

American Valley Groundwater Basin

- Groundwater Basin Number: 5-10
- County: Plumas
- Surface Area: 6,800 acres (11 square miles)

Basin Boundaries and Hydrology

The American Valley Groundwater Basin is bounded to the southwest and northeast by a northwest trending fault system. The basin is bounded to the northeast by Paleozoic metavolcanic rocks and is bounded on all other sides by Paleozoic marine sedimentary and meta-sedimentary rocks of the Sierra Nevada Mountains. Spanish Creek drains the valley and is tributary to the North Fork Feather River to the northwest. Annual precipitation ranges from 43- to 49-inches, increasing to the southwest.

Hydrogeologic Information

Hydrogeologic information was not available for the following:

Water-Bearing Formations

Groundwater Level Trends

Groundwater Storage

DWR (1960) estimates storage capacity to be 50,000 acre-feet for a saturated depth interval of 10 to 210-feet.

Groundwater Budget (Type B)

The estimate of groundwater extraction for the American 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 1,400 acre-feet. Deep percolation of applied water is estimated to be 800 acre-feet.

Groundwater Quality

Water Quality in Public Supply Wells

Constituent Group ¹	Number of wells sampled ²	Number of wells with a concentration above an MCL ³
Inorganics – Primary	29	0
Radiological	14	0
Nitrates	34	0
Pesticides	12	0
VOCs and SVOCs	13	1
Inorganics – Secondary	29	7

¹ 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).

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

³ 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	40 (2 Well Completion Reports)	
	Total depths (ft)	
Domestic	Range: 20 – 561	Average: 127 (286 Well Completion Reports)
Municipal/Irrigation	Range: 44 – 250	Average: 125 (15 Well Completion Reports)

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
	Groundwater levels	NKD
DWR	Miscellaneous water quality	4 wells bi-yearly
Department of Health Services	Miscellaneous water quality	11

NKD – No Known Data

Basin Management

Groundwater management:	No known groundwater management plans, groundwater ordinances, or basin adjudications
Water agencies	
Public	Quincy Community SD, East Quincy Services District.
Private	None

Selected References

California Department of Water Resources. 1960. Northeastern Counties Investigation. California Department of Water Resources. Bulletin 58.

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.

Hill M. 1975. Geology of the Sierra Nevada: University of California Press. 232 p.
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.