable and impacts would be less than significant.

5.3.18 Tribal Cultural Resources

A significant cumulative impact on tribal cultural resources would result if the project would contribute to cumulative impacts on significant tribal cultural resources as defined in Public Resources Code Section 21074.

5.3.18.1 Geographic Scope

The geographic scope of analysis for cumulative tribal cultural resource impacts depends on the type of resource, but generally includes Alpine and surrounding communities in the foothills of eastern San Diego County. For instance, tribal cultural resources could be located within any natural landforms surrounding the project, including areas within the valley area and on adjacent slopes or in oak woodlands adjacent to water courses. Impacts on buried tribal cultural resources generally occur from ground-disturbing activities, such as grading and excavation, while impacts on the cultural landscape can be the result of substantial visual changes to the setting of a tribal cultural resource, and/or noise impacts on a tribal cultural resource.

5.3.18.2 Cumulative Effects

Like the project site, portions of the surrounding area contain archaeological resources and known built environment historical resources. Past development in Alpine and adjacent communities has resulted in impacts on tribal cultural resources primarily due to ground-disturbing activities during construction. As development continues to occur within the community, providing increased density and additional commercial opportunities for residents, existing cultural resources that may be eligible for inclusion in the CRHR or for designation as tribal cultural resources could be demolished to create developable land, and excavation activities associated with new development could disturb archaeological resources. However, discretionary projects are required to undergo CEQA review, and, where there is a potential to affect cultural resources including tribal cultural resources, CEQA (Sections 15064.5 and 15126.4(b)), Public Resources Code Section 21074, the Health and Safety Code (Section 7050.5), the Alpine Community Plan, the Alpine Community Plan Update, and the County of San Diego General Plan contain policies and regulations that pertain to cultural resources, and their protection, preservation, and/or avoidance. These would continue to apply to present and reasonably foreseeable future projects within the cumulative study area. Consequently, a cumulatively significant impact from past, present, and reasonably foreseeable future projects is not present.

5.3.18.3 Project Contribution

~~No tribal cultural resources have been previously documented or identified within the on-site cultural resources study area. However, it is possible that ground~~Ground-disturbing activities

associated with construction of the project ~~could encounter previously~~may disturb undiscovered tribal cultural resources. ~~-~~ Given the potential for inadvertent damage or destruction of undisturbed tribal cultural resources, the project ~~therefore~~ has the potential to materially alter physical characteristics that would qualify a tribal cultural resource for inclusion in the National Register of Historic Places and CRHR (**Impact TCR-1**). No tribal cultural resources have been identified within the cultural resources study area that qualify as historical resources under CEQA. Implementation of the project could also result in materially altering physical characteristics that would qualify a tribal cultural resource for inclusion in the National Register of Historic Places and CRHR (**Impact TCR-1**), including undiscovered tribal cultural resources. However, implementation of **MM-TCR-1** would reduce impacts to less-than-significant levels. Therefore, impacts on tribal cultural resources, when considered with other past, present, and reasonably foreseeable future projects, are not anticipated to contribute to a cumulative adverse impact on these resources.

5.3.18.4 Impact Determination

The project's incremental contribution to cumulative tribal cultural resource impacts would not be cumulatively considerable after implementation of mitigation.

5.3.18.5 Mitigation Measures

No additional mitigation is required.

5.3.18.6 Level of Significance After Mitigation

The project's incremental contribution to tribal cultural resource impacts would not be cumulatively considerable and would be less than significant.

5.3.19 Utilities and Service Systems

Cumulative impacts on utilities and service systems may occur when projects combine to increase demand such that additional services must be provided, or additional facilities constructed. This usually would result from the incremental addition of people permanently occupying an area or the incremental construction of new or larger buildings requiring the provision of new or expanded utilities and service systems to meet the new permanent demand. However, if the environmental conditions would essentially be the same with or without the project's contribution, then the effect on the environment from the project would not be significant.

