Grass Valley Groundwater Basin

- Groundwater Basin Number: 6-77
- County: San Bernardino
- Surface Area: 9,980 acres (15.6 square miles)

Basin Boundaries and Hydrology

Grass Valley Groundwater Basin underlies a southeast-trending valley in western San Bernardino County. Surface elevation of the valley floor ranges from 3,200 to about 3,800 feet above mean sea level. The basin is bounded by nonwater-bearing consolidated rocks of Slocum Mountain on the east, the Gravel Hills on the south, and low granitic hills on the north and west. Slocum Mountain is the highest peak with an elevation of 5,124 feet. The basin lies largely within the China Lake Naval Air Weapons Center (DWR 1964).

Average annual rainfall ranges from 6 to 8 inches. Runoff from the surrounding mountains drains to a central southeast-trending wash that discharges through Black Canyon into Harper Valley (Jennings and others 1962).

Hydrogeologic Information

Water Bearing Formations

Quaternary alluvium is the water-bearing material that forms the basin, and includes unconsolidated younger alluvial deposits and underlying unconsolidated to poorly consolidated older alluvial deposits (DWR 1964).

Restrictive Structures

The northwest-trending Blackwater fault dissects the central portion of the basin and may impede groundwater movement.

Recharge and Discharge Areas

Recharge of the basin is primarily from the percolation of runoff through alluvial fan deposits along the margin of the valley. Minor amounts of recharge may be from the infiltration of rain that falls to the valley floor. Groundwater moves southeastward toward Black Canyon and into Harper Valley Groundwater Basin (DWR 1964).

Groundwater Level Trends

A single depth to water measurement taken from a well in the central part of the basin in 1955, was 86.1 feet below ground surface (DWR 1964).

Groundwater Storage

Groundwater Storage Capacity. Unknown.

Groundwater in Storage. Unknown.

Groundwater Budget (C)

Groundwater budget information is not available.

Groundwater Quality

Characterization. Analysis of the groundwater indicated a sodium chloride-sulfate character and TDS content of 473 mg/L. This water is suitable for most domestic and irrigation uses and probably reflects the quality of the water throughout the basin (DWR 1964).

Impairments.

Well Production characteristics

	Well yields (gal/min)
Municipal/Irrigation	
	Total depths (ft)
Domestic	
Municipal/Irrigation	

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	

Basin Management

Groundwater management:

Water agencies

Public

Private

References Cited

California Department of Water Resources (DWR). 1964. *Ground Water Occurrence and Quality Lahontan Region.* Bulletin No. 106-1. p. 437-439.

_____. 1975. *California's Ground Water.* Bulletin No. 118. p. 82-83.

Jennings, C. W. , J. L. Burnett, and B. W. Troxel. 1962. *Geologic Map of California: Trona Sheet.* Olaf P. Jenkins Edition. California Department of Conservation, Division of Mines and Geology. Scale 1: 250,000.

Errata

Changes made to the basin description will be noted here.