

Hidden Valley Groundwater Basin

- Groundwater Basin Number: 4-16
- County: Ventura
- Surface Area: 2,210 acres (3.5 square miles)

Basin Boundaries and Hydrology

This groundwater basin underlies Hidden Valley in southwest Ventura County. The basin is bounded by the semi-permeable rocks of the Santa Monica Mountains (CSWRCB 1953; DWR 1959). The valley drains into Sherwood Lake. Average annual precipitation ranges from 20 to 24 inches.

Hydrogeologic Information

Water Bearing Formations

The chief water production in this basin comes from fractures in the Conejo Formation volcanic deposits (CSWRCB 1953) and overlying alluvium (DWR 1959).

Restrictive Structures

No information is available.

Recharge Areas

Hydrographs show that this basin recharges rapidly with seasonal rains, implying that recharge comes chiefly from percolation of precipitation to the valley and ephemeral streamflow.

Groundwater Level Trends

Hydrographs show that water levels in the basin declined as much as about 30 feet during 1972 through 1977. Water levels recovered during 1978 then declined by as much as about 50 feet by 1988. During 1988 through 1992, the rate of decline of water levels increased, with water levels in 1992 reaching as much as 180 feet below high water levels of the previous decade. Water levels recovered again in 1993 and experienced seasonal fluctuations of as much as 60 feet through 2000. Groundwater moves southeastward through the basin toward Lake Sherwood (CSWRB 1953).

Groundwater Storage

Groundwater Storage Capacity. Unknown.

Groundwater in Storage. Unknown.

Groundwater Budget (Type C)

No information is available.

Groundwater Quality

Characterization. Groundwater in the basin varies from calcium bicarbonate to calcium-magnesium bicarbonate (DWR 1959). Water quality was reported to be generally good with TDS content below 800 mg/L.

(DWR 1959). Analyses of groundwater from 1953 show an average TDS content of about 453 mg/L and a range from 289 to 743 mg/L (DWR 1959).

Impairments. No information is available.

Well Characteristics

Well yields (gal/min)		
Municipal/Irrigation	Range:	Average:
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	1

Basin Management

Groundwater management:

Water agencies

Public

Private

References Cited

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Additional References

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Turner, J. M. 1971. *Ventura County Water Resources management Study, Geohydrology of the Ventura River System*. Ventura County Department of Public Works, Flood Control District: Unnumbered Report.

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<http://www.ventura.org/vcpwa/wre/wrd/pages/BASINS.htm> (March 2002).

Errata

Changes made to the basin description will be noted here.