Chapter 4
Other CEQA-Required Sections

This chapter includes the following discussions required by CEQA.

- Cumulative Impacts.
- Significant and Unavoidable Environmental Impacts.
- Significant Irreversible Environmental Changes.
- Growth-Inducing Impacts.

Cumulative Impacts

The term "cumulative impacts" refers to "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355).

A cumulative impact can result from the combination of two or more individually significant impacts, or the combination of two or more impacts that are individually less than significant but constitute a significant change in the environment when considered together. To analyze a proposed project's contribution to cumulative impacts, CEQA requires the lead agency to identify reasonably foreseeable projects in the vicinity of the proposed project, summarize their effects, identify the contribution of the proposed project to cumulative impacts occurring in the project region, and recommend mitigation measures for any cumulative impacts evaluated as significant (CEQA Guidelines Section 15130[b]).

Cumulative impacts were determined in the following manner.

1. Determine whether there is a significant cumulative impact under future conditions with the proposed project for an issue area; if yes, then
2. Determine if the proposed project would or would not make a considerable contribution to the identified significant cumulative impact.

To provide an adequate discussion of cumulative impacts, the context of the analysis is defined. Each resource topic was assigned a geographic setting (CEQA Guidelines Section 15130(b)(3)). These settings represent the probable area in which project effects could be observed or in some way interact with other cumulative development. The settings are directly related to the nature of the potential impact. For example, the setting for geology, soils, and seismicity is the Project vicinity. Geology and soils impacts are localized in that they would occur within a specific geographical area (i.e., on the Project site).

Two geographic settings were identified (**Table 4-1**).

- **Project vicinity.** This setting consists of the Project site and any adjacent areas for which there could be a combined effect on a particular resource.
- **Monterey Peninsula and beyond.** This setting encompasses the Monterey Peninsula and extends beyond Monterey County.

There are two approaches to identifying related past, present, and reasonably foreseeable projects and their impacts. The list approach identifies individual projects in order to identify potential cumulative impacts. The projection approach uses a summary of projections in an adopted general plan or related planning document to identify potential cumulative impacts. In this document both the list and the projection approach were used, depending on the resource topic.

As described in Section 3.11, *Transportation and Circulation*, the future year scenarios addresses conditions in the year 2030 with existing traffic increased by an annual growth rate to the year 2030, plus Del Monte Forest Plan[1] project trips. In addition, air quality and noise analysis are based on the cumulative traffic impacts.

Table 4-1. Cumulative Analysis Approach and Applicable Geographic Setting by Resource Area

Resource Topic	Cumulative Analysis Approach	Geographic Setting	
		Project Vicinity	Monterey Peninsula and Beyond
Aesthetics	List	X	
Air Quality	Projection		X
Biological Resources	List/Projection	X	X
Climate Change	Projection		X
Cultural Resources	List	X	
Geology, Seismicity, Soils	List	X	
Hydrology and Water Quality	List	X	X
Land Use and Recreation	Projection	X	
Noise and Vibration	Projection/List	X	
Public Services and Utilities	List	X	X
Transportation and Circulation	Projection	X	X
Water Supply and Demand	Projection/List		X

Projects Considered

Reasonably foreseeable future projects are defined as the projects that have been adopted or have otherwise demonstrated likelihood to occur based on documentation from project sponsors. For this analysis, transportation and development projects in the Project vicinity in Monterey County and the City of Pacific Grove were considered. According to the City of Pacific Grove, there are no approved or pending projects within the Project vicinity that could contribute to cumulative impacts (Aziz pers. comm.). **Table 4-2** lists the projects within Monterey County that are considered in the cumulative analysis. With the exception of the Monterey Presidio Real Property Master Plan project, all of the projects listed in the table are part of the Pebble Beach Company Project (also called the buildout project).

[1] Del Monte Forest Plan is referencing the Pebble Beach Company Project (PLN100138), also commonly called the Pebble Beach Company Concept plan or buildout project, which includes the planned development and preservation of Pebble Beach lands that was approved by the County in June 2012.

Table 4-2. Projects Considered in the Cumulative Analysis

Proposed Development[a]		Estimated Construction Schedule	Distance from Project site (miles)	Potential Cumulative Impact Areas
The Lodge at Pebble Beach				
Meeting Facility Expansion	Add 2,100 sf meeting space and 2,900 sf support/circulation space to the existing facility.	Complete by 2017	2.2	Air Quality (construction), Biological Resources, Climate Change, Cultural Resources, Geology/Soils, Hydrology and Water Quality, Noise, Public Services and Utilities, Traffic, Water Supply and Demand
New Colton Building	New 20-unit guest facility.	Complete by 2019	2.2	
Fairway One Reconstruction	New 40-unit guest facility.	Complete by 2017	2.2	
Parking and Circulation Reconstruction	New two-level 224-space parking facility and 23-space short-term parking lot.	Complete by 2017	2.2	
The Inn at Spanish Bay				
Conference Center Expansion	Add 4,660 sf meeting space and 4,155 sf support/circulation space to the existing facility.	Complete by 2019	0.8	Aesthetics, Air Quality (construction), Biological Resources, Climate Change, Cultural Resources, Geology/Soils, Hydrology and Water Quality, Noise (construction), Public Services and Utilities, Traffic, Water Supply and Demand
New Guest Cottages	New 40-unit guest facility.	Complete by 2022	0.8	
New Employee Parking	New 285-space surface parking lot.	Complete	0.8	
Collins Field–Equestrian Center–Special Events Area				
Pebble Beach Driving Range Relocation from Area V to Collins Field	Relocate driving range to Collins Field and construct golf academy, ball kiosk/bathroom, and 26-space surface parking lot.	Complete	2.0	Aesthetics, Air Quality (construction), Biological Resources, Climate Change, Cultural Resources, Geology/Soils, Hydrology and Water Quality, Noise (construction), Public Services and Utilities, Traffic, Water Supply and Demand
Equestrian Center Reconstruction	Demolish existing equestrian center and construct new equestrian center in its place with same uses plus covered arena.	Complete by 2017	2.0	

Proposed Development[a]		Estimated Construction Schedule	Distance from Project site (miles)	Potential Cumulative Impact Areas
Special Events Staging Area Grading and Expansion	Grade and slightly expand the special events staging area.	Complete	2.0	
Area M Spyglass Hill				
New Resort Hotel (Option 1)	New resort hotel with 100 guest rooms, 6,677 sf restaurant/lounge, 5,120 sf meeting space, 301-space parking facility, and 17,000 sf spa with 41-space surface and underground parking lot.	Complete by 2026	1.8	Aesthetics, Air Quality (construction), Biological Resources, Climate Change, Cultural Resources, Geology/Soils, Hydrology and Water Quality, Noise (construction), Public Services and Utilities, Traffic, Water Supply and Demand
New Residential Lots (Option 2)	Create 10 single-family residential lots.	Complete by 2026	1.8	
Residential Lot Subdivisions				
Area F-2	16 single-family residential lots.	Unknown, lots currently for sale	1.0	Aesthetics, Air Quality (construction), Biological Resources, Climate Change, Cultural Resources, Geology/Soils, Hydrology and Water Quality, Noise (construction), Public Services and Utilities, Traffic, Water Supply and Demand
Area I-2	16 single-family residential lots.		1.4	
Area J	5 single-family residential lots.	Unknown, lots to go on sale by December 31, 2017	1.0	
Area K	8 single-family residential lots.		1.3	
Area L	10 single-family residential lots.		1.3	
Area U	7 single-family residential lots.	Unknown, lots to go on sale by 2030	2.0	
Area V	14 single-family residential lots.		1.8	
Collins Residence	4 single-family residential lots (out of two existing residential lots).		2.2	
Corporation Yard	10 single-family residential lots.		1.0	
Roadway Improvements				
SR 1/SR 68/17-Mile Drive Intersection Reconstruction	Intersection reconfiguration.	October 2015-October 2016	2.0	Air Quality (construction), Biological Resources, Climate Change, Cultural Resources, Geology/Soils, Hydrology and Water Quality,

