

## 05074500 RED LAKE RIVER NEAR RED LAKE, MN

LOCATION.--Lat 47°57'27", long 95°16'35", in SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 28, T.152 N., R.36 W., Clearwater County, Hydrologic Unit 09020302, on Red Lake Indian Reservation, on left bank 50 ft downstream from dam outlet at outlet of Lower Red Lake, and 13 mi northwest of city of Red Lake.

DRAINAGE AREA.--1,950 mi<sup>2</sup> (approximately).

PERIOD OF RECORD.--May 1933 to September 1994 (monthly discharge only for May 1933, published in WSP 1308), October 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,100.00 ft above sea level, adjustment of 1912 (levels by U.S. Army Corps of Engineers). Prior to Sept. 7, 1934, nonrecording gage at site 50 ft upstream at datum 69.00 ft higher. Sept. 7, 1934 to Nov. 26, 1951, water-stage recorder at present site at datum 69.00 ft higher. Nov. 27, 1951 to Sept. 30, 1986, water-stage recorder at present site at datum 67.00 ft higher.

REMARKS.--Records poor. Flow completely regulated by outlet dam on Lower Red Lake.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	396	670	e910	e517	e971	e862	590	769	825	757	619	949
2	372	674	e920	e520	e980	e862	598	770	848	735	585	961
3	378	655	e915	e520	e982	862	610	769	870	679	613	991
4	378	650	e900	e515	e982	848	630	773	882	541	609	993
5	366	626	e890	e505	982	843	647	778	969	512	597	989
6	381	643	e872	e495	e980	840	673	770	873	499	587	1,010
7	376	635	e850	e490	e976	e840	687	783	678	482	592	994
8	373	641	e660	e480	e965	e843	701	779	608	557	633	991
9	374	701	e500	e475	e950	847	709	790	468	663	734	982
10	368	816	e490	e470	e940	851	717	818	451	674	757	981
11	365	801	e485	e468	e920	854	722	855	457	683	772	974
12	363	799	e475	e463	e900	e860	763	848	483	692	778	982
13	365	800	e500	e460	876	884	754	811	419	689	776	972
14	351	795	e495	e460	884	853	758	823	337	646	768	945
15	343	794	e490	e460	878	704	769	820	330	812	757	939
16	334	838	e490	e460	e878	495	769	822	320	849	771	927
17	334	942	e490	e460	e876	498	748	828	317	853	807	911
18	338	946	e490	e460	e874	499	740	838	309	842	822	906
19	332	963	e485	e460	e874	503	794	834	305	841	836	903
20	316	934	e485	e460	e874	506	871	838	322	842	827	878
21	317	908	e485	e463	e873	509	864	856	322	846	817	870
22	318	901	e480	e465	e870	510	898	849	463	831	811	881
23	335	895	e480	e465	e868	520	854	866	680	829	802	905
24	328	901	e480	e640	e863	527	828	878	693	831	841	902
25	324	924	e480	e990	e862	530	826	935	701	827	938	900
26	323	941	e480	e990	861	538	818	990	714	824	998	872
27	326	931	e480	e980	856	542	794	876	740	760	994	859
28	407	e920	e485	e980	861	540	784	552	743	667	987	856
29	566	e900	e488	e980	---	546	783	526	762	641	985	819
30	662	874	e493	e980	---	564	782	526	762	624	984	826
31	659	---	e505	e975	---	575	---	649	---	621	983	---
TOTAL	11,768	24,418	18,128	18,506	25,456	21,055	22,481	24,619	17,651	22,149	24,380	27,868
MEAN	380	814	585	597	909	679	749	794	588	714	786	929
MAX	662	963	920	990	982	884	898	990	969	853	998	1,010
MIN	316	626	475	460	856	495	590	526	305	482	585	819
AC-FT	23,340	48,430	35,960	36,710	50,490	41,760	44,590	48,830	35,010	43,930	48,360	55,280
CFSM	0.19	0.42	0.30	0.31	0.47	0.35	0.38	0.41	0.30	0.37	0.40	0.48
IN.	0.22	0.47	0.35	0.35	0.49	0.40	0.43	0.47	0.34	0.42	0.47	0.53

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2005, BY WATER YEAR (WY)

MEAN	483	491	470	475	473	440	362	497	562	536	478	474
MAX	2,071	1,765	1,498	1,418	1,342	1,396	1,357	1,624	2,025	1,840	1,464	1,712
(WY)	(1951)	(2000)	(1951)	(1951)	(1951)	(1951)	(2000)	(1950)	(1950)	(1950)	(1975)	(1950)
MIN	5.10	3.57	0.95	0.35	0.40	0.60	4.00	0.60	2.15	4.63	2.73	1.61
(WY)	(1934)	(1934)	(1934)	(1934)	(1934)	(1936)	(1936)	(1933)	(1933)	(1934)	(1936)	(1934)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1933 - 2005	
ANNUAL TOTAL	85,500		258,479		482	
ANNUAL MEAN	234		708		1,292	
HIGHEST ANNUAL MEAN					1,292	1951
LOWEST ANNUAL MEAN					5.55	1936
HIGHEST DAILY MEAN	963	Nov 19	1,010	Sep 6	2,240	Oct 6, 1950
LOWEST DAILY MEAN	72	Jan 1	305	Jun 19	a0.00	Sep 19, 1933
ANNUAL SEVEN-DAY MINIMUM	74	Jan 1	318	Jun 15	0.00	Sep 1, 1934
MAXIMUM PEAK FLOW			b1,030	Sep 5	3,600	Jun 25, 1950
MAXIMUM PEAK STAGE			c73.20	Dec 2	78.19	Jun 25, 1950
ANNUAL RUNOFF (AC-FT)	169,600		512,700		349,000	
ANNUAL RUNOFF (CFSM)	0.120		0.363		0.247	
ANNUAL RUNOFF (INCHES)	1.63		4.93		3.36	
10 PERCENT EXCEEDS	645		954		1,020	
50 PERCENT EXCEEDS	133		769		416	
90 PERCENT EXCEEDS	78		414		44	

- a Many days in 1933, 1934 and 1936.
- b Gage height, 72.64 ft.
- c Backwater from ice.
- e Estimated.

