Water-Data Report 2007

385035119240001 Local number 107 N11 E23 03CBBC1

Basin and Range basin-fill aquifers
Undefined Aquifer

Lyon County, NV

LOCATION.--Lat 38°50′35″, long 119°24′00″ referenced to North American Datum of 1927, in NW ¼ NW ¼ SW ¼ sec.3, T.11 N., R.23 E., Lyon County, NV, Hydrologic Unit 16050302.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Depth 580 ft. Upper casing diameter 16. in, top of first opening 165 ft, bottom of last opening 580 ft.

DATUM.--Land-surface datum is 4881 ft above National Geodetic Vertical Datum of 1929. Measuring point: Invert of 1.25-in pipe at base near pump, 0.0 ft above land-surface datum, June 2, 1976, 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; T, electric tape. Water-level status: - - , static.]

Date	Water level	Measurement method	Water-level status	Date	Water level	Measurement method	Water-level status
Nov 21, 2006	160.23	S	--	Feb 26, 2007	134.64	T	--

Highest: 134.64 Feb 26, 2007

Lowest: 160.23 Nov 21, 2006