Proposed Development[a]		Estimated Construction Schedule	Distance from Project site (miles)	Potential Cumulative Impact Areas
Congress Road/17-Mile Drive Intersection Improvements	Add a left-turn lane, restripe to incorporate crosswalks, and add handicap ramps at crosswalks.	Complete	0.8	Noise (construction), Public Services and Utilities, Traffic, Water Supply and Demand
Congress Road/Lopez Road Intersection Improvements	Realign intersection to eliminate the intersecting angle and improve sight distance.	Complete by 2016	0.9	
Lopez Road/Sunridge Road Intersection Improvements	Add lane channelization and realign intersection to improve sight distance.	Complete by 2026	1.1	
Portola Road/Stevenson Drive Intersection Improvements	Add lane channelization and realign intersection to eliminate acute angle and improve sight distance.	Complete	1.9	
Trail Improvements				
Area F-2	Relocate portion of existing trail eastward between proposed residential development and Poppy Hills Golf Course (20 linear feet net increase in trail).	Complete	1.0	Air Quality (construction), Biological Resources, Climate Change, Cultural Resources, Geology/Soils, Hydrology and Water Quality, Noise (construction), Public Services and Utilities, Traffic, Water Supply and Demand
Area I-2	Relocate portion of existing trail northward between proposed residential development and Poppy Hills Golf Course (70 linear feet net increase in trail).	Complete	1.4	
Area J	Relocate portion of existing trail outside of new lots (130 linear feet net increase in trail).	Complete by 2016	1.0	
Area K	Relocate portion of existing trail outside of new lots (56 linear feet net increase in trail).	Complete by 2016	1.3	
Area PQR	Create 1.36 miles of new trails on existing dirt fire roads and 0.25 mile of new connector trails in the Pescadero planning area.	Complete by 2016	1.7	

Proposed Development[a]		Estimated Construction Schedule	Distance from Project site (miles)	Potential Cumulative Impact Areas
Corporation Yard	Create 0.15 mile of new trails on existing dirt fire roads to connect the proposed residential lot subdivision to the network of trails in the Huckleberry Hill Natural Habitat Area and SFB Morse Preserve.	Complete by 2026	1.0	
Huckleberry Hill Natural Habitat Area	Create 0.59 mile of new trail following the existing Haul Road.	Complete	0.8	
Portions of 17-Mile Drive, Spyglass Road and Stevenson Drive	Dedicate bicycle lane for 4.7 miles in each direction.	Complete	0.6 (to closest point on the trail)	
Monterey Presidio Real Property Master Plan project				
Short-range and long-range project building renovations or upgrades to be implemented over a 20-year planning horizon.		Construction began in 2013 (POM Barracks Complex Phase I); Majority of long-range projects: construction will begin between 2018 and 2025, with some construction extending to 2030.	0.6	Aesthetics, Air Quality (construction), Biological Resources, Cultural Resources, Geology/Soils, Hydrology and Water Quality, Noise (construction), Traffic

Notes:

Source: County of Monterey 2011/2012; U.S. Army Corps of Engineers 2013.

[a] All projects listed are part of the Pebble Beach Company Project (also called the buildout project) with the exception of the Monterey Presidio Real Property Master Plan project.

sf = square feet

SR = State Route

Projections

2010 Monterey County General Plan Projections

The County General Plan was updated in October 2010, but only for the inland areas, which includes the Project site. The Project site is located in the Greater Monterey Peninsula Area Plan (GMPAP). The Greater Monterey Peninsula Area Plan, adopted October 26, 2010, provides supplemental land use policies that apply to the inland areas of the Monterey Peninsula, including the Project site. The General Plan and GMPAP contain policies that address the existing and future land uses in unincorporated Monterey County.

Del Monte Forest Land Use Plan and Local Coastal Program

The Del Monte Forest Land Use Plan (LUP), together with the zoning ordinance and Coastal Implementation Plan (CIP), serve as the Local Coastal Program, which is the regional planning document for Del Monte Forest (Monterey County 1984, 2012). The LUP was most recently updated as part of the approval of the Pebble Beach Company Project (also called the buildout project), and includes a limited amount of potential development that is separate from the Pebble Beach Company Project described in **Table 4-2**. Including the buildout project, cumulative projections are described in **Table 4-3**.

Table 4-3. Cumulative Projections in Del Monte Forest

	Existing	Cumulative	
Component	Existing DU/VSU	Potential DU/VSC Over Existing	Buildout
Existing Developed Lots	2,900	–	2,900
Undeveloped (Vacant) Existing Lots[a]	–	96	96
PBC Buildout Project	–	90 to100[b]	90 to 100
Inclusionary Housing Project Units	–	24	24
Additional Residential Lots Allowable	–	9[d]	9[d]
Total Residential Lots	**2,900**	**219-229**	**3,119 -3,129**
Existing Visitor-Serving Units	459	–	459
PBC Buildout Project	–	95 to 194	95 to 194
Other Potential Visitor-Serving Units	–	45	45
Total Visitor-Serving Units	**459**	**140-239[e]**	**599 to 698**

Notes:

DU = dwelling units. VSC = visitor-serving unit.

[a] Does not include vacant PBC lots.

[b] Includes 2 existing residential lots at Collins Residence.

[c] Includes vacant PBC lots, based on existing LCP zoning; full buildout may not be possible due to ESHA or other considerations.

[d] New lots: Area X (8) based on County-issued certificates of compliance; Area Y—assumed limit to 1 lot based on presumption that presence of ESHA may prevent further subdivision.

[e] The prior buildout project approval allows for up to 95 to 194 visitor-serving units included with the buildout project and up to an additional 45 units total at The Inn at Spanish Bay and The Lodge at Pebble Beach.

Pacific Grove General Plan

The Pacific Grove General Plan was adopted in 1994 and is a comprehensive, integrated, and internally consistent statement of Pacific Grove's development policies for the city of Pacific Grove and its Sphere of Influence. While immediately adjacent to Pacific Grove, the Project site is located outside of the City of Pacific Grove and its sphere of influence. Nonetheless, planned growth in Pacific Grove, in combination with the Project could result in cumulative impacts. Therefore, buildout of the Pacific Grove General Plan is considered in this cumulative analysis.

