San Benito River Valley Groundwater Basin

• Groundwater Basin Number: 3-28

• County: San Benito

• Surface Area: 24,200 acres (38 square miles)

Basin Boundaries and Hydrology

The San Benito River Valley Groundwater Basin occupies the middle reaches of the San Benito River Valley within the San Andres Fault Rift Zone and a dissected upland area of Middle Miocene nonmarine rocks west of the San Andres Fault. The elevation ranges from approximately 600 feet to nearly 2,000 feet. The basin is bounded on the west and southwest by granitic and volcanic rocks along the Pinnacles and Chalone Creek Faults. The primary rock types south and east of the basin are Middle and or lower Pliocene marine rocks (Jennings and Strand 1958). While the basin is clearly bounded by fault contacts, there is no information regarding groundwater occurrence or movement within the basin or across the boundaries, therefore the basin boundary confidence is listed as medium. The basin is drained primarily to the northwest by the San Benito River and its tributaries. However, approximately the southern one fourth of the basin is drained southward and westward to the Salinas Valley by Chalone Creek. Average precipitation is 17 inches.

Hydrogeologic Information

Water Bearing Formations

No specific published information on the water bearing deposits was found. A review of San Joaquin District well completion report files found 33 well reports in the basin. Depth of these wells ranged from 36 to 600 feet and encountered alluvial materials as well as consolidated rock formations. Well yields ranged from a dry hole to 2,000 gpm. The highest yielding wells, one at 2,000 gpm and one at 1,100 gpm, are completed in alluvial material near the San Benito River.

Restrictive Structures

It is very likely that the San Andres Fault has a significant effect on the occurrence and movement of groundwater in the basin but no date 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 1989 reported groundwater levels ranging from four to 59 feet.

Groundwater Storage

No published information on groundwater storage was found.

Groundwater Budget (Type C)

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. Data in DWR files was limited to one well sampled once in 1961. The EC for this well was 1,610 μ mhos/cm. No additional quality characterization is possible at this time.

Well Production characteristics

Well yields (gal/min)			
Municipal/Irrigation	Range: 4 – 2,000		
Total depths (ft)			
Domestic	Range: 36-160		
Municipal/Irrigation	Range: 46-600		

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	3 (may be outside of the basin)

Basin Management

Groundwater management:

Water agencies

Public

Private

None

References Cited

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

_____. Water Quality Records.

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.