

3.0 ENVIRONMENTAL SETTING AND IMPACT ANALYSIS

3.0.1 ENVIRONMENTAL SETTING SUMMARY

Physical Characteristics of the Planning Area

The topography of San Marcos varies, including hillsides, creek areas and lakes. Elevations range from approximately 590 feet above sea level at the central State Route 78 (SR-78)/W San Marcos Boulevard area of the City to prominent ridgelines of approximately 1,200 to 1,600 feet above sea level west of N. Twin Oaks Valley Road and at Double Peak in the Questhaven/La Costa Meadows Neighborhood, respectively. Due to this varied topography, view opportunities of peaks, canyons, urban and suburban landscapes are present within San Marcos. From the central City area at the base elevation, views are dominated by “P” Mountain, San Marcos Mountains and Owens Peak to the north, with Cerro de Las Posas, Double Peak, Franks Peak, and Mount Whitney to the south.

The planning area is located within the Peninsular Ranges geomorphic province, which is characterized by generally northwest-trending mountains and valleys, located south of the Transverse Ranges and west of the Mojave and Colorado deserts. Landforms and topography of the area are controlled by the distribution and character of geologic units, by fault movements, and by climate and erosion, all of which contribute to the sculpture of the landscape. The alluvial surface in the central section of the planning area, which includes the Business/Industrial District as well as the Richmar, Barham/Discovery Community and Richland neighborhood, is underlain young alluvium over crystalline tonalite “hard” bedrock. Older alluvium occupies limited valley bottoms in the eastern position of the City. A relatively “soft” bedrock formation underlies the westernmost portions of the City and consists of poorly bedded sandstone, siltstone and claystone with conglomerate. The Cerro de las Posas Mountains (with Mount Whitney, Double Peak, and Frank’s Peak), as well as the surrounding higher hills around Twin Oaks Valley, are underlain by “hard” metavolcanic rocks with some plutonic crystalline rocks. These units are cut by San Marcos Creek and numerous unnamed secondary drainages filled with younger alluvium consisting of slightly consolidated silt, sand, and gravel.

The planning area is located in the northwestern portion of San Diego County, and within the San Diego Air Basin (Basin). The Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountain ranges to the east. The boundary of the Basin is coincident with the County boundary. The topography in the Basin region varies greatly, from beaches on the west, to mountains and then desert to the east. Much of the topography in between consists of mesas intersected by canyons. The mountains to the east inhibit the dispersal of pollutants (generated in the Basin) to the east, and help to trap them in temperature inversion layers.

Environmental Resources of the Planning Area

San Marcos is characterized by steep ridgelines of local mountains which form Twin Oaks Valley, the San Marcos Creek and watershed, and the foothills south of San Marcos Creek. Twin Oaks Valley has historically been an agricultural area capitalizing on the unnamed tributary of San Marcos Creek that runs

through the area; however, in recent decades agricultural lands have been converting to low density residential development. The majority of San Marcos Creek is urbanized, running between Discovery Street and San Marcos Boulevard and continuing in a north eastern direction east of Twin Oaks Valley. This portion of San Marcos Creek is adjacent to existing and future planned “urban core” of the community. Foothills along the southern boundary of San Marcos Creek include Double Peak and Frank’s Peak which are over 1,600 feet above sea level. These foothills support natural vegetation community and protected habitat and species. This natural setting supports unique habitats like vernal pools, sensitive plant and wildlife species and agricultural areas.

Cultural resources within the planning area include archaeological and historical objects, sites and districts, historic buildings and structures, cultural landscapes, and sites and resources of concern to local Native American and other ethnic groups. Previously documented cultural resources within the City include prehistoric isolated finds, prehistoric archaeological sites, historic archaeological sites, multicomponent (prehistoric and historic) archaeological sites, and historic architectural sites. As of 2009, 149 historical and archaeological resource sites were known within San Marcos. The documented history suggests that there may be several resources associated with early settlement development that could be potentially eligible for the California Register of Historical Resources (CRHR) or the National Register of Historic Places (NRHP).

Water Resources in the planning area include local groundwater supplies, local surface water resources. All of San Marcos is contained within the Carlsbad Hydrologic Unit, a watershed covering approximately 210 square miles and containing six hydrologic areas: San Marcos, Agua Hedionda, Loma Alta, Encinas, Buena Vista Creek, and Escondido Creek. The Carlsbad Hydrologic Unit contains several smaller tributaries and bodies of water, including Loma Alta Creek, Buena Vista Creek, Buena Vista Lagoon, San Marcos Creek, Batiquitos Lagoon, Escondido Creek, San Elijo Lagoon, and Lake Wohlford. The Carlsbad Hydrologic Unit ultimately drains to the Pacific Ocean. A small portion of the planning area, located outside of the City limit in the northeast, is located within the San Luis Rey Hydrologic Unit.

