



Water-Data Report 2007

390509119103401 Local number 108 N14 E25 10CCDA1

Basin and Range basin-fill aquifers
Undefined Aquifer
Lyon County, NV

LOCATION.--Lat 39°05'09", long 119°10'34" referenced to North American Datum of 1927, in SE ¼ SW ¼ SW ¼ sec.10, T.14 N., R.25 E., Lyon County, NV, Hydrologic Unit 16050303.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Depth 460 ft. Upper casing diameter 16. in, top of first opening 448 ft, bottom of last opening 460 ft.

DATUM.--Land-surface datum is 4332 ft above National Geodetic Vertical Datum of 1929. Measuring point: 3/4-in port north side pump base beside airline, 2.0 ft above land-surface datum, Feb. 1, 1983, to present.

REMARKS.--Walker Lake is a perennial, natural terminal lake that became at-risk because of upstream agricultural diversions. Between 1882 and 1994, upstream diversions caused Walker Lake to decline about 140 feet and the total dissolved solids (TDS) concentrations to increase from 2,500 mg/L to 13,300 mg/L. The Lahontan cutthroat trout (LCT), a threatened species that is native to Walker Lake, has adapted to the high TDS of terminal basins. However, diversions have lowered lake levels and increased TDS to concentrations that threaten the survival of the LCT. The objectives of this project are to develop (1) an improved water budget for Walker Lake and (2) the capability to predict how changes in irrigation practices in and below Mason Valley will affect flows in the lower Walker River so alternatives for supplementing flows can be evaluated.

WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM

[Measurement method: S, steel tape. Water-level status: V, foreign substance was present on the surface of the water.]

Date	Water level	Measurement method	Water-level status
Feb 13, 2007	13.53	S	V