Carrizo Plain Groundwater Basin

- Groundwater Basin Number: 3-19
- County: San Luis Obispo
- Surface Area: 173,00 acres (270 square miles)

Basin Boundaries and Hydrology

The Carrizo Plain Groundwater Basin underlies a narrow northwest trending valley that lies between the Temblor Range on the east and the Caliente Range and San Juan Hills on the west. The valley has internal drainage to Soda Lake. The San Andreas fault zone passes through the valley. Average annual precipitation ranges from 7 to 9 inches.

Hydrogeologic Information

Water Bearing Formations

Groundwater is found in alluvium and the Paso Robles and Morales Formations.

Alluvium. Upper Pleistocene to Holocene alluvium consists of unconsolidated to loosely consolidated sands, gravels, and silts with a few beds of compacted clays.

Paso Robles Formation. The Pleistocene age Paso Robles Formation consists of poorly sorted, mostly loosely consolidated gravels, sands, and silts. The combined thickness of these deposits is more than 3,000 feet in the eastern portion of the basin along the San Andreas fault and decreases toward the west.

Morales Formation. The Upper Pliocene Morales Formation consists of sands, gravels, and silts, which generally are more stratified and compacted than in the overlying Paso Robles Formation.

Recharge Areas

Recharge to the basin is largely by percolation of stream flow and infiltration of rainfall to the valley floor (DWR 1958).

Groundwater Level Trends

No information is available.

Groundwater Storage

Groundwater Storage Capacity. The total storage capacity is estimated at 400,000 af (DWR 1975)

Groundwater in Storage. No information is available.

Groundwater Budget (Type C)

No information is available.

Groundwater Quality

Characterization. Analyses of groundwater from 79 wells in this basin done during 1957 through 1985 show TDS content ranging from 161 to 94,750 mg/L. A highly mineralized groundwater zone is found in the lower part of the alluvium and upper part of the Paso Robles Formation where they underlie Soda Lake. Water in a deeper zone in the Paso Robles Formation is of higher quality and confined in the vicinity of Soda Lake. Groundwater in the Morales Formation is likely to be brackish (Kemnitzer 1967).

Impairments. No information is available.

Well Characteristics

	Well yields (gal/min)	
Municipal/Irrigation	Range: to 1,100 gal/min (DWR 1958)\	Average:
	Range: 10 to 500 gal/min (5 Well Completion Reports)	Average:
	Total depths (ft)	
Domestic	Range:	Average:
Municipal/Irrigation	Range: to 600 ft	Average: 200 ft (DWR 1958)

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
	Groundwater levels	
	Miscellaneous water quality	
Department of Health Services and cooperators	Title 22 water quality	1

Basin Management

Groundwater management:

Water agencies

Public	San Luis Obispo County Department of Public Works
Private	

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Errata

Changes made to the basin description will be noted here.