5.3.19.1 Geographic Scope

The geographic scope of cumulative impacts for utilities and service systems is based on a mix of the List Method and the Plan Method. A significant cumulative impact would result if the project were to contribute to cumulative impacts that exceeded service providers' planned use and capacity of wastewater, water, solid waste, and/or other service, which project future supply and demand based on current land use and development projections within their respective service areas. Therefore, the cumulative setting for utilities and service systems includes the projects listed in Table 5-1 and all of the growth assumptions provided in regional planning documents such as a UWMP.

5.3.19.2 Cumulative Effects

As discussed in Section 4.19, *Utilities and Service Systems*, wastewater services within the cumulative geographic scope for utilities and service systems are provided by the County of San Diego Sanitation District, which collects wastewater that is treated by the City of San Diego at the Point Loma Wastewater Treatment Plant ~~in Point Loma.~~ This district serves a portion of the Alpine community, the remainder of which (approximately 98%) utilizes septic systems. As a result of past development, increases in wastewater facility demands have occurred. However, because the Point Loma Wastewater Treatment Plant currently treats 175 million gallons per day, has a treatment capacity of 240 million gallons per day, and is anticipated to meet the projected needs of the service area, impacts from past, present, and reasonably foreseeable future projects are not cumulatively significant.

For water services, the Padre Dam Municipal Water District (PDMWD) has prepared a 2015 UWMP as required by the California Water Code to identify potable water supplies for projected future growth through 2040. Population and growth projections are based on SANDAG's Series 13 growth estimates to determine future water demand and plan future water supplies until the year 2040. PDMWD's 2015 UWMP was prepared in coordination with the County's wholesale water supplier, the San Diego County Water Authority (SDCWA), and demonstrates how water would be available for the planned growth in the service area. The cumulative projects identified in Table 5-1 are consistent with SANDAG's growth projections. Moreover, for cumulative projects that are included in SANDAG's growth projections, SDCWA's 2015 UWMP includes additional water supplies to account for "accelerated forecasted growth."[1] Water supplies to meet accelerated forecasted growth range from 2,632 acre-feet per year in 2020 to 11,186 acre-feet per year in 2040. As a member agency of the SDCWA, the community of Alpine where the project is located has access to regional supplies associated with accelerated forecasted growth (SDCWA 2021). However, PDMWD, as with other water agencies in the region, continues to rely on imported water from the Metropolitan Water District of Southern California (Metropolitan) and SDCWA to bridge the gap between its available local supply and current and future demands within its service area. SDCWA's 2015 UWMP identifies projects and programs to help ensure that the existing and planned water users within PDMWD service area have an adequate supply. Metropolitan has also prepared and adopted an updated 2015 Integrated Water Resources Plan that outlines strategies for water reliability. Implementation of these strategies by Metropolitan, SDCWA, and local water agencies will assure adequate supply to support growth and redevelopment within the region. However, it should be noted that programs in the updated Metropolitan planning documents require future discretionary decisions by Metropolitan's Board of Directors. Until these programs are fully implemented by Metropolitan to manage current changed conditions and other uncertainties, the San Diego region will remain susceptible to potential water shortages. Therefore, cumulative effects on water supply from past, present, and reasonably foreseeable future projects would be significant.

The cumulative projects listed in Table 5-1 would each result in an incremental increase in electricity demand. However, as discussed above in Section 5.3.6, *Energy*, while the cumulative projects listed on Table 5-1 would increase electricity demand, it is anticipated that the region has sufficient capacity to accommodate electricity demand from these projects. As such, impacts on

[1] More information on Accelerated Forecasted Growth can be found in SDCWA's 2015 UWMP, which is available at http://www.sdcwa.org/sites/default/files/files/water-management/water_resources/2015%20UWMP%20Final%2006222016.pdf.

electrical facilities from past, present, and reasonably foreseeable future projects would not be cumulatively significant.

As discussed above in Section 5.3.10, *Hydrology and Water Quality*, projects listed in Table 5-1 would involve at least 1 acre of grading. During construction of these projects, they would be required to comply with the National Pollutant Discharge Elimination System Construction General Permit, which requires preparation of a SWPPP by a Qualified SWPPP Developer and implementation of BMPs by a Qualified SWPPP Practitioner to ensure runoff from individual projects meet current water quality standards. Projects would be assessed on an individual level to ensure sufficient stormwater facilities can accommodate the project. For projects under 1 acre, the Municipal Separate Storm Sewer System Permit (via the JRMP) requires minimum BMPs at all construction and grading projects. The minimum BMPs are required to ensure a reduction of potential pollutants from the project site to the maximum extent practicable and to effectively prohibit non-stormwater discharges from construction sites to the Municipal Separate Storm Sewer System. As such, impacts on stormwater facilities from past, present, and reasonably foreseeable future projects would not be cumulatively significant.

