



Water-Data Report 2006

06065000 HAUSER LAKE NEAR HELENA, MT

Upper Missouri Basin
Upper Missouri Subbasin

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, Hydrologic Unit 10030101, at Hauser Dam on Missouri River, 1.6 mi downstream from Prickly Pear Creek, 13 mi northeast of Helena, and at river mile 2,226.4.

DRAINAGE AREA.--16,876 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1936 to current year. Records prior to October 1939, published only in Water Supply Paper (WSP) 1309. April to July 1953 scattered daily elevations and contents, published in WSP 1320-B. May to June 1964 daily elevations and contents, published in WSP 1840-B. Monthend contents prior to May 1945 include contents of Lake Helena, excluded thereafter. Records of daily elevations are in files of the USGS Water Science Center located in Helena, Montana. Nonrecording gage read hourly.

REVISED RECORDS.--WSP 1729: 1949-57.

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

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

REMARKS.--Reservoir is formed by concrete dam completed in 1907; separated from Lake Helena in April 1945. Elevations are referenced to the National Geodetic Vertical Datum of 1929. Usable contents is 61,870 acre-ft, between elevation 3,617.00 ft, bottom of tunnel, and 3,635.00 ft top of flashboards. Dead storage is 46,810 acre-ft below elevation 3,617.00 ft. Prior to Nov. 28, 1949, usable capacity was 52,090 acre-ft at elevation 3,635.00 ft, decrease caused by construction of Canyon Ferry Dam in backwater of Hauser Dam. Storage is not normally drawn below 3,621.00 ft, 8,870 acre-ft. Capacity above elevation 3625.0 updated in 1990. Figures given herein represent usable contents. Water is used for power and recreation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 66,040 acre-ft, Mar. 14, 2003, elevation, 3,635.70 ft; no storage Jan. 31, Feb. 29, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 63,780 acre-ft, Apr. 7-9, June 11, and June 13, elevation, 3,635.32 ft; minimum observed, 55,890 acre-ft, Oct. 1, elevation, 3,633.90 ft.

**MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS,
SEPTEMBER 2005 TO SEPTEMBER 2006**

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)
September 30	3,633.40	54,240	--
October 31	3,635.20	63,060	+8,820
November 30	3,635.10	62,460	-600
December 31	3,635.20	63,060	+600
Calendar Year 2005	--	--	0
January 31	3,635.00	61,870	-1,190
February 28	3,635.10	62,460	+590
March 31	3,635.20	63,060	+600
April 30	3,635.24	63,300	+240
May 31	3,635.18	62,940	-360
June 30	3,635.21	63,120	+180
July 31	3,635.17	62,880	-240
August 31	3,635.13	62,640	-240
September 30	3,635.25	63,360	+720
Water Year 2006	--	--	+9,120