Wildrose Canyon Groundwater Basin

- Groundwater Basin Number: 6-75
- County: Inyo
- Surface Area: 5,160 acres (8.1 square miles)

Basin Boundaries and Hydrology

The Wildrose Canyon Groundwater Basin underlies a broad, west-trending canyon in the southern Panamint Range of southern Inyo County. Elevation of the canyon floor ranges from about 4,400 feet above sea level at the west end to about 6,600 feet at the east end. The intermontane basin is bound by nonwater-bearing rocks of the southern Panamint Range. The crest of this range varies from about 6,000 to a maximum elevation of 11,049 feet at Telescope Peak. The basin lies within the Death Valley National Park (Jennings 1958).

Average annual precipitation ranges from about 6 to10 inches. Runoff from the surrounding mountains drains west through Wildrose Canyon into Panamint Valley (Jennings 1958; USGS 1988a).

Hydrogeologic Information

Water Bearing Formations

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

Recharge and Discharge Areas

Recharge of the basin is chiefly from the percolation of runoff through alluvial deposits at the base of the surrounding mountains and from the infiltration of precipitation that falls to the canyon floor. Groundwater moves west toward Panamint Valley. Discharge occurs as undeflow to Wildrose Wash (USGS 1988a, 1988b).

Groundwater Level Trends

A well drilled at the west end of the valley near the Wildrose Ranger Station had a depth to water of 24 feet prior to 1977 (Miller 1977). No other records of groundwater levels are available for the basin.

Groundwater Storage

Groundwater Storage Capacity. Unknown.

Groundwater in Storage. Unknown.

Groundwater Budget (C)

Groundwater budget information is not available.

Groundwater Quality

Characterization. A spring in the eastern part of the valley sampled in 1954 is calcium bicarbonate in character and had a TDS concentration of 158 mg/L. Wildrose Spring, in the west end of the valley, had a calcium sulfate-bicarbonate character and a TDS content of 1,004 mg/L in 1954 and 972 mg/L in 1956.

Impairments. The quality of the water in the eastern part of the valley is suitable for all beneficial uses, but, in the western portion of the valley, elevated levels of sulfate and TDS marginally impair the water.

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. 439 p.

Jennings, C.W. 1958. *Geologic Map of California: Death Valley Sheet.* Olaf P. Jenkins Edition. California Department of Conservation, Division of Mines and Geology. Scale 1: 250,000.

Miller, G. A., 1977. *Appraisal of the Water Resources of Death Valley, California-Nevada*. U. S. Geological Survey, Open-File Report 77-728. 68 p.

U.S. Geological Survey. 1988a. *Emigrant Pass, California*. 7.5' Quadrangle. Provisional Edition. Scale 1: 24,000.

U.S. Geological Survey. 1988a. *Jail Canyon, California*. 7.5' Quadrangle. Provisional Edition. Scale 1: 24,000.

Additional References

Hunt, C.B. , T.W. Robinson, W.A. Bowles, and A.L. Washburn. 1966. *Hydrologic Basin Death Valley California.* U.S. Geological Survey Professional Paper 494 – B. 137 p.

Mendenhall, W.C., 1909. *Some Desert Watering Places in Southeastern California and Southwestern Nevada.* U. S. Geological Survey, Water-Supply Paper 224. 98 p.

Errata

Changes made to the basin description will be noted here.