



Water-Data Report NV-2005

385809119084401 Local number 108 N13 E25 23DDDC1

Basin and Range basin-fill aquifers

Lyon County, NV

LOCATION.--Lat 38°58'09", long 119°08'44" referenced to North American Datum of 1927, in SE ¼ SE ¼ SE ¼ sec.23, T.13 N., R.25 E., Lyon County, Hydrologic Unit 16050303.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Depth 308 ft. Upper casing diameter 14 in; top of first opening 100 ft, bottom of last opening 308 ft.

WELL USE.--Withdrawal well.

DATUM.--Land-surface datum is 4394 ft above National Geodetic Vertical Datum of 1929. Measuring point: Airline port off concrete base, 0.7 ft above land-surface datum.

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: T, electric tape; S, steel tape. Water-level status: - - , static.]

Date	Water level	Measurement method	Water level status
Nov 15, 2004	25.25	T	--
Mar 2, 2005	22.36	S	--

Highest: 22.36 Mar 02, 2005

Lowest: 25.25 Nov 15, 2004