

## Meadow Valley Groundwater Basin

- Groundwater Basin Number: 5-95
- County: Plumas
- Surface Area: 5,730 acres (9 square miles)

### Basin Boundaries and Hydrology

The Meadow Valley Groundwater Basin lies within the Melones Fault Zone of the Sierra Nevada Mountain Range. The basin is bounded on the west by Mesozoic ultrabasic intrusive rocks, to the north and south by Pliocene pyroclastic rocks, and to the east by ultrabasic intrusive rocks and Paleozoic marine sediments (Burnett 1962). Annual precipitation ranges from 47- to 53-inches, increasing to the southwest.

### Hydrogeologic Information

Hydrogeologic information was not available for the following:

***Water-Bearing Formations***

***Groundwater Level Trends***

***Groundwater Storage***

### Groundwater Budget (Type B)

The estimate of groundwater extraction for the Meadow Valley Basin is based on a 1997 survey conducted by the California Department of Water Resources. The survey included landuse and sources of water. Groundwater extraction for municipal and industrial uses is estimated to be 27 acre-feet. Deep percolation of applied water is estimated to be 60 acre-feet.

### Groundwater Quality

#### Water Quality in Public Supply Wells

Constituent Group <sup>1</sup>	Number of wells sampled <sup>2</sup>	Number of wells with a concentration above an MCL <sup>3</sup>
Inorganics – Primary	1	0
Radiological	1	0
Nitrates	1	0
Pesticides	0	0
VOCs and SOCs	0	0
Inorganics – Secondary	1	0

<sup>1</sup> A description of each member in the constituent groups and a generalized discussion of the relevance of these groups are included in *California's Groundwater – Bulletin 118* by DWR (2003).

<sup>2</sup> Represents distinct number of wells sampled as required under DHS Title 22 program from 1994 through 2000.

<sup>3</sup> Each well reported with a concentration above an MCL was confirmed with a second detection above an MCL. This information is intended as an indicator of the types of activities that cause contamination in a given basin. It represents the water quality at the sample location. It does not indicate the water quality delivered to the

consumer. More detailed drinking water quality information can be obtained from the local water purveyor and its annual Consumer Confidence Report.

## Well Characteristics

Well yields (gal/min)		
Municipal/Irrigation	NKD	
Total depths (ft)		
Domestic	Range: 50 – 310	Average: 125 (151 Well Completion Reports)
Municipal/Irrigation	NKD	

NKD: No Known Data

## Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
Department of Health Services	Groundwater levels	NKD
	Miscellaneous water quality	NKD
	Miscellaneous water quality	1
	Miscellaneous water quality	

## Basin Management

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

## Selected Reference

Burnett J L, Jennings CW. 1962. Geologic Map of California [Chico Sheet], California Division of Mines and Geology.

## 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.
- Dickinson WR, Ingersoll RV, Grahm SA. 1979. Paleogene Sediment Dispersal and Paleotectonics in Northern California. Geological Society of America Bulletin 90:1458-1528.
- Planert M, Williams JS. 1995. Ground Water Atlas of the United States, Segment 1, California, Nevada. USGS. HA-730-B.

Saucedo GJ, Wagner DL. 1992. Geologic Map of the Chico Quadrangle, California. California Division of Mines and Geology.

## **Errata**

Changes made to the basin description will be noted here.