Hemet Lake Valley Groundwater Basin

- Groundwater Basin Number: 8-06
- County: Riverside
- Surface Area: 16,700 acres (26.1 square miles)

Basin Boundaries and Hydrology

The Hemet Lake Valley Groundwater Basin underlies Gardner Valley in the southwestern San Jacinto Mountains. The basin is bounded on the southeast by the Vandeventer Flat Groundwater Basin and otherwise bounded by impermeable rocks of the San Jacinto Mountains. The valley is drained by the South Fork of the San Jacinto River and receives an average annual precipitation ranging from about 14 to 28 inches.

Hydrogeologic Information

Water Bearing Formations

Groundwater in the basin is found in Quaternary age younger and older alluvium that consists of clay, silt, sand, and gravel. Alluvial deposits may reach as about 100 feet in thickness, but are more commonly less than about 45 feet thick. Groundwater is also produced from residuum and from fractured crystalline rocks below the basin.

Restrictive Structures

The Hot Springs fault is mapped in the northern portion of the basin (Rogers 1965), though it is not known whether it affects groundwater movement.

Recharge Areas

Recharge of this basin is likely from percolation of precipitation and runoff, and subsurface flow from San Jacinto Mountains.

Groundwater Level Trends

Water levels reported for wells drilled in the late 1980s and early 1990s ranged to 100 feet below ground level.

Groundwater Storage

Groundwater Storage Capacity. No information is available.

Groundwater in Storage. No information is available.

Groundwater Budget (Type C)

No information is available.

Groundwater Quality

Characterization. Water sampled from 5 public supply wells show an average TDS content of 306 mg/L with a range of 140 to 410 mg/L.

Impairments. Groundwater from some parts of the basin is high in TDS and nitrate content (DWR 1975).

Water Quality in Public Supply Wells

Constituent Group[1]	Number of wells sampled[2]	Number of wells with a concentration above an MCL[3]
Inorganics – Primary	5	0
Radiological	5	0
Nitrates	5	0
Pesticides	5	0
VOCs and SVOCs	5	0
Inorganics – Secondary	5	2

[1] A description of each member in the constituent groups and a generalized discussion of the relevance of these groups are included in *California's Groundwater – Bulletin 118* by DWR (2003).
[2] Represents distinct number of wells sampled as required under DHS Title 22 program from 1994 through 2000.
[3] Each well reported with a concentration above an MCL was confirmed with a second detection above an MCL. This information is intended as an indicator of the types of activities that cause contamination in a given basin. It represents the water quality at the sample location. It does not indicate the water quality delivered to the consumer. More detailed drinking water quality information can be obtained from the local water purveyor and its annual Consumer Confidence Report.

Well Characteristics

	Well yields (gal/min)	
Municipal/Irrigation	Range: 23–820 gal/min max	Average: 196 gal/min (11 Well Completion Reports)
	Total depths (ft)	
Domestic	Range:	Average:
Municipal/Irrigation	Range:	Average:

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
	Groundwater levels	
	Miscellaneous water quality	
Department of Health Services and cooperators	Title 22 water quality	9

Basin Management

Groundwater management:	
Water agencies	
Public	
Private	Lake Hemet Water Company, Lake Hemet Metropolitan Water District, Thomas Mountain Water Association Inc.

References Cited

California Department of Water Resources (DWR). 1975. *California's Ground Water*. Bulletin 118.

Rogers, T. H. 1965. *Geologic Map of California, Santa Ana Sheet.* Single map sheet, scale 1:250,000.

Additional References

Waring, G. A. 1919. *Ground Water in the San Jacinto and Temecula Basins, California.* U.S. Geological Survey, Water Supply Paper 429.

Errata

Substantive changes made to the basin description will be noted here.