

**LEECH LAKE RIVER BASIN**

**05206000 LEECH LAKE AT FEDERAL DAM, MN**

LOCATION (REVISED).--Lat 47°10'14", long 94° 17'12", in SE¼SE¼ sec. 25, T.143 N., R.29 W., Cass County, Hydrologic Unit 07010102, on Leech Lake Indian Reservation, at head of Leech Lake River, 1 mi. northeast of Battle Point, 6 mi southwest of town of Federal Dam.

DRAINAGE AREA.--1,163 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1884 to current year. Monthend contents only for some periods, published in WSP 1308. Prior to October 1956, published as "Leech Lake Reservoir."

GAGE.--Water-stage recorder. Datum of gage is in mean sea level (levels by U.S. Army Corps of Engineers). Prior to Dec. 31, 1884, nonrecording gage 0.5 mi north of outlet to Leech Lake River at datum 98.47 ft higher. Dec. 31, 1884 to May 24, 1931, nonrecording gage 0.5 mi north of outlet to Leech Lake River and May 25, 1931 to July 10, 1973, water-stage recorder at same site and at datum 92.70 ft higher.

REMARKS.--Reservoir is formed by Leech Lake and several other natural lakes controlled by concrete and timer dam; storage began in 1884; original timber structure completed in 1884, replaced by present dam in 1902. Capacity between elevation 1,292.70 ft and 1,297.94 ft (maximum allowable range) is 688,985 acre-ft of which 352,637 acre-ft is controlled storage between elevations 1,292.70 ft and 1,295.70 Reservoir is formed by Leech Lake and several other natural lakes controlled by concrete and timber dam; storage began in 1884; original timber structure completed in 1884, replaced by present dam in 1902. Capacity between elevation 1,292.70 ft and 1,297.94 ft (maximum allowable range) is 688,985 acre-ft of which 352,637 acre-ft is controlled storage between elevations 1,292.70 ft and 1,295.70 ft (normal operating range). Contents shown herein are contents above elevation 1,290.00 ft. Prior to September 1978, published contents as contents above elevation 1,292.20 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 observed, 734,300 acre-ft, capacity table then in use, June 30, 1916, elevation, 1,297.88 ft; minimum, 51,380 acre-ft, capacity table then in use, Dec. 8, 24, 1976, elevation, 1,292.69 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 658,400 acre-ft, July 14, elevation, 1295.29 ft; minimum, 488,100 acre-ft, Mar. 28, elevation, 1,293.94 ft.

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

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1294.65	577500	
Oct. 31.....	1294.85	602800	+25300

Nov. 30.....	1294.72	586300	-16500
Dec. 31.....	1294.56	566100	-20200
CAL YR 1996.....			-20200
Jan. 31.....	1294.54	563600	-2500
Feb. 28.....	1294.22	523100	-40500
Mar. 31.....	1293.95	489300	-33800
Apr. 30.....	1294.80	596400	+107100
May 31.....	1294.94	614100	+17700
June 30.....	1295.11	635600	+21500
July 31.....	1295.12	636600	+1000
Aug. 31.....	1294.54	563600	-73000
Sept. 30.....	1294.51	559800	-3800
WTR YR 1997.....			-17700