

## 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 (\*):

	Discharge (ft <sup>3</sup> /s)	Gage height (ft)		Discharge (ft <sup>3</sup> /s)	Gage height (ft)	
Time			Time			
Apr 13	0800	*677	*3.80	0100	652	3.76
May 13	1500	471	3.40	0000	511	3.50

Minimum discharge, 5.4 ft<sup>3</sup>/s, Dec. 5, gage height, 1.43 ft (result of freezeup).

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	63	69	47	e28	e24	e30	e128	152	216	183	29	10
2	59	65	50	e28	e24	e30	e84	146	210	161	30	9.5
3	67	62	44	e27	e25	e30	e66	139	207	152	30	8.8
4	62	62	52	e27	e27	e31	75	133	214	139	38	8.7
5	57	62	39	e25	e29	e32	73	126	237	125	64	8.5
6	56	63	53	e24	e33	e35	72	120	251	113	51	12
7	55	61	50	e21	e36	e36	69	123	253	104	39	16
8	53	57	52	e21	e37	e38	69	176	280	102	31	21
9	50	54	56	e19	e36	e39	69	188	336	122	26	56
10	49	57	56	e18	e35	e39	73	202	448	136	22	60
11	48	54	54	e18	e35	e37	102	207	493	121	21	38
12	48	51	e54	e17	e35	e37	412	238	447	107	20	43
13	46	51	e49	e16	e36	e36	664	428	415	98	19	162
14	47	52	e43	e14	e39	e35	598	431	448	88	17	302
15	46	51	e50	e12	e43	e35	511	400	487	74	16	251
16	51	52	e51	e11	e45	e35	445	359	457	59	16	185
17	46	53	e50	e10	e40	e35	438	470	428	52	17	143
18	47	52	e49	e11	e41	e34	422	616	381	45	20	113
19	48	56	e45	e12	e36	e35	391	496	331	41	21	105
20	47	58	e39	e14	e36	e35	351	421	290	40	36	159
21	47	62	e38	e14	e35	e35	313	381	266	38	28	151
22	47	60	e38	e17	e33	e34	285	357	255	37	22	138
23	54	61	e31	e19	e33	e35	260	325	276	35	18	115
24	56	56	e25	e20	e33	e38	244	301	264	32	15	103
25	55	48	e25	e22	e32	e48	230	284	263	35	14	111
26	e57	58	e25	e22	e33	e60	218	282	256	41	21	227
27	e57	54	e25	e22	e32	e92	201	275	247	59	24	297
28	e64	44	e28	e21	e31	e114	185	264	224	45	20	281
29	79	48	e29	e22	---	e185	171	253	202	37	17	257
30	95	36	e30	e22	---	e188	159	238	196	32	13	238
31	79	---	e30	e23	---	e179	---	224	---	29	11	---
TOTAL	1,735	1,669	1,307	597	954	1,702	7,378	8,755	9,278	2,482	766	3,629.5
MEAN	56.0	55.6	42.2	19.3	34.1	54.9	246	282	309	80.1	24.7	121
MAX	95	69	56	28	45	188	664	616	493	183	64	302
MIN	46	36	25	10	24	30	66	120	196	29	11	8.5
AC-FT	3,440	3,310	2,590	1,180	1,890	3,380	14,630	17,370	18,400	4,920	1,520	7,200
CFSM	0.09	0.09	0.07	0.03	0.05	0.09	0.39	0.45	0.49	0.13	0.04	0.19
IN.	0.10	0.10	0.08	0.04	0.06	0.10	0.44	0.52	0.55	0.15	0.05	0.21

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2005, BY WATER YEAR (WY)

## 05316500 REDWOOD RIVER NEAR REDWOOD FALLS, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1909 - 2005
ANNUAL TOTAL	60,033.7	40,252.5	
ANNUAL MEAN	164	110	a153
HIGHEST ANNUAL MEAN			789
LOWEST ANNUAL MEAN			10.8
HIGHEST DAILY MEAN	2,870	May 30	13,200
LOWEST DAILY MEAN	7.6	Jan 29	b0.00
ANNUAL SEVEN-DAY MINIMUM	8.0	Jan 25	0.01
MAXIMUM PEAK FLOW		677	19,700
MAXIMUM PEAK STAGE		3.80	c18.01
INSTANTANEOUS LOW FLOW		d5.4	b0.00
ANNUAL RUNOFF (AC-FT)	119,100	79,840	110,900
ANNUAL RUNOFF (CFSM)	0.261	0.175	0.243
ANNUAL RUNOFF (INCHES)	3.55	2.38	3.31
10 PERCENT EXCEEDS	323	287	364
50 PERCENT EXCEEDS	54	52	35
90 PERCENT EXCEEDS	10	20	2.9

a Median of annual mean discharges is 110 ft<sup>3</sup>/s.

b Many days in 1940 and 1959.

c Backwater from ice.

d Result of freezeup.

e Estimated.

