

several other basins on its way to Lake Elsinore. In especially wet weather, Lake Elsinore overflows to Temescal Creek, which flows to the Santa Ana River near Corona. With development has come diversion of most natural surface flows for agriculture and domestic use. The creeks and rivers now carry only stormwater flows, urban and agricultural runoff, and reclaimed water. High groundwater, springs, and marshes have all but disappeared.

The Santa Ana River is the principal river in the Santa Ana Watershed. It originates in the San Bernardino Mountains and travels southwest approximately 60 mi where it reaches the Pacific Ocean near Huntington Beach. Historically, the Santa Ana River flowed perennially; however, the river is now ephemeral throughout most of its course due to the construction of dams, irrigation and water supply diversions, and groundwater pumping. Flows in the Santa Ana River are “effluent dominated.” Without effluent discharges from area wastewater treatment plants into the river, surface flow within Riverside County would be rare during dry weather. A minimum flow to protect downstream water rights and groundwater recharge (measured at Prado Dam) is maintained by wastewater discharge to the river. Immediately following winter rains, the Santa Ana River's flow is augmented by natural runoff. The duration of flow depends on the intensity and duration of the precipitation. Flooding in 1938 led to the construction of Prado Dam, which was followed by further hydrologic modification to the river in San Bernardino and Riverside counties to divert flows for water supply or percolation to groundwater basins.

The San Jacinto River is the principal river in the San Jacinto Watershed. It originates in the San Jacinto Mountains and flows northwest for the first half of its course and then southwest. The San Jacinto River occasionally reaches Canyon Lake, and more rarely Lake Elsinore. As noted above, water from Lake Elsinore may discharge into Temescal Wash, which is a tributary of the Santa Ana River. In this way, the Santa Ana and San Jacinto watersheds are linked.

The surface water storage areas in this area of Riverside County are Lake Hemet, periodically Mystic Lake, Canyon Lake, and Lake Elsinore. Drinking water storage is also available in Lake Mathews and Lake Perris.

3.10.1.2 San Diego Basin Watershed

The northeastern portion of the San Diego Basin Watershed crosses into Riverside County with the Santa Margarita River Watershed and small portions of the San Juan, San Luis Rey, and San Mateo Creek drainages. The Santa Margarita River watershed covers approximately 560 square miles in southwestern Riverside County and drains the southern part of the Perris fault block and southern end of the Santa Ana Mountains. The Santa Margarita River is formed by the confluence of Murrieta and Temecula creeks.

The primary surface water storage areas in this region of Riverside County are Vail Lake, Lake Skinner, and Diamond Valley Lake. Most of the water supply in the area is imported from the Colorado River, with some water from Northern California and a significant amount of groundwater use.