Hungry Valley Groundwater Basin

- Groundwater Basin Number: 4-18
- County: Los Angeles, Ventura
- Surface Area: 5,310 acres (8.3 square miles)

Basin Boundaries and Hydrology

This basin is bounded by Alamo Mountain on the south, Frasier Mountain on the north, and semi-permeable rocks of the Ridge Basin Group on the east and west (CSWRB 1953). Surface drainage is via the Upper or Lower Forks of Canada de Los Alamos Creek, which flow into Pyramid Lake. Average annual precipitation ranges from 10 to 16 inches.

Hydrogeologic Information

Water Bearing Formations

The main water-bearing rocks include alluvium and the Hungry Valley Formation. Some groundwater is derived from fractures in underlying rocks (Crowell 1952). Quaternary alluvium forms the chief aquifer and consists of coarse to fine-grained sands that average about 40 feet in thickness (Panaro 2000). The underlying lower Hungry Valley Formation contains mudstone and sandstone beds that total at least 3,000 feet thick (Crowell 1952). Groundwater is unconfined in the basin (Panaro 2000).

Recharge Areas

Recharge to the basin is chiefly from percolation of rainfall and stream runoff (Panaro 2000).

Groundwater Level Trends

Groundwater flows southeast from the Ventura County portion of the basin into the lower portions of the basin in Los Angeles County.

Groundwater Storage

Groundwater Storage Capacity. The total storage capacity is estimated at 10,937 af (Panaro 2000; VCWA 2002).

Groundwater in Storage. It is estimated that the basin was close to 95 percent full, or contained about 10,400 af of groundwater in 1999 (Panaro 2000).

Groundwater Budget (Type C)

Recharge from underflow is estimated to range from 500 to 1,000 af/yr (Panaro 2000). Estimated irrigation return flow is less than 2 af/yr (Panaro 2000).

Groundwater Quality

Characterization. Bicarbonate is the major anion, and calcium, sodium, and potassium occur in almost equal amounts (VCWA 1996). The average TDS content is less than 350 mg/L (VCWA 1996).

Impairments. The groundwater has an average pH of 8.1 which is slightly alkaline (VCWA 1996).

Well Characteristics

	Well yields (gal/min)	
Municipal/Irrigation	Range:	Average: 28 gal/min (Panaro 2000)
	Total depths (ft)	
Domestic	Range:	Average:
Municipal/Irrigation	Range:	Average:

Active Monitoring Data

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

Basin Management

Groundwater management:	None. A California State Offroad Vehicle Park occupies most of the valley (Panaro 2000).
Water agencies	
Public	Ventura County Public Works Agency
Private	

References Cited

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Crowell, J. C. 1950. *Geology of the Hungry Valley Area, Southern California.* American Association of Petroleum Geologists Bulletin, vol. 34. pp. 1623-1646.

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Additional References

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Errata

Changes made to the basin description will be noted here.