

4.0 ENVIRONMENTAL SETTING

The City of Moreno Valley is located in northwestern Riverside County, situated along a valley floor bounded by the hills and mountains of the Badlands to the east, Old Highway 215 to the west, the Box Springs Mountains to the north, and the mountains of the Lake Perris State Recreation Area to the south. Regional access to the planning area is provided by State Route 60, which traverses the City and Interstate 215. The surrounding jurisdictions include the City of Riverside, the City of Perris, and the County of Riverside.

The planning area is primarily developed with residential, commercial, and industrial land uses. Lands currently in agricultural production are concentrated in the eastern portion of the City. A joint civilian and military airport (March Air Reserve Base) is located at the southwestern boundary. The State of California owns and operates two regional recreation and open space areas, the San Jacinto Wildlife and the Lake Perris State Recreation Areas, at the southern boundary.

The elevation of the planning area ranges from a low of approximately 1,550 feet to a high of 1,800 feet. The planning area gradually slopes to the south and southwest with the higher elevations north of State Route 60 and the lower elevations near March Air Reserve Base. The City lies primarily on bedrock geology known as the Perris Block. This structural unit is located within the Peninsular Range Geomorphic Province, one of the major geologic provinces of Southern California. The Perris Block is a large mass of granitic rock generally bounded by the San Jacinto Fault, the Elsinore Fault, the Santa Ana River and a non-defined southeast boundary. The Perris Block has had a history of vertical land movements of several thousand feet due to shifts in the Elsinore and San Jacinto Faults. The primary source of strong seismic groundshaking in the planning area is the San Jacinto fault. The San Jacinto Fault Zone traverses the eastern portion of the planning area. Other regional faults of significance that could affect the planning area are the San Andreas and Elsinore faults.

There are a few small ponds and lakes scattered throughout the City. In addition, Lake Perris is located south of the City. The planning area is within the Santa Ana River and the San Jacinto River watersheds. The majority of the area is within the watershed of the San Jacinto River.

The climate of the area is characterized by warm, dry summers and mild winters. Most rain falls between the months of November and March. Winds around Moreno Valley are generally cyclic, blowing from the southwest and west, especially in the summer, during the day, while at night, especially during the winter, a weak off-shore breeze occurs. Occasionally in the fall these cyclical breezes are interrupted by strong, dry, warm desert winds (Santa Anas) from the north/northeast.

The topography and climate of Southern California combine to make the air basin in which the planning area is located an area of high air pollution potential. The basin fails to meet state and federal air quality standards for four of the six criteria pollutants including ozone, nitrogen dioxide (NO₂), carbon monoxide (CO), and fine particulate matter (PM10). Because the state and federal standards cannot be achieved, the basin is considered a “non-attainment” area.

The natural habitat of the planning area is largely disturbed by urban development, weed abatement or agricultural activities. However, the area supports the following native or semi-native plant communities: Riversidean sage scrub, non-native grassland, chaparral, riparian scrub, disturbed alluvium, alkali playa, Riversidean alluvial fan sage scrub, and marsh. Additionally, non-native categories are found within the planning area, including residential/urban/exotic, field croplands, and orchards/groves.

The planning area has a rich diversity of wildlife species. Mammals, including mule deer, and large carnivores, including coyotes, bobcats, badgers, and gray fox, exist in the undeveloped portions of the City. Opossums, raccoons, skunks, cottontail rabbits, and many rodent species are also common. A wide variety of reptiles can be found in the City as well. Additionally, over one hundred species of birds, including owls, hawks and other birds of prey can be found in the area. The planning area also includes few species listed under the Endangered Species Act. The listed species include the Stephen’s kangaroo rat, the California gnatcatcher, the Least bells vireo, and the San Bernardino kangaroo rat. Potentially listed species include the orange throated whiptail, the San Diego horned lizard, and the short nosed pocket mouse.