

## MINNESOTA RIVER BASIN--Continued

05316500 REDWOOD RIVER NEAR REDWOOD FALLS, MN

LOCATION.--Lat 44°31'25', long 95°10'20", in SE $\frac{1}{4}$ NE $\frac{1}{4}$  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<sup>2</sup>.

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 (NGVD of 1929). 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<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Apr 1	1700	1,100a	--	Jun 5	0200	855	3.89
Apr 30	1800	705	3.64	Jun 22	1400	*1,610	*5.52
May 9	1800	1,030	4.27	Jul 3	1100	1,410	5.14

Minimum discharge, 21 ft<sup>3</sup>/s, Sept. 24, 25, gage height, 1.64 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	34	145	e128	e93	e73	e1110	693	281	285	59	69
2	26	33	140	e124	e91	e72	1090	624	273	253	50	65
3	26	30	e142	e120	e88	e71	1010	539	438	643	49	59
4	25	30	144	e114	e86	e70	903	465	817	429	68	55
5	25	30	150	e109	e84	e69	736	405	823	292	86	52
6	23	30	175	e106	e83	e69	667	470	691	238	74	49
7	24	31	209	e105	e85	e69	634	412	565	204	96	46
8	24	26	e208	e106	e88	e69	617	553	469	175	103	43
9	24	26	e196	e107	e92	e68	589	972	405	155	85	40
10	26	29	e189	e111	e93	e68	549	1000	366	139	84	36
11	29	29	e179	e113	e93	e69	539	994	337	141	98	36
12	27	28	e179	e114	e93	e87	607	1010	312	198	96	42
13	30	30	e179	e115	e92	e103	657	1000	293	148	91	36
14	29	33	e181	e115	e90	e101	680	982	277	120	80	35
15	33	41	e184	e113	e90	e95	671	945	261	106	71	33
16	34	34	e190	e110	e90	e90	621	869	244	94	66	31
17	34	32	e201	e108	e93	e93	572	765	231	84	75	29
18	34	33	e208	e106	e94	e91	563	682	220	77	66	28
19	34	31	e210	e105	e95	e88	562	615	208	72	61	27
20	33	30	e210	e105	e96	e85	507	556	199	69	55	26
21	32	31	e204	e105	e95	e82	447	505	529	64	233	26
22	31	33	e192	e106	e93	e79	446	466	1510	59	288	25
23	31	33	e187	e106	e85	e78	465	434	1390	56	230	24
24	32	51	e181	e104	e85	e77	474	389	1150	53	186	24
25	32	168	e173	e110	e81	e75	439	364	967	69	155	23
26	30	293	e164	e112	e76	e82	380	347	767	62	129	26
27	27	241	e156	e112	e76	e118	349	333	593	55	111	26
28	28	138	e149	e109	e75	e235	393	321	476	62	99	28
29	28	161	e143	e104	---	e436	579	312	384	115	91	31
30	30	163	e136	e99	---	e718	690	308	327	84	81	28
31	33	---	e133	e95	---	e1030	---	293	---	67	74	---
TOTAL	902	1932	5437	3396	2475	4610	18546	18623	15803	4668	3190	1098
MEAN	29.1	64.4	175	110	88.4	149	618	601	527	151	103	36.6
MAX	34	293	210	128	96	1030	1110	1010	1510	643	288	69
MIN	23	26	133	95	75	68	349	293	199	53	49	23
AC-FT	1790	3830	10780	6740	4910	9140	36790	36940	31350	9260	6330	2180
CFSM	0.05	0.10	0.28	0.17	0.14	0.24	0.98	0.96	0.84	0.24	0.16	0.06
IN.	0.05	0.11	0.32	0.20	0.15	0.27	1.10	1.10	0.93	0.28	0.19	0.06

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	55.8	60.9	38.8	18.9	24.5	237	466	235	264	152	78.5	50.7
MAX	509	541	245	110	167	1289	2880	1530	2724	1994	934	673
(WY)	1996	1980	1983	2002	1983	1983	1969	1993	1993	1993	1993	1986
MIN	0.84	0.96	0.46	0.19	0.20	1.54	14.6	2.75	1.01	0.44	0.51	0.31
(WY)	1937	1936	1936	1940	1937	1965	1934	1934	1934	1934	1934	1976

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1909 - 2002

ANNUAL TOTAL	139928	80680	
ANNUAL MEAN	383	221	154b
HIGHEST ANNUAL MEAN			789 1993
LOWEST ANNUAL MEAN			10.8 1959
HIGHEST DAILY MEAN	5620	Apr 25	1510 Jun 22 13200 Apr 9 1969
LOWEST DAILY MEAN	14	Jan 3	23 Oct 6, Sep 25 0.00c Jan 17 1940
ANNUAL SEVEN-DAY MINIMUM	16	Jan 1	24 Oct 3 0.01 Jan 25 1940
MAXIMUM PEAK FLOW			1610 Jun 22 19700 Jun 18 1957
MAXIMUM PEAK STAGE			8.30d Mar 31 18.01d Mar 29 1997
INSTANTANEOUS LOW FLOW			21 Sep 24 0.00c Jan 17 1940
ANNUAL RUNOFF (AC-FT)	277500	160000	111700
ANNUAL RUNOFF (CFM)	0.61	0.35	0.25
ANNUAL RUNOFF (INCHES)	8.28	4.77	3.33
10 PERCENT EXCEEDS	1090	616	366
50 PERCENT EXCEEDS	67	105	34
90 PERCENT EXCEEDS	18	30	2.8

- a Estimated daily, backwater from ice.
- b Median of annual mean discharges is 100 ft<sup>3</sup>/s.
- c Many days in 1940 and 1959.
- d Backwater from ice.
- e Estimated.