The cumulative projects listed in Table 5-1 would also generate solid waste. Assembly Bill (AB) 939 requires municipalities to achieve a 50% diversion rate for solid waste. AB 341, which went into effect in 2020, mandates recycling for commercial uses (i.e., businesses). AB 341 also sets a statewide goal of 75% solid waste diversion rate. Moreover, California's Green Building Standards Code (CALGreen) requires the diversion of at least 65% of construction waste generated (CALGreen Sections 4.408 and 5.408). Compliance with these laws and regulations is mandatory. In addition, remaining landfill capacity at the region's four landfills totals approximately 146,359,020 cubic yards. While the cumulative projects listed on Table 5-1 would increase solid waste generation, it is anticipated that the region has sufficient landfill capacity to accommodate solid waste generated by these projects. As such, impacts on solid waste facilities from past, present, and reasonably foreseeable future projects would not be cumulatively significant.

5.3.19.3 Project Contribution

As described above, impacts from past, present, and reasonably foreseeable future projects on wastewater infrastructure are less than cumulatively significant. As such, the project's wastewater impacts, which were determined to be less than significant at the project level, would not have a cumulatively considerable impact on the area's wastewater facilities. Operation of the project would ~~have a marginal~~ increase demand on water infrastructure serving the project site, potentially requiring the construction of new ~~onsite~~or expanded water facilities to serve proposed uses. Construction of these facilities could result in physical impacts on the environment (**Impact-UTIL-1**). Implementation of **MM-UTIL-1** would require County DPR to conduct a water study to ~~confirm~~assess the ~~adequacy~~capacity of ~~-~~existing water facilities~~.~~, and, in the event insufficient capacity exists to serve the project, requires County DPR to construct the necessary improvements prior to issuance of a building permit. Implementation of **MM-UTIL-1** would ensure construction of sufficient water infrastructure and therefore, **Impact-UTIL-1** would be reduced to a less-than-significant level.

When combined with the significant cumulative impacts from past, present, and reasonably foreseeable future projects, the project's contribution to sufficient water infrastructure would not be cumulatively considerable.

The project would potentially result in a substantial increase in water demand that would exceed the water supplies available from existing entitlements and resources (**Impact-UTIL-2**). However, implementation of **MM-UTIL-2** would require the County's coordination with PDMWD to ensure sufficient water supplies are available prior to construction. Therefore, operational impacts would be less than significant. When combined with the significant cumulative impacts from past, present, and reasonably foreseeable future projects, the project's contribution to water demand would not be cumulatively considerable.

As discussed in Section 4.19, operation of the project would generate 590.3 cubic yards of disposable solid waste per year. Sycamore Landfill is closest to the project site and has a permitted remaining capacity of 113,972,637 cubic yards. The project's annual operational contribution of solid waste would be 0.009% of the landfill's remaining capacity. This represents a conservative estimate because ~~the~~ County DPR would be required to comply with applicable waste diversion requirements. Therefore, implementation of the project would not generate solid waste in excess of ~~s~~State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Consequently, the project's contribution to solid waste impacts would be considered less than cumulatively considerable.

5.3.19.4 Impact Determination

The project's incremental contribution to cumulative utilities impacts would be less than cumulatively considerable after implementation of mitigation.

5.3.19.5 Mitigation Measures

No additional mitigation is required.

5.3.19.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative utilities and service systems impacts would not be cumulatively considerable and would be less than significant.

