

Bridgeport Valley Groundwater Basin

- Groundwater Basin Number: 6-8
- County: Mono
- Surface Area: 32,500 acres (51 square miles)

Basin Boundaries and Hydrology

Bridgeport Valley is located at the eastern base of the Sierra Nevada just south of the California - Nevada State Line and north of Mono Lake in northern Mono County. Bridgeport Valley is about 6,500 feet in elevation and fairly flat. The valley lies generally in a north-south direction and terminates at its northerly end near Bridgeport Reservoir. The East Walker River flows along the eastern side of Bridgeport Valley and is the confluence of many streams draining the eastern slopes of the Sierra Nevada. The East Walker River is the only stream exiting the valley and eventually drains into Walker Lake, Nevada. Robinson and Swauger Creeks are other important tributaries in the watershed.

Average annual precipitation in the basin ranges from 12 inches to 20 inches, increasing from valley floor to the upland areas.

Hydrogeologic Information

Water Bearing Formations

The primary water-bearing formations are recent valley sediments. Groundwater in Bridgeport Valley occurs in unconfined and artesian zones. (DWR 1960).

Recent Valley Sedimentary Deposits. Alluvial valley fill consisting of unconsolidated brown or bluish sandy silty gravel with occasional boulders. This material, originally derived from glaciation of the mountainous area to the southwest, was transported in immense quantities by streams flowing from the glacial areas and deposited in the valley as "glacial outwash". These deposits occur extensively throughout the valley but their thickness is unknown. However, it is assumed that similar materials extend to a depth of at least several hundred feet. Average specific yields are estimated to range from 13 to 26%.

Due to lack of borehole data, descriptions of material underlying the glacial outwash are not available.

Recharge Areas

Groundwater in Bridgeport Valley is recharged in the southern portion by seepage principally from streams and by the infiltration of unconsumed irrigation water, snowmelt and rainfall.

Groundwater Level Trends

No published data was found for the Bridgeport Valley Basin.

Groundwater Storage

Shallow groundwater levels, within a few feet of the surface, are common in the Bridgeport Valley groundwater basin. No published data was found for the Bridgeport Valley Basin.

Groundwater Budget (Type C)

Due to lack of groundwater budget data, inflows, including natural, applied, and artificial recharge and outflows including urban and agricultural extraction have not been included.

Groundwater Quality

Characterization. No published data was found for the Bridgeport Valley Basin.

Impairments. No published data was found for the Bridgeport Valley Basin.

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	3	0
Radiological	2	0
Nitrates	2	0
Pesticides	2	0
VOCs and VSOCs	2	0
Inorganics – Secondary	3	1

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).

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.

Well production characteristics

Well yields (gal/min)		
Municipal/Irrigation	Average: Unknown	
Total depths (ft)		
Domestic	Range: 65–215	Average: 124 (25 Well Completion Reports)
Municipal/Irrigation	Range: 175–330	Average: 253 (2 Well Completion Reports)

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
Department of Health Services and cooperators	Groundwater levels	No wells monitored at this time
	Miscellaneous water quality	No wells monitored at this time
	Title 22 water quality	No wells monitored at this time

Basin Management

Groundwater management:

Water agencies

Public

Bridgeport Public Works

Private

References Cited

California Department of Water Resources. 1960. Report on Bridgeport Valley Ground-Water Investigation, Sacramento, Calif

Additional References

Jennings, O.P. and Koenig, J.B. 1963. Geologic map of California: California Division of Mines and Geology, Geologic Map Series Walker Lake Sheet, scale 1:250,000.

California Department of Water Resources. 1991. Walker River Atlas: Sacramento, Calif.

California Department of Water Resources. 1964. Bulletin 64, West Walker River Investigation: Sacramento, Calif.

Errata

Changes made to the basin description will be noted here.