## 3 Environmental Setting

This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

## 3.1 Regional Setting

The Rio Ranch Marketplace project site is located in northwestern Monterey County, in the westernmost portion of the Carmel Valley planning area known as the Mouth of the Valley. Figure 2 in Section 2, *Project Description*, shows the location of the project site in the region. Figure 3 shows the location of the project site in relationship to the surrounding neighborhood.

The Carmel Valley is bounded by the Santa Lucia Mountains to the southwest and the Sierra de Salinas Mountains to the northeast. These two mountain ranges are located within the Pacific Coast Ranges of California, which are characterized by a series of northwest trending mountains and valleys. The Carmel Valley consists of a relatively flat valley floor drained by the Carmel River. Land on both sides of the valley includes open space and preserved areas, such as the Santa Lucia Preserve, Palo Corona Ranch Regional Park, Thomas Open Space, Garland Ranch Regional Park, Jacks Peak County Park, and Hatton Canyon State Park. As these areas remain largely undeveloped, they tend to support a rich mosaic of oak forests, chaparral scrublands, grasslands, and riparian habitats, and are generally characterized by rolling hills and broad northwest-southeast trending valley.

The project site is located in the Carmel River Hydrologic Unit, a 255 square miles, southeast-northwest trending watershed in the coast ranges of central Monterey County. The Carmel River Watershed drains the Carmel Valley northwestward and feeds into the Carmel River, which meanders for 36 miles in a northwesterly direction merging with seven major stream tributaries until it flows into the Pacific Ocean at Carmel Bay (MPWMD 2014). The terminus of the Carmel River with the Pacific Ocean is approximately 0.7 miles northwest of the project site, just south of the City of Carmel-by-the-Sea.

The developed landscapes of the Valley are comprised of rural residential and single family development, various commercial uses that support the Valley's residents and visitors, and small-scale seasonal agriculture. Recreational land uses, including several golf and tennis facilities, occur throughout the valley at a variety of locations.

## 3.2 Project Site Setting

The project site consists of 3.8 acres and is located in unincorporated Monterey County, California, approximately 2,600 feet southeast of the City of Carmel-by-the-Sea city limits. The site is located on the north side of Rio Road approximately 375 feet southeast of Highway 1, approximately 0.3 mile south of Carmel Valley Road, and approximately 1,000 feet north of the Carmel River. The project site is comprised of three legal parcels: Assessor's Parcel Numbers [APN] 009-562-002-000, 009-562-015-000, and 009-562-016-000.

The project site is currently undeveloped except for a paved driveway entrance, a gravel driveway, two wells, utility connections, a section of the Carmel Mission Inn parking lot, and an existing above-ground propane tank and shed building located in the northern portion of the site. The site was previously developed with an apartment complex that was demolished in the 1980s. The site contains predominantly non-native annual grassland and Mixed Woodland. Non-native annual grassland species cover approximately 2.2 acres of the site, including Italian rye grass (*Festuca perennis*), wild oats (*Avena* sp.), Kikuyu grass (*Pennisetum clandestinum*), and foxtail barley (*Hordeum murinum*). Herbaceous plants (i.e., forbs) such as mustards (*Brassica* spp.), wild radish (*Raphanus sativus*), and fennel (*Foeniculum vulgare*), as well as coyote brush (*Baccharis pilularis*). Mixed Woodland species, a mixture of native and non-native species, cover approximately 0.8 acre of the site, including coast live oak (*Quercus agrifolia*), ornamental redwoods (*Sequoia sempervirents*), Hollywood juniper (*Juniperus chinesis*), willow (*Salix* sp.), English ivy (*Hedera helix*), and California buckeye (*Aesculus californica*). The remainder of the site is disturbed with exposed soil and gravel. The on-site vegetation communities are further described in Section 4.2, *Biological Resources*.

The project site is relatively flat and ranges in elevation from 25 feet to 30 feet above mean sea level (amsl) at the highest knolls. Spoil piles reaching from one to six feet in height are located in the eastern half of the project site. The site is located upland of the Carmel River. The majority of the site is within the 100-year flood zone, Zone AE (FEMA 2017). A very small area in the northernmost portion of the project site is located in the 500-year floodplain. The site elevation is lowest in the southwest corner; however, there is no defined surface sheet-flow over the site.

