

Adobe Lake Valley Groundwater Basin

- Groundwater Basin Number: 6-10
- County: Mono
- Surface Area: 39,800 acres (62.2 square miles)

Basin Boundaries and Hydrology

This groundwater basin underlies Adobe Valley in the east central portion of Mono County. The basin is bounded by the Granite and Cowtrack Mountains on the west, the Glass Mountains on the south, the Benson Range on the east, and the Adobe Hills and Antelope Mountains on the north (DWR 1964; Strand 1967). Adobe Valley is internally drained into Black (dry) Lake, chiefly by Adobe Creek and Black Canyon Creek (DWR 1964; USGS 1994a; 1994b). Average annual precipitation is about 11 inches.

Hydrogeologic Information

Water Bearing Formations

The primary water-bearing unit is unconsolidated Quaternary age alluvium. This alluvial aquifer is unconfined with a saturated thickness that averages about 30 feet (Bader 1969). The depth to groundwater varies from about 9 to 32 feet. (Bader 1969; DWR 1964).

Restrictive Structures

Unknown.

Recharge Areas

The natural recharge of the basin is chiefly from infiltration of rainfall and surface water through alluvial fans near Glass Mountain (DWR 1964). A comparison of surface and groundwater chemistry indicates that Adobe Creek provides recharge to the northern end of the basin, whereas, Black Canyon Creek provides recharge to the southern part of the basin (DWR 1964).

Groundwater Level Trends

Groundwater appears to move eastward through the basin (Bader 1969).

Groundwater Storage

Groundwater Storage Capacity. Storage capacity of the basin as estimated to be about 320,000 af (DWR 1975).

Groundwater in Storage.

Groundwater Budget (Type C)

Water used for irrigation of pasture in 1950 was estimated to be about 6,700 af and other uses of water were considered negligible (DWR 1964).

Groundwater Quality

Characterization. Sodium bicarbonate type water is found in most wells in the basin. Groundwater in the northern end of basin and beneath dry lakes are reported to have higher concentrations of sodium which makes this water marginal for irrigation use, although it is suitable for domestic use (DWR 1964). Water from wells in the southern part of the basin is calcium-magnesium bicarbonate in character and is rated suitable for domestic and irrigation use (DWR 1964). TDS content ranges from 135 to 284 mg/L (DWR 1964).

Well production 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	Groundwater levels	
	Miscellaneous water quality	
	Title 22 water quality	

Basin Management

Groundwater management:

Water agencies

Public

Private

References Cited

- Bader, J.S. 1969. *Ground-Water Data as of 1967 South Lahontan Subregion California*. U.S. Department of the Interior Geological Survey, Water Resources Division, Open-File Report, 25p.
- California Department of Water Resources (DWR). 1964. *Ground Water Occurrence and Quality Lahontan Region*. p.101-105.
- _____. 1975. *California's Ground Water*. Bulletin 118, 135p.
- Strand, Rudolf. ed. 1967. *Geologic Map of California Mariposa Sheet*. Olaf P. Jenkins Edition. California Department of Conservation, Division of Mines and Geology. Scale 1:250,000.
- United States Geological Survey. 1994. *Benton Hot Springs Quadrangle, California*. 7.5 Minute Series Topographic Quadrangle. Scale 1:24,000.
- _____. 1994. *River Spring Quadrangle, California, Nevada*. 7.5 Minute Series Topographic Quadrangle. Scale 1:24,000.

Errata

Changes made to the basin description will be noted here.