Chorro Valley Groundwater Basin

• Groundwater Basin Number: 3-42

• County: San Luis Obispo

• Surface Area: 3,200 acres (5.0 square miles)

Basin Boundaries and Hydrology

The Chorro Valley Groundwater Basin underlies Chorro Valley in west-central San Luis Obispo County. The basin is bounded on the west by the Pacific Ocean and on all other sides by impermeable Franciscan Group and Miocene intrusive rocks. Chorro Creek drains this valley into Morro Bay. Precipitation ranges from 15 to 19 inches.

Hydrogeologic Information

Water Bearing Formations

Groundwater is found in Holocene and late Pleistocene age alluvium, which consists of sand, gravel, and clay. The alluvium reaches a thickness of 70 feet near the mouth of Chorro Creek (DWR 1975). The specific yield for the basin is estimated at 12 percent (DWR 1958). Groundwater is unconfined (DWR 1975).

Recharge Areas

Recharge to the basin is by percolation of stream flow, precipitation, and excess irrigation flow (DWR 1958).

Groundwater Level Trends

Groundwater moves generally westward (DWR 1958).

Groundwater Storage

Groundwater Storage Capacity. The total storage capacity is estimated at 9,600 af (DWR 1975).

Groundwater in Storage. Unknown.

Groundwater Budget (Type C)

No information available.

Groundwater Quality

Characterization. Analyses of groundwater from 31 wells in this basin taken during 1957 through 1994 show TDS content ranging from 60 to 3,606 mg/L. Analyses of water from 5 public supply wells show an average TDS content of 656 mg/L, with a range of 520 to 690 mg/L.

Impairments. Chlorides were found to exceed 100 mg/L during 1953 to 1955 (DWR 1975). During a dry period, 1959 through 1960, chloride concentrations reached levels of 2,000 to 2,500 mg/L (DWR 1975).

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	6	0
Radiological	4	0
Nitrates	6	4
Pesticides	4	0
VOCs and SOCs	4	0
Inorganics – Secondary	6	2

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).

Well Production characteristics

Well yields (gal/min)				
Municipal/Irrigation	Range: to 700 gal/min	Average: 200 gal/min (DWR 1958)		
Total depths (ft)				
Domestic	Range:	Average:		
Municipal/Irrigation	Range: to 150 ft	Average: 70 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	6

Basin Management

Groundwater management:	
Water agencies	
Public	City of Morro Bay, San Luis Obispo County- Department of Public Works
Private	,

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.

References Cited

California Department of Water Resources (DWR). 1958. San Luis Obispo County Investigation. Bulletin 18. 288 p.

_____. 1975. Sea-Water Intrusion in California: Inventory of Coastal Ground Water Basins. Bulletin 63-5.

Additional References

California Department of Water Resources (DWR), Southern District. 1981. *Aquifer Tests Conducted at the City of Morro Bay Wells in Lower Chorro Valley, May 12-14, 1981.* 26 p.

John Carollo Engineers. 1973. Report on Water Supply, City of Morro Bay, California.

Errata

Changes made to the basin description will be noted here.