

## Jess Valley Groundwater Basin

- Groundwater Basin Number: 5-3
- County: Modoc
- Surface Area: 6,700 acres (10 square miles)

### Basin Boundaries and Hydrology

The Jess Valley Groundwater Basin is located in southeastern Modoc County and consists of Quaternary alluvium and lake deposits. The west side of the basin is bounded by Miocene basalt and, to a much lesser extent, Tertiary pyroclastic rocks. The basin is bounded on all other sides by Tertiary pyroclastic rocks. Basin drainage is to the west. Annual precipitation is approximately 17 inches.

### 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 Jess Valley Basin is based on a 1997 survey conducted by the California Department of Water Resources. The survey included land use and sources of water. Groundwater extraction for municipal and industrial uses is estimated to be 2 acre-feet. Deep percolation of applied water is estimated to be 830 acre-feet.

#### ***Groundwater Quality***

### Well Characteristics

	Well yields (gal/min)
Municipal/Irrigation	3000 (1 Well Completion Report)
	<b>Total depths (ft)</b>
Domestic	NKD
Municipal/Irrigation	500 (1 Well Completion Report)

NKD – No known data

### 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:	Modoc County adopted a groundwater management Ordinance in 2000.
Water agencies	
Public	None
Private	None

---

## Selected References

- California Department of Water Resources. 1963. Northeastern Counties Groundwater Investigation, Volume 1, Text. California Department of Water Resources. Bulletin 98. 224 p.
- California Department of Water Resources. 1963. Northeastern Counties Investigation, Volume 2, Plates. California Department of Water Resources. Bulletin 98.
- California Department of Water Resources. 1965. Northeastern Counties Ground Water Investigation, Appendix C, Geology. California Department of Water Resources, Northern District. Bulletin 98.
- Gay TE, Jr., Aune QA. 1968. Geologic Map of California [Alturas Sheet]. California Division of Mines and Geology. Atlas.

## 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.
- Thompson TH, Chappell R. 1983. Maps Showing Distribution of Dissolved Solids and Dominant Chemical Type in Ground Water, Basin and Range Province, Northern California. USGS. WRI 83-4115-B.

## Errata

Changes made to the basin description will be noted here.