but the remainder of the metropolitan area sprawls back inland to the Santa Monica and San Gabriel Mountain ranges for distances ranging up to nearly 30 miles. In the area surveyed, the elevation ranges from sea level to altitudes in excess of 2000 feet at points like Sunland, Tujunga and Altadena. In cases where the various communities within the area abut on the mountain ranges, many residential areas are situated on exceedingly rough terrain, some clinging precariously to the sides of steep hills, giving so-called view properties. This condition, common to most cities located in mountainous terrain, will receive more detailed attention in the real estate section following.

Southern California and the Los Angeles area are situated in a semi-desert with light and irregularly distributed rainfall. The only stream of water of any importance within the area under survey is the Los Angeles River, and this stream is little more than a small creek excepting during the rainy season. Many dry "washes" and arroyos originate at the mouth of the mountain canyons and criss-cross both the San Fernando and San Gabriel Valleys. These washes, too, have at various times become raging torrents after heavy rainfall in the mountains and have on different occasions—particularly in 1937 and 1938—caused considerable property damage. Extensive water conservation and flood control work undertaken by the Federal and local governments is believed to have alleviated to pronounced degree the likelihood of future difficulties of this nature.

However, lack of an adequate natural water supply is and has been a source of increasing difficulty to the Los Angeles area. This handicap was recognized by Los Angeles citizens as early as the close of the 19th century and considerable money as well as untiring civic effort has been expended to correct this deficiency by means of building reservoirs in mountain areas more plentifully supplied with water and piping this water to Los Angeles. Nevertheless, the rapid population growth of the metropolitan area, together with intensified use of irrigation in the agricultural pursuits of the community, has constantly overtaxed the available sources of supply and drained over-deeply of the natural underground water basins. This condition is all too apparent in the Long Beach area where underground water pressure has been so depleted that sea water is filtering into the basin and rendering the city's water supply virtually unpalatable for drinking purposes. To combat this serious condition, the Metropolitan Water District was formed by various communities of Southern California to take advantage of the water supply offered by the Federal Government's Boulder Dam project. The Metropolitan Water District's diversion facilities are rapidly nearing completion, and will solve the water difficulties of the community under survey for a long number of years.

E. CLIMATE

The climate of Los Angeles is an economic asset of incalculable worth. It is moderately vigorous, and free from extreme temperature variations (but not sudden changes between sunshine and shade). Cognizance must be given to the definite variations as between sections of the metropolitan area. There are four different climates to be found—coastal, interior, mountain and desert. The climate is neither tropic nor sub-tropic. The air-conditioning influence of the Pacific Ocean is limited in general to the coastal plain area, affecting only in moderate degree the Pasadena area, and but slightly the San Fernando and San Gabriel Valleys. Virtually all the annual rainfall occurs during the period from November through April with about 76% taking place from December through March. This concentration of rainfall leaves the remainder of the year almost completely free from disturbing weather conditions and during the past 56 years an average of only 10 days a year have been without at least one hour of sunshine. On the other hand, this same concentration of rainfall creates a physical hazard in the form of winter floods and summer brush and forest fires in the hills and mountains. These hazards will be discussed in more detail in the real estate section.

The economic significance of climate to the Los Angeles area is manifest. It has been the chief factor underlying the almost unbelievable agricultural development in the country which leads all counties in the United States in the value of agricultural and horticultural products. It has proven the outstanding reason for the almost complete centralization of the motion picture and aircraft manufacturing industries in Metropolitan Los Angeles. Manufacturing industry in general has benefited by the excellence of year-round working conditions, lowered living costs for its employees and lowered plant construction and maintenance costs. Lastly, the climatic factor has been the major attraction in drawing tourists and retired persons to the area.