Existing Land Use and Development Patterns

The City of San Marcos is located in a context of urban and rural interface and contains a variety of existing land uses. Of these uses, residential land uses are dominant with vacant land representing the second largest land use. Residential development is primarily composed of single-family housing units in a rural/lower-density layout. The second most prevalent existing land use in the planning area is “vacant.” Vacant land is defined as land that is currently undeveloped and includes both developable and undevelopable lands (i.e., constrained hillsides or ridgelines). Approximately 14 percent of the planning area is currently utilized as parks, open space, recreation and/or trails areas. Approximately 10 percent of the planning area is designated for agricultural use. The majority of agricultural land lies in the northern SOI, however working agricultural areas also exist in the City limits. Public/Quasi-Public uses encompass approximately 815 acres within the planning area (nearly 4 percent) and includes private and publicly owned land serving public agencies, such as schools, parks, government facilities, sheriffs, and fire stations, libraries, and utilities and transit facilities. Approximately 754 acres or 3.6 percent of the planning area is dedicated to Industrial uses. This includes extractive industrial uses, light industrial uses

such as warehousing and wholesale trade. Commercial uses in the planning area occupy approximately 595 acres, or 2.8 percent of land. While commercial uses are spread throughout the planning area, main commercial corridors are located along San Marcos Boulevard, Mission Road, and Rancho Santa Fe Road.

The cities of Vista and Carlsbad border the planning area to the west. Vista is primarily residential in character, however, the land uses directly adjacent to the planning area are research/light Industrial and low-density rural residential. Carlsbad land uses bordering the planning area are a mix of medium to medium-high residential, public institutional uses and open space. The City of Escondido to the east borders the planning area with large-lot single family and light industrial adjacent to Barham/Discovery Community, and primarily medium density residential and specific plan area adjacent to the Richland Neighborhood and Twin Oaks Valley Neighborhood.

Unincorporated areas of San Diego County adjoin the planning area to the north and south. These areas are primarily designated by the County of San Diego as semi-rural and village residential uses. Unincorporated areas also include an MRZ-2 Zone in the Merriam Mountains to the north of the planning area.

San Marcos has been one of the fastest growing cities in the San Diego region since 1980, experiencing substantial population growth and construction of new homes and businesses. San Marcos has consistently and significantly outpaced growth in San Diego County as a whole. While growth in the county was moderate (36 percent), from 1980 to 1990 the population of San Marcos increased 123 percent. Growth occurred primarily due to availability of vacant land, land constraints in other areas of the county, and the establishment of Palomar Community College and CSU San Marcos. Population continued to grow steadily through the 1990s as industry and education continued to flow into the area. The 2000s further supplemented growth with the addition of housing, in large Specific Plan Areas.

Existing Transportation Network

The City of San Marcos transportation system consists of highways, streets, pedestrian paths, transit routes, and bikeways. The San Marcos circulation network is connected to a larger regional system. State Route 78 (SR-78) bisects the planning area into north and south sections. SR-78 carries west- and east-bound travel lanes connecting to Interstate 5 (I-5) to west, to Interstate 15 (I-15) to the east, and provides access to destinations throughout southern California through these connections. Within the planning area, access to SR-78 is provided from S. Rancho Santa Fe Road, Las Posas /Via Vera Cruz, San Marcos Boulevard, Twin Oaks Valley Road, E. Barham Drive/Woodland Parkway, and Nordahl Road. Surface streets connect San Marcos to the cities of Vista, Carlsbad, Escondido and unincorporated areas of the county.

Public transportation and alternative modes of travel are an important component of the circulation system serving the planning area. Public bus service in San Marcos is operated by North County Transit District (NCTD). NCTD BREEZE bus routes provide access within San Marcos and provide connective access to other Cities including Vista, Carlsbad, Encinitas and Escondido. These routes link housing, jobs,

higher education campuses, retail and recreation areas in the planning area and the greater North County area. NCTD currently operates six fixed Breeze bus service routes that provide access from, to and within the planning area. Routes 304, 305, 347 and 445 all serve or stop at the Palomar Community College Transit Station providing increased transit accessibility by connecting to the SPRINTER Rail line and COASTER/Amtrak lines via Poinsettia Station in Carlsbad.

Existing bikeways serve all San Marcos communities and limited areas of the SOI. There are several Class I Bikeway facilities in the planning area. Several of the facilities are of considerable length, such as those facilities along Melrose Drive, San Elijo Road, Twin Oaks Valley Road, La Cienega Road, and north of the intersection of Rancho Santa Fe Road and South Santa Fe Avenue/Mission Road.

