



Water-Data Report 2007

06064500 LAKE HELENA NEAR HELENA, MT

Upper Missouri Basin

LOCATION.--Lat 46°45'58", long 111°53'10" referenced to North American Datum of 1927, in SE ¼ SW ¼ sec.29, T.12 N., R.2 W., Lewis and Clark County, MT, Hydrologic Unit 10030101, at Hauser Dam on Missouri River, 13 mi northeast of Helena, and at river mile 2,239.1.

DRAINAGE AREA.--610 mi², above dam and control works on Prickly Pear Creek.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1945 to current year. April to July 1953 scattered daily elevation and contents, published in Water Supply Paper (WSP) 1320-B. May to June 1964 daily elevations and contents, published in WSP 1840-B. Records of daily elevations are in files of the USGS Water Science Center located in Helena, Montana. Nonrecording gage at Hauser Dam read hourly.

GAGE.--Elevation of gage is at sea level (levels by the Montana Power Company).

COOPERATION.--Records furnished by PPL EnergyPlus, LLC.

REMARKS.--Gage heights collected at Hauser Dam are effective on Lake Helena at control dam. Prior to April 1945, contents of Lake Helena were included with records of Hauser Lake. After that date, a dam and control works has separated the two lakes to allow independent regulation of Lake Helena, if needed. Elevations are referenced to the National Geodetic Vertical Datum of 1929. Usable capacity is 12,710 acre-ft, between elevation 3,624.00 ft, bottom of control works, and 3,635.00 ft, top of flashboards. The lake has no dead storage. Figures given herein represent usable contents. Water is used for recreation, wildlife, and power production through Hauser Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 12,040 acre-ft, Mar. 14, 2003, elevation, 3,635.70 ft; no storage Mar. 29 to Apr. 7, 1958, Feb. 12, 20, 1962, May 4-10, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 11,130 acre-ft, Nov. 9, elevation, 3,635.30 ft; minimum observed, 10,540 acre-ft, Aug. 30, elevation, 3,635.04.

**MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS,
SEPTEMBER 2006 TO SEPTEMBER 2007**

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)
September 30	3,635.25	11,020	--
October 31	3,635.22	10,950	-70
November 30	3,635.22	10,950	0
December 31	3,635.24	11,000	+50
Calendar Year 2006	--	--	+100
January 31	3,635.17	10,840	-160
February 28	3,635.20	10,900	+60
March 31	3,635.22	10,950	+50
April 30	3,635.23	10,970	+20
May 31	3,635.27	11,060	+90
June 30	3,635.18	10,860	-200
July 31	3,635.23	10,970	+110
August 31	3,635.06	10,590	-380
September 30	3,635.22	10,950	+360
Water Year 2007	--	--	-70