

**SANDY RIVER BASIN**

**05218500 BIG SANDY LAKE AT LIBBY, MN**

LOCATION.--Lat 46° 47'20", long 93° 19'10", in sec. 25, T.50 N., R.24 W., Aitkin County, Hydrologic Unit 07010103, on dam on Sandy River at Libby, 1.2 mi upstream from mouth, and 14 mi north of McGregor.

DRAINAGE AREA.--421 mi<sup>2</sup>.

PERIOD OF RECORD.--July to December 1893, October to December 1894, July 1895 to current year. Monthend contents only for some periods, published in WSP 1308. Published as Sandy Lake Reservoir at Libby, October 1941 to September 1956; and Sandy Lake at Libby, October 1956 to September 1995..

GAGE.--Water-stage recorder. Datum of gage is in mean sea level (levels by U.S. Army Corps of Engineers). Prior to Sept. 23, 1949, nonrecording gage and Sept. 24, 1949 to Nov. 28, 1962, water-stage recorder at site 1 mi upstream at datum 1,207.71 ft, adjustment of 1912. Nov. 29, 1962 to June 30, 1973, water-stage recorder at present site at datum 1,207.71 ft, adjustment of 1912.

REMARKS.--Lake is formed by concrete dam which controls Sandy, Flowage, Snake, and Aitkin Lakes. Storage began in 1893; original timber crib dam completed in 1895, replaced by present structure in 1911. Capacity between elevation 1,214.31 ft and 1,221.31 ft (top of structure) is 73,037 acre-ft, of which 37,539 acre-ft is controlled storage between elevations 1,214.31 ft and 1,218.31 ft (normal operating range). Contents shown herein are contents above elevation 1,207.00 ft. Prior to September 1978, published contents as contents above elevation 1,209.03 ft. Water is used to benefit navigation on Mississippi River below Minneapolis.

COOPERATION.--Records were provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 167,200 acre-ft, capacity table then in use, May 19, 1950, elevation, 1,224.82 ft; minimum observed, 5,950 acre-ft, below zero of capacity table then in use, Jan. 20, 1921, elevation, 1,207.96 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 101,200 acre-ft, Apr. 22, elevation, 1,220.01 ft; minimum, 43,480 acre-ft, Mar. 20, elevation, 1,214.20 ft.

**MONTH-END ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997**

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sep. 30....	1216.22	61070	
Oct. 31....	1216.36	62390	+1320
Nov. 30....	1216.31	61910	-480
Dec. 31....	1215.30	52740	-9170

CAL YR 1996			+3870
Jan. 31....	1214.43	45350	-7390
Feb. 28....	1214.27	44040	-1310
Mar. 31....	1214.44	45440	+1400
Apr. 30....	1219.52	95370	+49930
May 31....	1216.19	60790	-34580
June 30....	1216.94	67960	+7170
July 31....	1216.37	62480	-5480
Aug. 31....	1216.24	61260	-1220
Sep 30....	1216.28	61630	+370
WTR YR 1997			+560