



Water-Data Report 2007

06040500 ENNIS LAKE NEAR MCALLISTER, MT

Missouri Headwaters Basin
Madison Subbasin

LOCATION.--Lat 45°28'12", long 111°38'15" referenced to North American Datum of 1927, in NW ¼ SW ¼ sec.20, T.4 S., R.1 E., Madison County, MT, Hydrologic Unit 10020007, at Madison Dam on Madison River, 5 mi northeast of McAllister, and at river mile 40.3.

DRAINAGE AREA.--2,181 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1936 to September 1975 (total contents), October 1975 to current year (usable contents). Records prior to October 1939, published only in Water Supply Paper 1309. Prior to 1949, published as Madison Reservoir near McAllister. Records of daily elevations are in files of the USGS Water Science Center located in Helena, Montana.

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

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

REMARKS.--Reservoir is formed by timber crib dam completed in 1900. Elevations are referenced to the National Geodetic Vertical Datum of 1929. Usable capacity is 41,020 acre-ft between elevation 4,826.5 ft, bottom of penstock, and 4,841.5 ft, top of flashboard. Dead storage is 1,040 acre-ft below elevation 4,826.5 ft. Storage is not normally drawn below 4,831.0 ft, 6,810 acre-ft. Figures given herein represent usable contents. Water is used for power and recreation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 40,830 acre-ft, June 20, 1968, elevation, 4,841.45 ft; minimum observed, 2,600 acre-ft, Mar. 31, 1937, elevation, 4,828.8 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 38,080 acre-ft, July 14-16, elevation, 4,841.00 ft; minimum observed, 27,450 acre-ft, Nov. 30, Dec. 1, and Feb. 3, elevation, 4,838.10 ft.

**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	4,840.20	35,070	--
October 31	4,840.40	32,120	-2,950
November 30	4,838.10	27,450	-4,670
December 31	4,838.30	28,160	+710
Calendar Year 2006	--	--	-1,430
January 31	4,838.70	29,590	+1,430
February 28	4,838.30	28,160	-1,430
March 31	4,838.60	29,230	+1,070
April 30	4,839.40	32,120	+2,890
May 31	4,840.50	36,200	+4,080
June 30	4,840.20	35,070	-1,130
July 31	4,840.10	34,690	-380
August 31	4,840.40	35,820	+1,130
September 30	4,840.20	35,070	-750
Water Year 2007	--	--	0