Bitterwater Valley Groundwater Basin

- Groundwater Basin Number: 3-30
- County: San Benito
- Surface Area: 32,200 acres (50 square miles)

Basin Boundaries and Hydrology

Bitterwater Valley Groundwater Basin is comprised of several valley areas along the San Andres Rift Zone and a somewhat upland area west of the Rift Zone within Coast Range Mountains of San Benito County. The basin is approximately 18 miles long and has a maximum width of six miles. The elevation ranges from about 800 to 2,000 feet. The geologic materials in the valley areas are mapped as Quaternary alluvium and the upland areas are Plio-Pleistocene nonmarine rocks. The Bear Valley Fault and the San Andres Fault Zone bound the basin on the north and east. To the south and west, middle or lower Pliocene marine rocks bound the basin (Jennings and Strand 1958). No information regarding groundwater occurrence or movement within the basin was found, therefore basin boundary confidence is considered low. The Bitterwater Valley portion, located in the southern end, is drained by Bitterwater Creek to the southeast and then southwest to Lewis Creek and then to San Lorenzo Creek to the Salinas River. The central portion of the basin, known as Little Rabbit Valley, is drained to the northwest and then to the south through Topo Valley to the Salinas River. The north end on the basin displays internal drainage into Dry Lake. Average precipitation values range from 17 to 19 inches.

Hydrogeologic Information

Water Bearing Formations

No specific published information on the water bearing deposits was found. San Joaquin District well completion report files contain logs for nine wells in the basin. These wells range in depth form 67 to 390 feet. They are reported to encounter alluvial material as well as consolidated rocks. Sandstone is reported at depths as shallow as 10 feet and granite is reported in one well at 19 feet. The nature of the aquifers is not clear.

Restrictive Structures

It is very likely that the San Andres Fault zone has a significant effect on the occurrence and movement of groundwater in the basin but no data is available to illustrate this.

Groundwater Level Trends

No data was found regarding water level trends. Well completion report files for wells drilled between 1955 and 1997 reported groundwater levels ranging from five to 150 feet.

Groundwater Storage

No published information on groundwater storage was found.

Groundwater Budget (TypeC)

There is no information to provide an estimate of this basin's budget.

Groundwater Quality

No groundwater quality information was found in the published literature or in DWR files.

Well Production characteristics

	Well yields (gal/min)	
Municipal/Irrigation		
	Total depths (ft)	
Domestic	Range: 67 - 390	Average: 187 (DWR well completion reports)
Municipal/Irrigation		

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
	Groundwater levels	NKD
	Miscellaneous water quality	NKD
Department of Health Services and cooperators	Title 22 water quality	0

NKD: No Known Data

Basin Management

Groundwater management:

Water agencies

Public	None
Private	None

References Cited

California Department of Water Resources (DWR), San Joaquin District. Well completion report files.

Jennings, Charles W. and Rudolph G. Strand (compilers). 1958. Santa Cruz Sheet of *Geologic Map of California.* California Division of Mines and Geology (CDMG). Scale 1:250,000.

Errata

Changes made to the basin description will be noted here.