MINNESOTA RIVER BASIN

05316500 REDWOOD RIVER NEAR REDWOOD FALLS, MN

LOCATION.--Lat 4431'25', long 9510'20", in SE *1* / *4* NE *1* / *4* sec. 9, T.112 N., R.36 W., Redwood County, Hydrologic Unit 07020006, on right bank 4 ft upstream from highway bridge, 3 mi west of town of Redwood Falls, and 8.5 mi upstream from mouth.
DRAINAGE AREA.--629 mi *2* .
PERIOD OF RECORD.--July 1909 to September 1914 (no winter records except 1911-12). August 1930 to September 1935 (no winter records), October 1935 to current year.
REVISED RECORDS.--WDR MN-89-2: Drainage area.
GAGE.--Water-stage recorder. Datum of gage is 972.33 ft above sea level. July 1909 to September 1914, nonrecording gage at bridge 20 ft downstream at datum 0.22 ft lower. August 1930 to Oct. 25, 1949, nonrecording gage, at bridge 20 ft downstream at present datum.
REMARKS.--Records good except those for estimated daily discharges, which are fair to poor. Natural discharge affected by unknown amount of interbasin flow between Yellow Medicine, Redwood, and Cottonwood River basins during extreme floods.
EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft *3* /s and maximum (*):

Date	Time	Discharge (ft *3* /s)	Gage height (ft)	Date	Time	Discharge (ft *3* /s)	Gage height (ft)
Feb. 27	2300	418	3.14	Apr. 02	0400	*1440	*5.23

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	45	65	e49	e31	371	1330	292	105	67	36	29
2	38	47	66	e48	e31	306	1420	281	105	62	34	25
3	40	39	67	e48	e30	297	1330	269	105	62	33	24
4	40	35	62	e48	e30	263	1240	251	99	59	35	22
5	41	46	48	e46	e30	229	1170	239	96	57	42	22

6	39	47	e42	e44	e30	226	1110	229	92	59	50	21
7	38	47	e43	e41	e30	217	1080	222	88	63	67	19
8	44	50	e46	e39	e30	190	1130	215	86	62	71	18
9	41	51	e47	e37	e30	e180	1190	211	86	59	66	19
10	41	52	e47	e34	e30	e165	1160	203	86	58	56	19
11	42	54	e47	e33	e30	e150	1150	201	87	54	51	19
12	46	41	e47	e31	e31	e140	1120	204	100	50	46	19
13	55	45	e47	e30	e32	e132	1020	199	99	46	41	18
14	66	48	e47	e28	e34	e125	891	195	92	42	37	16
15	68	40	e50	e26	e39	e120	796	197	89	58	36	16
16	72	34	e52	e28	e47	e116	719	203	94	111	38	16
17	68	e34	e54	e29	e59	e115	653	204	98	92	34	16
18	64	e36	e54	e29	e80	e114	602	206	229	75	31	16
19	61	e37	e54	e30	e110	e114	560	199	273	70	29	15
20	57	e36	e54	e30	e140	e115	522	189	195	168	28	14
21	53	e36	e54	e30	e185	e120	486	174	166	147	27	13
22	51	e36	e54	e31	e250	e128	455	160	140	128	37	13
23	52	e37	e53	e31	e330	e143	428	152	120	110	30	13
24	50	e37	e52	e31	e370	e163	402	155	111	97	29	15
25	50	e39	e52	e32	e385	204	380	163	106	84	26	20
26	47	43	e51	e32	e395	355	365	160	99	73	24	22
27	46	54	e51	e32	403	612	339	152	92	60	28	24
28	46	58	e50	e32	409	1040	323	140	89	51	34	34
29	48	61	e50	e32	---	1100	313	123	79	46	66	30
30	47	62	e49	e32	---	1120	299	115	73	41	44	27
31	46	---	e49	e32	---	1120	---	113	---	39	34	---
TOTAL	1534	1327	1604	1075	3631	9790	23983	6016	3379	2250	1240	594
MEAN	49.5	44.2	51.7	34.7	130	316	799	194	113	72.6	40.0	19.8
MAX	72	62	67	49	409	1120	1420	292	273	168	71	34

MIN	37	34	42	26	30	114	299	113	73	39	24	13
AC-FT	3040	2630	3180	2130	7200	19420	47570	11930	6700	4460	2460	1180
CFSM	.08	.07	.08	.06	.21	.50	1.27	.31	.18	.12	.06	.03
IN.	.09	.08	.09	.06	.21	.58	1.42	.36	.20	.13	.07	.04

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	57.2	59.6	34.5	17.0	22.6	244	440	220	257	148	79.1	51.8
MAX	509	541	245	104	167	1289	2880	1530	2724	1994	934	673
(WY)	1996	1980	1983	1994	1983	1983	1969	1993	1993	1993	1993	1986
MIN	.84	.96	.46	.19	.20	1.54	14.6	2.75	1.01	.44	.51	.31
(WY)	1937	1936	1936	1940	1937	1965	1934	1934	1934	1934	1934	1976

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1909 - 1998		
ANNUAL TOTAL	142501		56423				
ANNUAL MEAN	390		155		150a		
HIGHEST ANNUAL MEAN					789		1993
LOWEST ANNUAL MEAN					10.8		1959
HIGHEST DAILY MEAN	7200	Mar 30	1420	Apr 2	13200	Apr 9	1969
LOWEST DAILY MEAN	34	Nov 16	13	Sep 21	.00b	Jan 17	1940
ANNUAL SEVEN-DAY MINIMUM	36	Nov 16	14	Sep 18	.01	Jan 25	1940
INSTANTANEOUS PEAK FLOW			1440	Apr 2	19700	Jun 18	1957
INSTANTANEOUS PEAK STAGE			5.23	Apr 2	18.01c	Mar 29	1997
INSTANTANEOUS LOW FLOW			12	Sep 21,22,23	.00b	Jan 17	1940

ANNUAL RUNOFF (AC-FT)	282700		111900		108900		
ANNUAL RUNOFF (INCHES)	8.43		3.34		3.25		
10 PERCENT EXCEEDS	721		367		321		
50 PERCENT EXCEEDS	67		54		28		
90 PERCENT EXCEEDS	40		29		2.2		

a Median of annual mean discharges is 99 ft *3* /s.
b Many days in 1940 and 1959.
c Result of ice
jam.