5.3.20 Wildfire

A significant cumulative impact associated with wildfire would result if the project would contribute to cumulative impacts related to impairment of an adopted emergency response plan or emergency evacuation plan; exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment; or expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

5.3.20.1 Geographic Scope

Because of the transitory nature of wildfires, which can burn across multiple landscapes if suitable fuel is present, the geographic scope of the cumulative impact analysis for wildfire risk includes the Alpine Community Plan Area and the communities that surround Alpine, including Crest/Dehesa, Lakeside, Cuyamaca, Descanso, Pine Valley, and Jamul/Dulzura.

5.3.20.2 Cumulative Effects

The County Fire ~~Services~~Protection District staff (i.e., County Fire Marshall) review all projects to ensure onsite access is available for emergency vehicles, and onsite utilities are sufficient for emergency response. Thus, cumulative projects identified in Table 5-1 would be submitted to the County Fire Marshall for review and approval. In addition, reasonably foreseeable projects would comply with the applicable requirements set forth by the County of San Diego Multi-Jurisdictional Hazard Mitigation Plan and the Operational Area Emergency Operations Plan during an emergency. As such, impacts that would impair an adopted emergency response plan or emergency evacuation plan facilities from past, present, and reasonably foreseeable future projects would not be cumulatively significant.

Cumulative projects would be required to comply with County Code of Regulatory Ordinances, Title ~~3~~9, Division ~~5, Chapter 3 and Appendix II-A~~1, of the ~~Uniform~~California Fire Code. County DPR would be required to comply with the Defensible Space for Fire Protection Ordinance (2011). The ordinance requires combustible vegetation; dead, dying, or diseased trees; green waste; rubbish; or other flammable materials to be cleared within 30 feet of the property line and 10 feet of each side of a highway, private road, or driveway in order to maintain defensible space (County of San Diego 2011b). Reasonably foreseeable projects would also be required to comply with the County of San Diego Fire Service Conditions stipulated by the County Fire ~~Services~~Protection District staff (i.e., County Fire Marshall) upon review and approval. Cumulative projects would also be required to comply with the California Wildland-Urban Interface Code (Part 7 of the California Building Standards Code), which includes special building construction regulations for development in designated fire hazard severity zones. As such, impacts associated with pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire from past, present, and reasonably foreseeable future projects would not be cumulatively significant.

Given the project area location within a Very High Fire Hazard Severity Zone, cumulative projects listed in Table 5-1 would be required to maintain defensible space around project infrastructure consistent with California Public Resources Code Section 4291 and the Defensible Space for Fire Protection Ordinance. Reasonably foreseeable projects would also comply with all applicable California Wildland-Urban Interface Code~~California Building Code~~ and California Fire Code requirements for development in a Very High Fire Hazard Severity Zone, including, but not limited to, specific requirements for structural hardening, water supply and flow, hydrant and standpipe spacing, signage, and fire department access. As such, installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment from past, present, and reasonably foreseeable future projects would not be cumulatively significant.

5.3.20.3 Project Contribution

The project would not increase demand on existing emergency response services such that it would impair an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant and would not contribute to a cumulatively significant impact.

The project site is identified as a Very High Fire Hazard Severity Zone and has burned during wildland fire events before. Implementation of the vegetation fuel modification and human activity fire prevention measures~~standard BMPs~~ would reduce the potential for ignition and increase the

ability of onsite workers and staff to control and extinguish a wildfire event. Therefore, construction and operation of the project would not exacerbate the conditions and wildfire risk on site, thereby exposing people to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

During operation, implementation of a Site Evacuation Plan, recommendations provided in the Fire and Emergency Operational Assessment, ~~project design features~~fire prevention measures, compliance with applicable ordinances and regulations, and enforcement of County DPR rules and regulations would reduce the potential for the project to exacerbate wildfire risks due to slope, prevailing winds, and other factors, including risks related to pollutant concentrations as a result of a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant and would not contribute to a cumulatively significant impact.

The project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment. Impacts would be less than significant. The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant and would not contribute to a cumulatively significant impact.

5.3.20.4 Impact Determination

The project's incremental contribution to cumulative wildfire impacts would not be cumulatively considerable.

5.3.20.5 Mitigation Measures

No mitigation is required.

5.3.20.6 Level of Significance After Mitigation

The project's incremental contribution to cumulative wildfire impacts would not be cumulatively considerable and would be less than significant.