Analysis of Cumulative Impacts

The following analysis described the potential for the Project, in combination with the cumulative projects, to result in cumulatively significant environmental impacts. Each analysis considers the cumulative setting of the potential impacts. The evaluations identify where the cumulative impact would be significant, and whether the Project's contribution to a significant cumulative impact would be considerable.

Aesthetics

Impact AES-1(C): Cumulative development in Pebble Beach could result in separate aesthetics impacts, but the Project would not contribute to any cumulative aesthetic impacts.

The cumulative setting for aesthetics includes any proposed developments listed in **Table 4-2** that are within the same viewshed as the Project. The Project vicinity viewshed is defined by surrounding land uses along SFB Morse Drive and from the ends of David, Lincoln, Miles, Lawton, Shafter, Funston and Buena Vista Avenues in Pacific Grove. The area along SFB Morse Drive is primarily undeveloped and the areas to the west and north of Congress Road and within Pacific Grove are developed with residential uses.

As described in Section 3.1, *Aesthetics*, with mitigation, implementation of the Project would not result in project-level significant impacts on scenic vistas, scenic resources within a scenic highway, or on the existing visual character or quality of the site and surrounding areas. Additionally, none of the projects listed in **Table 4-2** is within the same viewshed as the Project. The closest development projects are the developments at The Inn at Spanish Bay, which is approximately 0.8 mile north of the Project site. Views of this area are blocked or buffered by topography and forest trees. Accordingly, the Project would not contribute to any cumulative impacts when considered with potential future proposed projects.

Air Quality

Impact AQ-1(C): Cumulative development on the Monterey Peninsula and beyond could result in cumulative air quality impacts, but the Project would not considerably contribute to any cumulatively significant air quality impacts.

According to Monterey Bay Unified Air Pollution Control District guidelines, a project is considered to have a significant cumulative impact if the project's emissions are not accommodated in the Air Quality Management Plan (AQMP) or if localized carbon monoxide (CO) hotspots exceed state and federal ambient air quality standards (AAQS) under cumulative traffic conditions.

As described under **Impact AQ-A1** in Section 3.2, *Air Quality*, the Project, combined with "approved but not built dwelling units" is not anticipated to exceed the Association of Monterey Bay Area Governments' 2020 forecast. Therefore, Project emissions are accommodated in the AQMP.

The Project would add limited traffic volumes to certain roadways and intersections that are already congested. As described in the EIR for the Pebble Beach Company Project (Monterey County 2011/2012), a number of intersections in the Project vicinity are expected to operate at level of service D or worse during cumulative 2015 and 2030 conditions with implementation of development associated with the Pebble Beach Company Project (also called the buildout project). However, as shown in Tables 3.2-11 and 3.2-12 of the buildout project EIR, CO concentrations are not expected to contribute to any localized violations, and, in fact, were shown to be well below State and federal AAQS. Note that while average daily trips (ADT) for the buildout project was expected to be between 2,013 ADT and 3,109 ADT, the largest increase in CO concentrations at nearby intersections under 2030 cumulative with-project over no-project conditions was a 0.1 parts per million (ppm) increase at both State Route (SR) 68/Skyline Forest Drive and at the SR 68/SR 1 off-ramp.[2] The Project would be negligible in comparison, adding only 180 ADT to nearby roadways; thus, the increase in CO concentrations is expected to be less than the 0.1 ppm increase shown in the buildout project EIR and still far below state and federal AAQS. Therefore, localized CO hotspots exceeding state and federal AAQS under cumulative traffic conditions is not expected. The Project would result in no project- or cumulative-level impacts on air quality.

Biological Resources

The setting for cumulative impacts on biological resources is Monterey Peninsula and beyond. The regional setting was chosen for the cumulative analysis because the sensitive biological resources that would be affected by the Project have distributions on and outside the Monterey Peninsula, and thus Project impacts may contribute to a cumulative impact on the range and distribution of a sensitive biological resource. The effects of other developments beyond Pebble Beach are addressed generically for this impact analysis because of the wide area of assessment. Resources assessed on a regional basis include Monterey pine forest, California red-legged frog (CRLF), and nesting raptors.

Sensitive Habitats

Impact BIO-1 (C). Cumulative development would result in significant loss of Monterey pine forest, but the Project's contribution would be less than significant with mitigation.

The setting for the cumulative analysis of Monterey pine forest is the full extent of native Monterey pine forest, but the focus of the analysis is on the Monterey region of native Monterey pine forest, because this is the population to which the Project can contribute effects.

Prior to Europeans entering California and Baja California, indigenous Monterey pine forest is estimated to have covered about 24,000 acres at three locations in California and two islands off the coast of Baja, Mexico (ICF International 1996). The present extent of Monterey pine forest with undeveloped understory is less than 13,600 acres (ICF International 1996). The forest at Monterey was the largest historically, larger than the combined areas of all other indigenous forest occurrences.

[2] The buildout EIR finding was for a signalized intersection. As discussed in Section 3.11, *Transportation and Traffic*, the SR 68/SR1 intersection will now be changed to a roundabout instead, which has been shown by additional evaluation to result in reduced congestion compared to a signalized intersection (Kittleson 2013).

The Monterey pine forest at Monterey is still the largest occurrence but has undergone the greatest transformation as a result of human activities, including logging and urban, suburban, institutional, and recreational development. As of 1994, approximately 9,400 acres of Monterey pine forest with undeveloped understory remained on public and private lands; approximately 1,554 acres remained of Monterey pine forest with mostly closed canopy but with cleared or closely managed understory vegetation in large-lot developed areas; and approximately 2,811 acres remained in suburban neighborhoods with much of the pine canopy removed, but usually greater than 20% canopy cover remaining, and understory in unnatural landscaped vegetation, paved surfaces, and structures (ICF International 1994).

For cumulative effects on Monterey pine forest on a regional basis, a "substantial adverse effect" is defined in this document as "the loss, conversion, and/or fragmentation of Monterey pine forest such that the future conservation of Monterey pine forest, in absence of an adopted regional conservation plan, would be uncertain." Uncertainty is defined as the loss of more than 5% of existing undeveloped Monterey pine forest on a regional basis.

The Project would contribute to the impacts on Monterey pine forest that result from ongoing development elsewhere and at other locations in the region. The Project would result in removal or conversion of less than 0.05% of the remaining Monterey pine forest with undeveloped understory in the Monterey region as well as all known remaining undeveloped Monterey pine forest in California and Mexico. The Project would retain approximately 80% of the extant forest within the Project site. The Project would preserve 10.5 acres of the 13.2-acre site.

In concept, the proposed preservation of on-site areas would substantially offset the direct and indirect effects of the Project and its contribution to cumulative impacts. **Mitigation Measures BIO-A1** and **BIO-A2** formalize dedication of the proposed on-site preserve areas and require preparation and implementation of site-specific resource management plans for preservation areas for the benefit of Monterey pine forest.[3] Considering the open space preservation area and the identified mitigation, the Project would not contribute considerably to significant impacts on Monterey pine forest.

Furthermore, per Condition No. 143 in the approval of the Pebble Beach Company Project, if the inclusionary housing is built, then the Company would dedicate the 135-acre Old Capitol Site, which contains an additional 75 acres of Monterey pine forest.[4] Thus the total amount of preserved Monterey pine forest as part of the inclusionary housing project would be 85 acres.

