



Water-Data Report 2006

**385031118462801 110B N11 E29 05CBD 1**

Walker Basin  
Walker Subbasin

LOCATION.--Lat 38°50'30.8", long 118°46'28.04" referenced to North American Datum of 1983, in SE ¼ NW ¼ SW ¼ sec.6, T.11 W., R.29 E., Mineral County, NV, Hydrologic Unit 16050303.

**WATER-QUALITY RECORDS**

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-QUALITY DATA  
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 1 of 2

[Remark codes: <, less than; E, estimated.]

Date	Time	Sample type	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bromide water, fltrd, mg/L (71870)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)
Aug 10...	1245	Environmental	3.07	2.37	11.8	226	368	.17	58.1	3.29	31.0	98.6

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

Part 2 of 2

[Remark codes: <, less than; E, estimated.]

Date	Residue on evap. at 180degC wat flt mg/L (70300)	Boron, water, fltrd, ug/L (01020)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Stront- ium, water, fltrd, ug/L (01080)	Deu- terium/ Protium ratio, water, unfltrd per mil (82082)	Sr-87/ Sr-86 ratio, water, fltrd, per mil (75978)	U-234, water, fltrd, pCi/L (22610)	U-235, water, fltrd, pCi/L (22620)	U-238, water, fltrd, pCi/L (22603)	B11/B10 ratio, water, fltrd, per mil (62648)	O-18 / O-16 ratio, water, unfltrd per mil (82085)	S34/S32 in sulfate water, fltrd, per mil (49932)
Aug 10...	651	1,460	<6	E.5	190	-113	.70622	5.8	.32	4.21	4.02	-14.27	10.91