



Water-Data Report 2008

06058500 CANYON FERRY LAKE NEAR HELENA, MT

Upper Missouri Basin
Upper Missouri Subbasin

LOCATION.--Lat 46°38'57", long 111°43'39" referenced to North American Datum of 1927, in SE ¼ SE ¼ sec.4, T.10 N., R.1 W., Lewis and Clark County, MT, Hydrologic Unit 10030101, in block 17 of Canyon Ferry Dam, 15 mi east of Helena, and at river mile 2,252.8.

DRAINAGE AREA.--15,904 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1953 to current year (monthend contents only). Prior to October 1981, published as Canyon Ferry Reservoir near Helena. Records of monthend contents in Lake Sewell, submerged by present reservoir Apr. 8, 1953, available January 1936 to March 1953. Scattered daily elevations and contents for April to July 1953, published in Water Supply Paper (WSP) 1320-B. Daily elevations and contents for May to June 1964, published in WSP 1840-B. Daily elevations and contents on file in Helena district office.

REVISED RECORDS.-- WSP 1559: Drainage area.

GAGE.--Water-stage recorder in powerhouse control room. Elevation of gage is 3,650.0 ft, referenced to the National Geodetic Vertical Datum of 1929.

COOPERATION.--Elevations and capacity table furnished by Bureau of Reclamation.

REMARKS.--Reservoir is formed by concrete dam; construction began in 1949 and was completed in 1953. Storage began in March 1953. Usable capacity is 1,993,000 acre-ft between elevation 3,770.00 ft, invert of outlet works, and 3,800.00 ft, controlled spillway elevation. Dead storage is 1,060 acre-ft, below elevation 3,650.00 ft. Minimum operating level is 396,000 acre-ft, at elevation 3,728.00 ft, for on-site power generation. Figures given herein represent usable contents. Water is used for power production, flood control, irrigation, recreation, and supplemental water supply for city of Helena.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 2,043,000 acre-ft, July 15-29, 31, 1955, July 2, 5, 6, 8, 1956, July 16, 17, 1962, June 23, 1964, elevation, 3,800.0 ft; minimum since first filling, 1,017,000 acre-ft, Apr. 11, 1967, elevation, 3,764.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,936,000 acre-ft, July 6, elevation, 3,798.34 ft; minimum, 1,399,000 acre-ft, Feb. 11, elevation, 3,781.44 ft.

**MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS,
SEPTEMBER 2007 TO SEPTEMBER 2008**

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)
September 30	3,784.80	1,500,000	--
October 31	3,784.73	1,497,000	-3,000
November 30	3,784.50	1,490,000	-7,000
December 31	3,783.32	1,455,000	-35,000
Calendar Year 2007	--	--	-88,000
January 31	3,781.64	1,405,000	-50,000
February 29	3,781.76	1,409,000	+4,000
March 31	3,781.97	1,415,000	+6,000
April 30	3,782.57	1,433,000	+18,000
May 31	3,790.90	1,691,000	+258,000
June 30	3,797.67	1,913,000	+222,000
July 31	3,797.25	1,899,000	-14,000
August 31	3,792.60	1,746,000	-153,000
September 30	3,792.88	1,755,000	+9,000
Water Year 2008	--	--	+255,000