[3] While the proposed preservation of the Old Capitol site is a reasonable foreseeable outcome of the project, mitigation to require a site-specific resource management plan for the Old Capitol site is not included as mitigation for the proposed project because the proposed preservation and management of the on-site forested areas is considered adequate mitigation for the inclusionary housing project impacts on its own.

[4] Most of the Old Capitol Site is designated for low-density residential development in the 2010 City of Monterey General Plan (City of Monterey 2010). The Applicant has previously committed to the U.S. Fish and Wildlife Service to preserve 16 acres of Monterey pine forest habitat containing Yadon's piperia, as part of a separate agreement with USFWS that is not a condition of prior approval for the buildout project.

Waters

Impact BIO-2(C). Cumulative development could result in direct and indirect effects on wetlands and waters, but the Project's contribution would be less than significant with mitigation.

The cumulative setting is limited to waters and wetlands in the Sawmill Gulch watershed in Pebble Beach because this is the only area in which the Project could contribute effects. The only waters of the United States on the Project site are a portion of the Sawmill Gulch drainage. This feature occupies approximately 0.2 acre in the proposed open space preservation area.

Cumulative development, consisting of the Pebble Beach Company Project market-rate lots at the Corporation Yard, limited other single-family development on vacant lots, and indirect effects due to increased recreational use by new residents and visitors could also affect wetland and waters or riparian areas within Sawmill Gulch directly or indirectly.

Project impacts on waters are discussed under **Impact BIO-B1**. **Mitigation Measure BIO-B1** in Section 3.3, *Biological Resources*, is required to avoid and reduce impacts on these resources to a less-than-significant level. The Project's proposed open space preservation areas also include preservation of portions of the Sawmill Gulch drainage. Similarly, the prior Pebble Beach Company Project was required to mitigate its direct and indirect effects on waters and wetlands, including management of nearby preservation areas within the HHNHA and SFB Morse, to protect waters and wetlands. With identified project mitigation, the Project's contribution to a significant cumulative impact would be reduced to a less-than-significant level.

Cumulative water quality impacts to marine waters are addressed separately below under Hydrology and Water Quality.

Special-Status Species

Impact BIO-3(C). Cumulative development could result in direct mortality of California red-legged frog, degradation of aquatic habitat, and loss of and degradation of upland habitats, but the Project's contribution would be less than significant with mitigation.

The setting for the cumulative analysis CRLF is the Central Coast Recovery Unit.

Historically, CRLF was known from 46 counties in California, but the taxon is now extirpated from 24 of these counties (U.S. Fish and Wildlife Service 2002b). CRLF occurs in isolated localities in the Sierra Nevada, Northern Coast, and northern Transverse Ranges, but is still relatively common in the San Francisco Bay Area and along the central coast (U.S. Fish and Wildlife Service 2002a).

This taxon is widespread in Monterey County and nearly all coastal drainages from Garrapata Creek south to Salmon Creek, including the Little and Big Sur River drainages and the vicinity of Pfeiffer State Beach, support CRLF. The species occurs in the Carmel River watershed and most of its tributaries. More than 350 adults have been observed on Rancho San Carlos, a private ranch on the upper portion of the Carmel River Valley (U.S. Fish and Wildlife Service 2002a).

The California Natural Diversity Database lists multiple occurrences of CRLF in Monterey County, not including the recent documented occurrences found on the Monterey Peninsula. CRLF is rare locally and was only recently (2002) found on the Monterey Peninsula near the Project site. CRLFs have been found at several locations in Seal Rock Creek (approximately 1.17 miles southwest of the

Project site) and nearby water hazards on the Spyglass Hill golf course; and in the Drake Pool and a seasonal pond near Drake Road at the proposed Area N preservation area.

The portion of Sawmill Gulch within the Project site is not considered CRLF breeding habitat because of its seasonal character and lack of in-stream pools, and because the site is surrounded by relatively busy roads that sever the upland habitat from the surrounding forest. However, the Sawmill Gulch area may provide foraging and dispersal habitat for CRLF. The Project could result in direct and indirect impacts on CRLF during construction and operation.

Cumulative development elsewhere in Pebble Beach, on the Monterey Peninsula, and beyond may also result in losses of this species or its habitat.

Cumulative losses of occupied CRLF habitat in Pebble Beach and elsewhere would be a significant cumulative impact. Because the project would contribute to the loss of occupied foraging and dispersal habitat, the Project's contribution is considerable. Implementation of **Mitigation Measures BIO-A1, BIO-A2, BIO-B1,** and **BIO-C1** would reduce the contribution of the Project to a less-than-significant level.

Non-listed Special-Status Species

Impact BIO-4(C). Cumulative development could result in potential loss or disturbance to habitat occupied by non-listed special-status wildlife species, but the Project's contribution would be less than significant with mitigation.

The setting for the cumulative analysis of non-listed special-status wildlife species is Pebble Beach because the Project's effects on these species is limited in scale and extent and could contribute only to population level effects in the localized area.

Black or silvery legless lizards. These species are rare locally and have a restricted distribution on the Monterey Peninsula. Project development would result in direct effects on suitable habitat. Cumulative development in Pebble Beach might increase recreational use of trails in areas of suitable habitat, like dunes. With the Project's preservation area and **Mitigation Measures BIO-A1, BIO-A2**, and **BIO-C2**, the Project's contribution would not be considerable.

California horned lizard. This species is common throughout chaparral habitats across an extensive geographic range and is not known in the Project vicinity. However, the MPFW provides marginal habitat. Because the statewide status of the California horned lizard is relatively robust, and because the species is unlikely to occur in significant numbers in the small areas of marginal habitat found in the Project vicinity, the Project's potential contribution to a cumulative impact would not be considerable.

Western pond turtle. The Project would not remove any habitat for the western pond turtle. Sawmill Gulch provides potential dispersal habitat for western pond turtle; however, it is unlikely to support a breeding population because it is a seasonal drainage that lacks in-stream pools and primarily conveys stormwater runoff from adjacent areas through a series of culverts. Although cumulative development may affect western pond turtle, the Project's contribution would not be considerable.

Pallid bats. Cumulative projects that could also affect pallid bat habitat within Pebble Beach include potential future developments in Pebble Beach.

The Project could remove tree roosting sites and thus directly affect this species and eliminate potential habitat, resulting in an adverse effect on population levels. Clearing of forest habitat may remove foraging and roosting habitat, but the increase of edge habitat and moister, irrigated environment in development areas could balance this effect by increasing foraging habitat and insect availability in the long term. The Project would also preserve approximately 10.5 acres of Monterey pine forest. The Project's contribution to a cumulative impact would be mitigated to a less-than-significant level with implementation of the **Mitigation Measure BIO-C3**.

Ringtails and Monterey ornate shrew. Cumulative projects that could affect habitat for these species within Pebble Beach include potential future development.

Some potential habitat for ringtails and ornate shrews in forest habitats near riparian areas would be removed by the Project. The preservation area, along with directed resource management as required by **Mitigation Measures BIO-A1** and **BIO-A2**, would reduce the Project's contribution to a cumulative impact to a less-than-significant level.

