

**PINE RIVER BASIN**

**05230500 PINE RIVER RESERVOIR (CROSS LAKE) AT CROSS LAKE, MN**

LOCATION.--Lat 46° 40'09", long 94° 06'44", in SW¼NW¼ sec. 21, T.137 N., R.27 W., Crow Wing County, Hydrologic Unit 07010105, at dam on Pine River, at outlet of Cross Lake at city of Cross Lake.

DRAINAGE AREA.--562 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1886 to current year. Monthend contents only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is in mean sea level (levels by U.S. Army Corps of Engineers). Prior to May 3, 1949, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by Trout, Whitefish, Rush, and Cross Lakes and several other natural lakes controlled by timber crib dams; storage began in 1886; dam completed in 1886. Capacity between elevations 1,226.32 ft and 1,234.82 ft (maximum allowable range) is 118,703 acre-ft of which 53,272 acre-ft is controlled storage between elevations 1,226.32 ft and 1,230.32 ft (normal operating range). Contents shown herein are contents above an elevation 1,216.00 ft. Prior to September 1978, published contents as contents above elevation 1,218.67 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, 173,600 acre-ft, capacity table then in use, July 10, 1916, elevation, 1,234.56 ft; minimum observed, 1,310 acre-ft, below zero of capacity table then in use, Aug. 20, 1918, elevation, 1,217.67 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 109,100 acre-ft, June 29, elevation, 1,229.89 ft; minimum, 73,920 acre-ft, Mar. 17, elevation, 1,227.26 ft.

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

Date	Elevation (feet)	Contents (acre-feet)	Change in content (acre-feet)
Sep. 30....	1229.35	101800	
Oct. 31....	1229.33	101500	-300
Nov. 30....	1228.73	93370	-8130
Dec. 31....	1227.95	82980	-10390
CAL YR 1996			-2510
Jan. 31....	1227.55	77720	-5260
Feb. 28....	1227.28	74180	-3540
Mar. 31....	1227.40	75750	+1570
Apr. 30....	1229.23	100100	+24350
May 31....	1229.38	102200	+2100
June 30....	1229.88	109000	+6800

July 31....	1229.39	102300	-6700
Aug. 31....	1229.33	101500	-800
Sep. 30....	1229.24	100300	-1200
WTR YR 1997			-1500