The two nearby airports – McClellan-Palomar Airport located 2.5 miles west of the planning area boundary, and San Diego International Airport (SDIA)/Lindbergh Field located approximately 35 miles south of the City, offer air service to the City. McClellan-Palomar Airport is a gateway to and from San Diego’s North County, which is a general aviation airport used primarily for business and recreational purposes. Lindbergh Field is the region’s primary commercial airport. One heli-pad owned and utilized by the San Diego County Sheriff’s Department existing within the planning area.

3.0.2 ENVIRONMENTAL ISSUE AREAS ANALYZED

The subsequent sections in this chapter, Sections 3.01 through 3.16, discuss the impacts of implementing the City of San Marcos General Plan and identify mitigation measures, if any, aimed at reducing impacts found to be significant. In accordance with the State CEQA Guidelines, this Program EIR analyzes those environmental issue areas where significant impacts have the potential to occur.

The environmental issues analyzed in this EIR are as follows:

- Aesthetics and Visual Resources
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils, and Minerals
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Paleontological Resources
- Population and Housing
- Public Services, Utilities, and Energy
- Recreation
- Transportation and Traffic

Organization of the Environmental Impact Analysis

Each issue area is analyzed in the following manner:

Existing Environmental Setting describes the existing conditions in the environment in the vicinity of the project before the commencement of the project to provide a baseline for comparing “before the project” and “after the project” environmental conditions.

Regulatory Framework provides a summary of the applicable federal, state, and local laws, regulations, plans, or policies that are relevant to each environmental issue area and, therefore, must be considered by the City of San Marcos in the decision-making process.

Thresholds for Determining Significance defines and lists specific criteria used to determine whether an impact is or is not considered potentially significant. Major sources used in crafting criteria appropriate to the specifics of the project include the CEQA Guidelines; local, state, federal, or other standards applicable to an impact category; and officially established thresholds of significance. Per CEQA, "...an ironclad definition of significant effect is not possible because the significance of an activity may vary with the setting" (CEQA Guidelines, Section 15064 [b]). Principally, "... a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project, including land, air, water, flora, fauna, ambient noise, and objects of historic and aesthetic significance" constitutes a significant impact (CEQA Guidelines, Section 15382).

Analysis of Environmental Impacts presents evidence, based to the extent possible on scientific and factual data, for the cause and effect relationship between the proposed project and the potential changes in the environment. The exact magnitude, duration, extent, frequency, range, or other parameters of a potential impact are ascertained, to the extent possible, to determine whether impacts may be significant; all of the potential effects, including direct effects and reasonably foreseeable indirect effects are considered. A cumulative impacts analysis is provided in Section 4.2 of this EIR. This section analyzes whether an impact is created as a result of the combination of the proposed project together with other projects causing related impacts (CEQA Guidelines Section 15130).

Mitigation Measures identifies the means by which potentially significant impacts could be reduced or avoided in cases where the Program EIR analysis determines such impacts to be potentially significant. Standard existing regulations, requirements, programs, and procedures that are applied to all similar projects are taken into account in identifying additional project-specific mitigation that may be needed to reduce significant impacts. Mitigation, in addition to measures that the lead agency will implement, can also include measures that are within the responsibility and jurisdiction of another public agency (CEQA

Guidelines, Section 15091 [a] [2]). Many of the mitigation measures have been drawn from the Implementation Program of the General Plan.

Significance after Mitigation identifies the impacts that will remain after application of mitigation measures, and whether the remaining impacts are or are not considered significant. When these impacts, even with the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, they are identified as "unavoidable significant impacts." To approve a project with significant unavoidable impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency finds that it has reviewed the Program EIR, has balanced the benefits of the project against the unavoidable adverse environmental effects, and determines that the benefits outweigh the adverse environmental effects. Thus, the adverse environmental effects may be considered "acceptable" (CEQA Guidelines Section 15093 [a]).

Cumulative Impacts provides an analysis of the General Plan's potential cumulative effects that addresses the impacts of the General Plan in combination with the impacts of growth that is forecast to occur through from present and future development across the San Diego region.

Project-Level Environmental Documentation for Subsequent Projects

Due to the programmatic nature of the General Plan and this EIR, project-level environmental documentation, separate from this EIR, may be currently underway or required in the future as individual projects are proposed for implementation and as specific land use plans and development projects are proposed to implement the generalized land use patterns included in the General Plan. Based on the project-specific environmental analysis, actual project-level impacts will be more clearly defined at the time that this subsequent documentation is prepared.