Common Wildlife Habitat/Populations/Plant Communities

Impact BIO-5(C). Cumulative development would remove habitat of common wildlife species and plant communities within Pebble Beach, but the Project's contribution would be less than significant.

The setting for the cumulative analysis of common plants and wildlife habitat is Pebble Beach because the project's impact on common plants and wildlife is limited to Pebble Beach.

Cumulative development in Pebble Beach could affect habitat for common species including Monterey pine forest. The Project would remove 2.7 acres of Monterey pine forest habitat where there are currently common wildlife and plant species. Species found at the Project site are common elsewhere in the Monterey pine forest, Pebble Beach and the Monterey Peninsula as a whole. Consequently, these species would not be locally eliminated and the Project's contribution to a cumulative impact would be less than significant.

Indirect Impacts on Habitat Resulting from Human Use

Impact BIO-6(C). Cumulative development would increase human disturbance of Monterey pine forest within the proposed open space preservation area, and the Project's contribution to this effect would be less than significant with mitigation.

The setting for the cumulative analysis of human disturbance is Pebble Beach.

Cumulative development in Pebble Beach could generate additional trail users that may affect biological resources found along trails. Under cumulative plus project conditions, the Project could contribute to increased trail use by pedestrians and equestrians. This impact is offset by the applicant's proposed open space preservation area and **Mitigation Measures BIO-A1** and **BIO-A2** (see Section 3.3, *Biological Resources*), including management of trail access within the new proposed preserve areas. Mitigation adopted as part of the prior Pebble Beach Company Project required preparation of site-specific resource management plans for the HHNHA and the SFB Morse Preserve to specifically address recreational use impacts on sensitive biological resources. With project mitigation and the prior mitigation adopted for the prior Pebble Beach Company Project, the Project's contribution to a cumulative impact would be less than significant.

Wildlife Movement

Impact BIO-7(C). Cumulative development would fragment certain existing forested habitats and could interfere with wildlife movement, and the Project's contribution would be less than significant.

The setting for the cumulative analysis of wildlife movement is Pebble Beach because the Project's impact on wildlife movement would be limited to the animals moving in and through Pebble Beach.

Cumulative development in Pebble Beach could also affect wildlife movement areas, although single-family development's effect on wildlife movement would be limited because most of the vacant lots (with the exception of Lots X and Y) are in areas surrounded by existing development.

Under cumulative plus project conditions, the Project could contribute to interference with wildlife movement. However, the Project site is currently fragmented from surrounding areas by SFB Morse Drive extending through the west portion of the site and residential development east of the Project site. This impact would be less than significant given the degree of existing fragmentation from the larger, relatively contiguous areas of forest and natural land cover and given the Project's proposed preservation. The Project's contribution to a cumulative impact would be less than significant.

Wildlife Breeding and Nesting

Impact BIO-8(C). Cumulative development, including tree removal and grading, could result in potential disturbance to nesting raptors, including several special-status raptor species, if present during construction, and the Project's contribution would be less than significant.

The setting for the cumulative analysis of nesting raptors is the Monterey Peninsula and beyond as raptors range far beyond Pebble Beach.

The Project vicinity provides potential nesting habitat for several species of hawks and owls (raptors). Raptors are protected against take, including destruction of nests, pursuant to Section 3503.5 of the California Fish and Game Code and the federal Migratory Bird Treaty Act.

Cumulative projects that would also remove trees that may be used by nesting raptors include other development in Pebble Beach and in the region and could also affect nesting raptors.

The Project includes removal of trees that may contain nesting raptors. The Project would preserve suitable nesting raptor habitat in forested areas and would be required to comply with the County's Standard Condition of Approval PD050 (Raptor/Migratory Bird Protection). Under this Condition of Approval, any tree removal activity that occurs during the typical bird nesting season (February 1-September 15), a County qualified biologist will perform a nest survey to determine if any active raptor or migratory bird nests are present within the Project site or within 300 feet of proposed tree removal activity. During the typical nesting season, the survey will be conducted no more than 10 days prior to ground disturbance or tree removal. If nesting birds are found on the project site, an appropriate buffer plan shall be established by the project biologist. Additionally, PD011 (Tree and Root Protection) requires that trees located close to trees approved for removal shall be protected from inadvertent damage from equipment or tree removal activity by fencing off the canopy drip-lines and/or critical root zones (whichever is greater) with protective materials. Any tree protection measures recommended by a County-approved tree consultant, in addition to the standard condition, shall be implemented. Collectively, the open space preservation area and adherence to the

County's Standard Condition of Approval would reduce the Project's contribution to a cumulative impact to a less-than-significant level.

Tree Removal

Impact BIO-9(C). Cumulative development would result in removal or disturbance of native Monterey pine trees and coast live oak trees, and the Project's contribution would be less than significant with mitigation.

The setting for the cumulative analysis of tree removal is Pebble Beach as individual tree removal impacts are localized to Pebble Beach.

Cumulative projects that would also remove more than a few native trees include development in Pebble Beach, which could also result in removal of native trees.

Project impacts on Monterey pine forest was discussed under **Impact BIO-1(C)**. The Project would also include removal of coast live oaks.

The Project would preserve areas containing native trees within Pebble Beach. **Mitigation Measures BIO-A1** and **BIO-A2** would ensure 10.5 acres of Monterey pine forest and approximately 2,000 oak trees and Monterey pine trees are protected and managed in perpetuity and would also require tree replanting to replace the removed trees.

With the proposed preservation and resource management, and the identified mitigation measures for impact on Monterey pine forest and native trees for Project impacts, the Project's contribution to a cumulative impact on native trees would be less than significant.

Climate Change

Impact CC-1(C): Cumulative development on the Monterey Peninsula and beyond could result in cumulatively significant greenhouse gas emissions, but the Project would not contribute considerably to cumulative emissions, with mitigation.

As described in Section 3.4, *Climate Change*, the unique chemical properties of greenhouse gases (GHGs) enable them to become well-mixed within the atmosphere and transported over long distances. Climate change is largely a cumulative issue and the geographic scope for cumulative GHG emissions impacts is global, as GHGs are emitted by innumerable sources worldwide. Thus the analysis presented in Section 3.4, *Climate Change*, is inherently cumulative.

No single project, when taken in isolation, can cause climate change because a single project's emissions are insufficient to change the radiative balance of the atmosphere. Because climate change is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, global climate change will have a significant cumulative impact on the natural environment as well as on human development and activity.

As described in **Impact CC-A1** in Section 3.4, the significance threshold used to evaluate project GHG emissions is tied directly to the need to address cumulative GHG emissions and is based on the County's overall GHG reduction target for 2020 to be consistent with AB 32.

With **Mitigation Measures CC-A1** and **CC-A2a** and/or **CC-A2b**, the project's GHG emissions would be less than the cumulative contribution threshold. Consequently, the impact would be less than cumulatively considerable and the Project would, therefore, not conflict with an applicable plan,

policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Cultural Resources

Impact CR-1(C). Cumulative development in Pebble Beach might have substantial adverse effects on historical, archaeological, or paleontological resources, but the Project's potential contribution would be less than significant.