As shown in Figure 3 in Section 2, *Project Description*, the project site is bordered by a Chevron Gas Station to the west, the Carmel Mission Inn to the north, two-story professional offices and mixed-use professional office/residential to the east, and Rio Road and the Crossroads Shopping Center to the south, which is anchored by a grocery store and drugstore. The Carmel River is located approximately 1,000 feet south of the site, and Carmel River Elementary School is located approximately 0.9 mile west of the site, Junipero Serra School is located 0.6 mile west of the site, and Carmel Middle School is located 0.4 mile northeast of the northernmost end of the site.

## 3.3 Cumulative Development

The CEQA Guidelines require the analysis of the cumulative effects of a project in combination with other past, present and reasonably foreseeable future development in the area. CEQA defines "cumulative impacts" as two or more individual events that, when considered together, are considerable or will compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately, but could have a significant impact when analyzed together. Section 15130 of the CEQA Guidelines prescribes two methods for analyzing cumulative impacts: (1) use of a list of past, present, and reasonably foreseeable future projects producing related or cumulative impacts; or (2) use of a summary of projections contained in an adopted general plan or related planning document. This EIR uses the list approach to provide a tangible understanding and context for analyzing the potential cumulative effects of a project. General plans and other planning documents were used as additional reference points in establishing the cumulative scenario for the analysis.

Past, present and reasonably foreseeable future projects that could produce related or cumulative impacts are listed in Table 5, and include projects in Carmel Valley. The table indicates the project name and project type, as well as its location and status. Collectively, these projects represent known and anticipated activities that may occur in the project vicinity that have the potential to produce related or cumulative impacts on the environment.

Table 5 Cumulative Projects List

<b>Project Name</b>	Project Type	Location	Status
Approved Projects			
Bay Laurel LLC (PLN020398)	16 additional hotel units at the existing 57-unit Bernardus Lodge	415 Carmel Valley Road, Carmel Valley; 3.9 miles east of the project site	Approved but not yet constructed
September Ranch Subdivision (PLN050001 and PLN110173)	95 residential lots including 15 inclusionary and 7 deed-restricted workforce housing lots; 50-stable equestrian center	Approximately 2.5 miles east of Highway 1 on the north side of Carmel Valley Road, between Canada Way and Valley Greens Drive; 2.1 miles east of the project site	Approved but not yet constructed
Heritage Development (PLN060603)	Subdivision of three lots into four lots	27050, 27070, and 27080 Rancho San Carlos Road, Carmel Valley; 1.8 miles southeast of the project site	Approved but not yet constructed
Rancho Canada Village (PLN040061)	281 mixed use residential units consisting of: 182 single family, 64 townhomes, and 35 condominiums/flats	4860 Carmel Valley Road, Carmel Valley; 480 feet east of the project site	Approved but not constructed; currently in litigation
Pending Projects			
Mary Delfino Trust (PLN060276)	18 single family lots and six multi-family units	Former Carmel Valley Airport site (APNs 187-521-014-000, 187-521-015-000, 187-512-016-000, 187-512-017-000, 187-512-018-000, and 187-502-001-000); 10.1 miles southeast of the project site	Deemed complete or December 10, 2009. Not yet approved

The area within which a cumulative effect can occur varies by resource. For example, air quality impacts tend to disperse over a large area, while soils hazards impacts are typically more localized. For this reason, the geographic scope for the analysis of cumulative impacts must be identified for each resource area.

The analysis of cumulative effects considers a number of variables including spatial limits, time limits, and the characteristics of the resource being evaluated. The geographic scope of each analysis is based on the topography surrounding the proposed project and the natural boundaries of the resource affected, rather than jurisdictional boundaries. The geographic scope of cumulative effects will often extend beyond the scope of the direct effects, but not beyond the scope of the direct and indirect effects of the project. The geographic extent and cumulative impact analysis for each individual issue area is included in the respective discussions in Sections 4.1 through 4.8 of this EIR.

