



Groundwater Basin

The main San Gabriel Valley Groundwater Basin is bounded by the San Gabriel Mountains to the north, San Jose Hills to the east, Puente Hills to the south, and by a series of hills and the Raymond Fault to the west (Figure: Groundwater Basin Map). It covers approximately 167 square miles and is about 6,600 feet deep. The fresh water storage capacity of the basin is estimated to be about 8.6 million acre-feet.

Mostly alluvial sands and gravels, sparsely interlayered with silt and clay lenses comprise the principal water-bearing formations of the basin. The Hollydale, Jefferson, Lynwood, Silverado, and Sunnyside aquifers compose the five overlying aquifers of the San Pedro Formation. The major source of natural groundwater recharge is the infiltration and percolation of rainfall (meteoric water) and runoff from the adjacent mountains. The basin also receives imported water (Colorado River and California Aqueduct) and return flow from applied water.

The physical boundaries of the groundwater basin are divided into two main parts, the Main Basin and the Puente Subbasin. The Puente Subbasin is a tributary to the Main Basin and hydraulically connected to it, with no barriers to groundwater movement. It is, however, not within the legal jurisdiction of Main San Gabriel Basin Watermaster, and is thus considered a separate entity for management purposes.

Nearby basins include the Coastal Plain Groundwater Basins of Los Angeles and Orange Counties and the Upper Santa Ana Valley Groundwater Basin.