The cumulative setting for cultural resources includes the planned developments listed in **Table 4-2** that could potentially affect archaeological, historical, and paleontological resources. Development of these projects would result in potentially significant impacts on known and unknown archeological, historical, and paleontological resources.

However, no known historical, archaeological, or paleontological resources were identified on the Project site, and, therefore, the Project would not contribute to this cumulative impact. To the extent that construction activities unearth previously undiscovered resources, adherence to the County's standard Conditions of Approval would ensure that, if such resources are discovered during construction, work is stopped and the resources are properly identified and treated. The Project would, therefore not result in a considerable contribution to this cumulative impact.

Geology and Soils

Impact GSS-1(C). Cumulative development in Pebble Beach would include new structures that may result in exposure to seismic hazards, or could expose people and structures to geologic hazards, but the Project's contribution would be less than significant.

Geological hazards related to future development in the Project vicinity are site-specific and relate to the type of building and building foundation proposed, as well as the soil composition and slope on the site.

Potentially adverse environmental effects associated with seismic hazards, expansive soils, and erosion usually are site-specific and generally do not combine with similar effects that could occur with other projects. Implementation of the provisions of the California Building Code, the National Pollutant Discharge Elimination System permit requirements, the General Plan safety policies and implementation of the recommendations in the Project's geotechnical study would ensure that potential site-specific geotechnical conditions would be addressed fully in the design of the Project and that potential impacts would be maintained at less-than-significant levels. The Project would not contribute to adverse soils, geologic, or seismic cumulative impacts.

Hydrology and Water Quality

Impact HYD-1(C). Cumulative development in Pebble Beach would result in increased stormwater runoff and could alter surface drainage patterns, but the Project's contribution would be less-than-significant.

The cumulative setting for hydrology includes the planned developments listed in **Table 4-2** that could potentially affect flooding and runoff in the Sawmill Gulch watershed, which includes the market-rate lots at the Corporation Yard, and potential single-family residential development on vacant lots. These cumulative developments would be required to comply with site-specific

hydrology/water quality recommendations/measures as required by the Monterey County Water Resources Agency.

The Project would include ground disturbance, grading, and construction of new impervious surfaces that would alter surface drainage patterns. The Project would result in an addition of 1.5 acres (11.3% of the total site) of impervious surfaces. As described in Section 3.7, *Hydrology and Water Quality*, the impacts associated with increased stormwater runoff are addressed by the proposed drainage system, which includes an on-site detention basin. Additionally, the required Conditions of Approval (WR8 and WR10) will ensure the drainage system is constructed in accordance with the drainage plan approved by MCWRA. Therefore, although cumulative development impacts related to stormwater runoff and drainage patterns are considered to be potentially significant, the project's contribution would not be considerable.

Impact HYD-2(C). Cumulative development on the Monterey Peninsula and beyond could degrade onshore and offshore water quality, but the Project's contribution would be less-than-significant.

The setting for cumulative water quality impacts is the Monterey Peninsula and beyond because the Project could contribute to marine water quality impacts in Carmel Bay and Monterey Bay.

Cumulative development in the Monterey Peninsula and beyond, including the Project, could result in increases to pollutant loads due to drainages within Pebble Beach and in marine waters offshore due to new paved surfaces and related urban runoff, vehicle fluid spills and runoff, and increased pesticide, herbicide, and fertilizer use. Development of the Project site, in combination with the planned projects in **Table 4-2** and the projections in **Table 4-3** could result in a significant cumulative impact on water quality in local drainages and wetlands and contribute to marine water quality impacts. On the Monterey Peninsula and beyond, new development would contribute to impacts on water quality in Carmel Bay and Monterey Bay and marine waters outside the two bays. New construction would be required to comply with site-specific hydrology/water quality recommendations/measures as required by the County Water Resources Agency (in County areas) or local jurisdictions (in incorporated cities), as well as state water quality requirements.

The Project could have both construction impacts (related to clearing of vegetation and grading, construction, paving, and landscaping) as well as operational impacts (increases in runoff, residential use) on water quality. As described in Section 3.7, *Hydrology and Water Quality*, implementation of the Construction NPDES requirements in a SWPPP, the proposed drainage plan, and Conditions of Approval WR8 and WR10 would reduce potential water quality project impacts to a less-than-significant level. Therefore, although cumulative development impacts related to water quality are considered to be potentially significant, the Project's contribution would not be considerable.

Land Use and Recreation

Impact LU-1(C). Cumulative development in Pebble Beach or in the Greater Monterey Peninsula Area Plan area might conflict with the applicable land use plans or land use policies adopted for the purpose of avoiding or mitigating an environmental effect, but the Project is consistent with the General Plan and the GMPAP and would not considerably contribute to this impact.

The cumulative setting for land use is the Greater Monterey Peninsula Area Plan area. The Project site is planned for medium density (4 dwelling units per acre) residential development and forested open space. Because the Project conforms to the General Plan's land use designations and the GMPAP and would not result in any significant impacts on land use, it would not contribute considerably to a significant cumulative impact.

Impact LU-2(C). Cumulative development in Pebble Beach is limited and would not result in a recreational demand that would result in the need for new recreational facilities, and the project's contribution to cumulative impacts associated with increased recreational demand and use would be less than significant with mitigation.

The cumulative setting for recreation is Pebble Beach. Other than the proposed Project, the projects listed in **Table 4-2** and the projections in **Table 4-3** would result in new residents in Pebble Beach, as well as additional visitors. New residents and visitors would also use existing parks and recreational facilities. However, cumulative growth would be within projections anticipated by the Del Monte Forest Land Use Plan and the Greater Monterey Peninsula Area Plan, there are extensive recreational opportunities at present within Pebble Beach and outside Pebble Beach, and cumulative growth is not anticipated to result in a substantial increase in overall demand that might result in the need for new recreational facilities. Additionally, there are several trail improvement projects listed in **Table 4-2** that would result in approximately 2.4 miles of new recreational trails or have resulted in 4.7 miles of new dedicated bicycle lanes that would increase recreational facilities, which would help to manage additional recreational demand. **Mitigation Measure BIO-A1** includes actions to manage the additional effect of residents on the on-site Monterey pine forest by designating formal trails, closing informal trails, and managing forest resources to prevent future informal recreational degradation of the forest. Similarly, the prior Pebble Beach Company Project included mitigation for adjacent forested areas (like HHNHA and SFB Morse Preserve) to manage recreational impacts on sensitive biological resources appropriately. Thus the Project's contribution to cumulative impacts associated with recreational demand would be less than significant with mitigation.

Noise

Impact NOI-1(C): Cumulative development in Pebble Beach could result in cumulative noise impacts, but the Project would not contribute considerably to any cumulatively significant noise impacts.

There are no cumulative projects that would be constructed adjacent to the proposed Project; therefore, the project would not contribute to cumulatively significant construction noise impacts.

For operational noise, as described in Section 3.9, *Noise and Vibration*, under **Impact NOI-A1**, traffic noise levels with the Project in 2030 are expected to increase by 1 dB over existing (2014) conditions at all evaluated roadway segments. However, the Project would not contribute considerably to noise level increases (i.e., changes in noise levels between 2030 with and without the Project), because noise level increases are projected at 0 dB[5] between the without Project and with Project conditions (refer to **Table 3.9-8** in Section 3.9). Therefore, the Project would not contribute to a significant cumulative impact.

