

Painters Flat Groundwater Basin

- Groundwater Basin Number: 6-99
- County: Lassen
- Surface Area: 6,400 acres (10 square miles)

Basin Boundaries and Hydrology

The Painters Flat Groundwater Basin is part of the Lahontan Drainage Basin and is located east of Madeline Plains extending into Nevada. The basin is bounded on all sides by Pliocene basalt (Lydon 1960). Annual precipitation is approximately 15-inches.

Hydrogeologic Information

Water-Bearing Formations

Limited information is available regarding water-bearing formations in the basin. DWR (1967) provides descriptions for basins in the region, specifically the Madeline Plains Groundwater Basin, which provides for a generalized discussion of basin deposits in Painters Flat. The primary water-bearing formations in the basin are Pleistocene lake deposits and Pliocene volcanic basalt.

Pleistocene Lake Deposits. The Pleistocene lake deposits consist of slightly-to-moderately consolidated clay, silt, and fine sand with interbedded lava flows. Yields may be sufficient for domestic and stock uses.

Pliocene Basalt. The basalt units consist of gray-black jointed and fractured basalt with some scoria zones (DWR 1965). The unit is highly permeable where it is fractured or jointed. Based on a single well log for the Painters Flat basin, the degree of basalt inter-bedding may be limited. The well boring encountered basalt from 5- to 20-feet and was terminated in basalt at 108-feet. The well yield was 5 gpm.

Hydrogeologic information was not available for the following:

Groundwater Level Trends
Groundwater Storage
Groundwater Budget
Groundwater Quality

Well Characteristics

	Well yields (gal/min)
Municipal/Irrigation	5 (1 Well Completion Report)
	Total depths (ft)
Domestic	110 (1 Well Completion Report)
Municipal/Irrigation	

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
	Groundwater levels	NKD
	Miscellaneous water quality	NKD

NKD – No known data

Basin Management

Groundwater management:	No known groundwater management plans, groundwater ordinances, or basin adjudications.
Water agencies	
Public	None
Private	None

Selected References

- Lydon PA, Gay TE, Jennings CW. 1960. Geologic Atlas of California [Westwood Sheet]. California Division of Mines and Geology.
- California Department of Water Resources (DWR). 1963. Bulletin No. 98, Northeastern Counties Groundwater Investigation, Volume 1, Text, California Department of Water Resources: 224.
- California Department of Water Resources (DWR). 1963. Bulletin No. 98, Northeastern Counties Investigation, Volume 2, Plates, California Department of Water Resources.
- California Department of Water Resources (DWR). 1965. Bulletin No. 98, Northeastern Counties Ground Water Investigation, Appendix C: Geology, California Department of Water Resources, Northern District.

Bibliography

- Bailey EH. 1966. Geology of Northern California. California Division of Mines and Geology. Bulletin 190.
- California Department of Water Resources. 1975. California's Ground Water. California Department of Water Resources. Bulletin 118.
- California Department of Water Resources. 1980. Ground Water Basins in California. California Department of Water Resources. Bulletin 118-80.
- Planert M, Williams JS. 1995. Ground Water Atlas of the United States, Segment 1, California, Nevada. USGS. HA-730-B.

Errata

Changes made to the basin description will be noted here.