[5] There would be a minor increment of traffic noise, but it is so small it is rounded to 0 dB and would not be a considerable contribution to cumulative traffic noise levels.

Public Services and Utilities

Police and Fire Protection and Emergency Access

Impact PSU-1(C). Cumulative development would increase demand for fire, first responder emergency medical services, and police services but not to a level that would result in the need for new physical facilities for these services, and the cumulative impact would be less than significant.

The cumulative setting for emergency services is the Pebble Beach Community Services District (PBCSD) service area. Other than the proposed Project, the projects listed in **Table 4-2** and the projections in **Table 4-3** would result in new residents and visitors to Pebble Beach. The net increase in daily population by all cumulative development is not sufficient demand to result in the need for new physical facilities that might otherwise result in secondary impacts on the environment. Additionally, any proposals for new residential development would be responsible for maintaining or replacing emergency access and would be required to comply with County and Fire Department access requirements. Thus, the Project's contribution to any cumulative demand for new facilities would be less than significant.

Wildland Fires

Impact PSU-2(C). Cumulative development could expose people and structures to wildland fire risk, but the Project's contribution would be less than significant.

The cumulative setting for emergency services is Pebble Beach and the surrounding communities on the Monterey Peninsula. Cumulative development might have a substantial adverse effect by placing residential structures adjacent to wildland and open space areas, and in areas where there are no fire hydrants or lines, contributing to the risk of loss, injury, or death from wildland fires.

As identified under **Impact PSU-C1** in Section 3.10, *Public Services and Utilities*, the Project would be required to comply with PBCSD Fire Department requirements and Monterey County's Fire Code. Furthermore, the Project would comply with PRC 4291 which mandates 100 feet of defensible space by vegetation reduction/treatment around all homes and buildings to help protect from wildland fires. Compliance with these requirements would reduce the potential wildland fire hazard impacts to a less-than-significant level. Therefore, although cumulative development impacts related to wildland fire hazards would be potentially significant, the Project's contribution would not be considerable.

Schools

Impact PSU-3(C). Cumulative development would result in increased student enrollments which would increase demand for new school facilities, but fees paid at the time of construction of residential lots would offset any potential physical impacts as a result of new or expanded facilities at PGUSD pursuant to Government Code Section 65995(e) and the Project's contribution to cumulative impacts would be less than significant.

The cumulative setting for schools is the Pacific Grove Unified School District (PGUSD). The Project would generate up to eight new students at PGUSD. There are no future cumulative residential projects identified by the City of Pacific Grove that would generate students at PGUSD. None of the

residential projects listed in **Table 4-2** would generate students that would attend schools within the PGUSD. There may be limited residential development on existing vacant lots in the northern Del Monte Forest or Pacific Grove that may contribute small amounts of additional students. Any future homeowners and developers would be required to pay school impact fees at the time of construction on their residential site. Payment of these developer fees would offset any potential physical impacts as a result of new or expanded school facilities at PGUSD pursuant to Government Code Section 65995(e). Therefore, cumulative impacts related to schools would be less than significant and the Project would not contribute to a significant cumulative impact.

Wastewater Collection and Treatment

Impact PSU-4(C). Cumulative development would result in increased wastewater treatment requirements, but, because there is adequate PBCSD allotted wastewater capacity and no need for additional sewer lines or wastewater treatment facility, the Project would not contribute to a significant cumulative impact.

The cumulative setting for wastewater collection and treatment is the PBCSD. PBCSD is currently using less than half (approximately 400,000 gallons per day) of its 1 million gallons per day allotted capacity. The Project, in combination with other future projects within the PBCSD, are not expected to generate wastewater flows in excess of 700,000 gallons per day (Niccum pers. comm.). Therefore, increased flow resulting from the cumulative plus-project conditions would not exceed the 1 million gallons per day capacity. The Project is already served by existing wastewater infrastructure and includes new Project-serving sewer lines to support development. Therefore, cumulative impacts related to expanded or new wastewater collection or treatment facilities would be less than significant and the Project would not contribute to a significant cumulative impact.

Utility Disruption

Impact PSU-5(C). Cumulative development could result in construction-related utility service disruption, but the Project's contribution would be reduced to a less-than-significant level with mitigation.

Cumulative development could result in construction-related service disruptions. Construction of proposed development in **Table 4-2**, including infrastructure and roadway improvements, (as described in Chapter 2, *Project Description*) could result in utility service disruption to residences, businesses, and public service and utility providers. Potentially affected utilities include water, reclaimed water, sewer, gas, electricity, telecommunications, cable, and other infrastructure. Water service interruptions could also affect fire flows. All utility providers would be contacted to avoid or minimize any potential service disruption. Therefore, although cumulative development impacts related to utility disruption could be potentially significant, the Project's contribution would not be considerable.

Solid Waste

Impact PSU-6(C). Cumulative development would increase solid waste, green waste, and recycling disposal needs, but solid waste services and facilities are sufficient to accommodate cumulative development and the Project would not contribute to a significant cumulative impact.

Cumulative development could result in an increase in solid waste generation. Construction and occupation of individual homes and commercial uses is not anticipated to result in significant increases in solid waste generation. Solid waste services in Pebble Beach are provided by PBCSD, who has contracted for collection services with Waste Management. Currently the Monterey Peninsula Landfill and Recycling Facility have estimated remaining capacity of 48 million tons and is expected to be open for approximately 150 years. Increased solid waste, green waste, and recycling needs resulting from cumulative development including the Project can be accommodated by the existing collection and disposal services. Therefore, cumulative impacts related to solid waste would be less than significant.

Transportation and Circulation

Refer to Section 3.11, *Transportation and Circulation*, for the cumulative traffic analysis with the Project. As described therein, the Project would contribute considerably to certain cumulatively significant traffic impacts, and the contribution would be significant and unavoidable with mitigation.

Water Supply

Refer to Section 3.12, *Water Supply*, for the cumulative water supply with the Project. As described therein, the Project would contribute considerably to certain cumulatively significant water supply impacts, but mitigation is considered infeasible given the Applicant's prior funding of the Recycled Water Project and constitutional limits on mitigation burdens.

Significant and Unavoidable Environmental Impacts

Section 15126.2 (b) of the State CEQA Guidelines requires that an EIR describe any significant impacts, including those that can be mitigated but not reduced to a level of less than significant. Furthermore, where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should also be described.

The individual resource sections of Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*, identify those significant impacts that cannot be reduced below a level of significance. The significant and unavoidable impacts are listed in **Table 4-4**, which are limited to impacts associated with traffic and water supply. See Section 3.11, *Transportation and Traffic*, and Section 3.12, *Water Supply* for a more detailed discussion of each of these significant and unavoidable impacts.

Table 4-4. Summary of Significant and Unavoidable Environmental Impacts

Significant and Unavoidable Environmental Impacts
Transportation
A. Traffic during Project Construction
TRA-A1. Construction traffic would result in short-term increases in traffic volumes that would affect level of service and intersection operations.
TRA-A1(C). Construction traffic combined with cumulative traffic would result in short-term increases in traffic volumes that would affect level of service and intersection operations.
C. Impacts on Roadway Intersections
TRA-C1. The Project would add traffic to certain far intersections and highway segments that would worsen existing unacceptable levels of service.
TRA-C2. The Project would add traffic to regional highway sections that are projected to operate at unacceptable levels of service.
TRA-C2(C). The Project would considerably contribute to significant cumulative traffic impacts for far intersections.
TRA-C3(C). The Project would considerably contribute to significant cumulative traffic impacts for highway segments.
Water Supply and Demand
A. Water Supply and Demand
WSD-A1. The Project's water demand would represent an increase in water use compared to without project conditions, but would be within the applicant's current entitlement and could be legally supplied by Cal-Am. However, given the current uncertain nature of regional water supplies, the additional Project water demand could intensify water supply shortfalls and rationing starting in 2017 until a regional water supply project is built.
WSD-A1(C). Cumulative water demand on the Monterey Peninsula exceeds current water supplies requiring new regional water supplies to be developed. The Project's water demand would represent an increase in water use compared to without project conditions. In 2017 and after, given the current uncertain nature of regional water supply planning, the additional Project water demand could intensify cumulative water supply shortfalls and rationing starting until a regional water supply project is built.
B. Water Infrastructure Capacity
WSD-B1. Local water infrastructure is included to serve the Project and existing supply infrastructure outside the Project site is adequate to serve the Project. A regional water supply project will need to be built to serve existing demand and the increase in demand from the project. Regional water supply infrastructure and operations will have secondary environmental impacts.
WSD-B1(C). Existing, Project, and other entitlement demand create a cumulative demand for a regional water supply project. Regional water supply infrastructure and operations may have significant and unavoidable secondary environmental impacts and the Project would contribute to the need for such infrastructure.
C. Carmel River Biological Resources
WSD-C1. If the State Water Board enforces the limitation on Cal-Am withdrawals from the Carmel River starting in 2017, then the project would not have any impact on biological resources associated with the Carmel River. If the State Water Board delays enforcement, then the Project would likely increase withdrawals from the Carmel River aquifer compared to without project conditions and thus contribute to existing impacts on Carmel River biological resources until the limitations are fully enforced.
WSD-C1(C). If the State Water Board enforces the limitation on Cal-Am withdrawals from the Carmel River starting in 2017, then the Project and other entitlement demand would not have any impact on biological resources associated with the Carmel River. If the State Water Board delays enforcement of the limitations, then the Project and other entitlements would likely increase withdrawals from the Carmel River aquifer and thus contribute to cumulative impacts on Carmel River biological resources until the withdrawal limits are fully enforced.

Notes:
(C) = Cumulative impact.

Significant Irreversible Environmental Changes

Section 15126.2(c) of the State CEQA Guidelines requires that an EIR must consider any significant irreversible environmental changes that would be caused by the proposed project should it be implemented. Section 15126.2(c) reads as follows:

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

A project would result in significant irreversible environmental changes if it results any of the following conditions.

- The primary and secondary impacts would generally commit future generations to similar uses.
- The project would involve a large commitment of nonrenewable resources.
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project.
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

The environmental effects of the Project are analyzed in detail in the resource sections of Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*.

The Project would require the use of nonrenewable resources such as metal and aggregate resources for physical construction components. Furthermore, fossil fuels would be consumed during construction and operation activities. Fossil fuels in the form of diesel oil and gasoline would be used for construction equipment and vehicles. During operations, diesel oil and gasoline would be used by passenger vehicles. Electrical energy (in part derived from fossil fuel generation) and natural gas would also be consumed during construction and operation (e.g., heating, cooling, refrigeration, lighting, etc.). All new buildings would need to comply with the state's Title 24 regulations that promote energy efficiency. However, the consumptive use of these energy resources would be irretrievable and their loss irreversible. Construction use of fossil fuels is limited to the construction period and is not a wasteful use of energy. Operational direct and indirect use of fossil fuels would be in compliance with existing regulations, including Title 24, and would not be a wasteful use of energy.

Impacts associated with operation of the Project would occur as described in Chapter 3. Development of the Project would result in irreversible changes to biological resources, specifically the loss of Monterey pine forest. Development of the Project would constitute a long-term intensification of developed uses, and it is unlikely that the land use would return to its original condition. The total amount of area converted from undisturbed natural land covers to urban land covers is approximately 2.7 acres.

The Project would not involve the routine on-site transport or storage of substantial amounts of hazardous materials, with the exception of common hazardous agents such as fuel, paints, oils, solvents, and cleansers. The amount and use of these chemical agents would be limited and are not anticipated to result in irreversible damage related to the release of hazardous materials. Adherence to Monterey County hazardous materials regulations would ensure that potential impacts related to the accidental release of hazardous materials would be less than significant.

As previously discussed, the Project would result in significant irreversible changes due to the use of raw materials and fossil fuels during construction and operation, and the permanent loss of undeveloped natural lands. While many of these impacts can be avoided, lessened, or mitigated, some of these impacts are irreversible consequences of development, which are described in greater detail in the resource sections of Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*.

Growth-Inducing Impacts

Section 15126.2(d) of the State CEQA Guidelines requires that an EIR discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Furthermore, Section 15126.2(d) states:

> Included in this are projects which would remove obstacles to population growth. Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

This analysis evaluates whether the Project would directly or indirectly induce economic, population, or housing growth in the surrounding environment.

Analysis of Direct Growth-Inducing Impacts

A project would directly induce growth if it would involve development of new housing or remove barriers to population growth, for example, by changing a jurisdiction's general plan/zoning to allow new residential development to occur or by removing an infrastructure constraint.

The Project would allow for development of 24 new residential units on 2.7 acres and would preserve 10.5 acres of Monterey pine forest on the 13.2-acre project site. As described in Section 3.10, *Public Services and Utilities* under Impact Analysis/Methodology, the Project would add approximately 78 new residents to Pebble Beach. Potential impacts related to the increase in population were considered in the impact analysis in the resource sections of Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures*.

Utilities and roadways, or lack thereof, are not currently an impediment to development in Pebble Beach. There are existing public services, utilities and infrastructure that serve the Pebble Beach community in the Project vicinity and would be extended to include the Project site and accommodate the new residents. Utility extensions for water, sewer, gas, and telecommunications would be installed in SFB Morse Drive and the new Morse Court driveway leading to the residential units. For water supply, the Project would use the Pebble Beach Company's existing water entitlement; but due to the current constraint on regional water supply, the Project would

contribute to the need for a new regional water supply project (see Section 3.12, *Water Supply and Demand*).

The Project itself would facilitate growth of residential units in Pebble Beach, which would increase economic activity in and beyond Pebble Beach. Increased economic activity could stimulate growth of services for employees and others. However, the Project is intended to house PBC employees and would not create conditions that would induce unplanned growth in Pebble Beach or elsewhere. Thus, while the Project would result in growth directly and would result in an increase in economic activity that would induce growth indirectly, it is not expected to result in unplanned growth that is not already anticipated in governing adopted land use planning documents.