

MINNESOTA RIVER BASIN--Continued

05317200 LITTLE COTTONWOOD RIVER NEAR COURTLAND, MN

LOCATION.--Lat 44°14'47", long 94°20'19", in SW¹/₄NE¹/₄ sec.17, T.109 N., R.29 W., Blue Earth County, Hydrologic Unit 07020007, on right bank 30 ft downstream from bridge on State Highway 68, 0.7 mi above mouth, 1.5 mi south of Courtland.

DRAINAGE AREA.--170 mi².

PERIOD OF RECORD.--October 1973 to current year. September 1969 to September 1973, operated as a low-flow station only.

GAGE.--Water-stage recorder. Datum of gage is 788.25 ft above sea level.

REMARKS.--Records good except those for estimated days, which are fair to poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 17	0300	347	5.33	Jul 3	2400	*548	*6.13
Jun 27	1700	394	5.48	Jul 8	0900	442	5.70

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	25	32	e11	e10	e36	57	100	81	155	41	14
2	5.5	23	31	e11	e11	e37	55	96	82	133	39	13
3	5.9	20	30	e11	e11	e38	54	93	80	414	36	12
4	6.1	19	29	e10	e12	e39	53	89	78	479	34	11
5	7.2	18	29	e10	e12	e40	54	90	76	338	31	10
6	7.3	17	29	e10	e12	e41	80	93	79	266	29	10
7	8.5	17	27	e10	e14	e42	85	100	74	235	28	10
8	7.2	17	25	e10	e16	e43	85	104	69	284	26	10
9	7.6	18	28	e9.8	e17	e44	216	108	66	205	40	9.8
10	6.9	31	26	e9.8	e17	e45	238	115	75	155	42	9.1
11	6.8	67	25	e9.8	e17	e47	291	123	119	125	38	8.6
12	6.9	68	26	e9.6	e16	e50	276	128	132	104	33	8.2
13	6.7	65	31	e9.4	e18	e54	250	130	115	89	29	7.6
14	7.0	57	29	e9.4	e20	e60	257	124	103	78	26	7.6
15	8.7	52	27	e9.4	e20	e75	272	119	93	69	25	7.6
16	9.2	49	28	e9.6	e21	e100	318	124	86	63	23	8.2
17	15	45	26	e9.9	e21	e123	334	166	81	56	22	7.8
18	18	43	26	e10	e21	92	285	159	77	56	20	6.7
19	15	43	14	e10	e21	100	242	141	80	70	20	6.4
20	14	30	e13	e10	e20	117	212	144	81	156	18	6.2
21	14	37	e12	e10	e20	110	190	169	80	191	18	5.7
22	13	44	e12	e10	e21	94	178	160	77	166	18	5.7
23	11	39	e12	e10	e22	87	166	150	75	140	19	5.3
24	11	37	e12	e9.8	e23	82	152	139	70	116	19	5.4
25	10	35	e12	e9.7	e25	73	140	128	66	96	17	5.0
26	11	34	e12	e9.6	e27	68	129	117	63	80	16	4.7
27	14	33	e12	e9.6	e30	64	123	108	295	70	16	4.5
28	18	35	e12	e9.6	e33	63	116	101	314	64	15	4.7
29	26	36	e11	e9.7	---	61	110	94	245	56	19	4.4
30	33	36	e11	e9.6	---	60	105	87	187	51	17	4.2
31	29	---	e11	e9.8	---	58	---	82	---	45	15	---
TOTAL	365.1	1090	660	307.1	528	2043	5123	3681	3199	4605	789	233.4
MEAN	11.8	36.3	21.3	9.91	18.9	65.9	171	119	107	149	25.5	7.78
MAX	33	68	32	11	33	123	334	169	314	479	42	14
MIN	5.5	17	11	9.4	10	36	53	82	63	45	15	4.2
AC-FT	724	2160	1310	609	1050	4050	10160	7300	6350	9130	1560	463
CFSM	.07	.21	.13	.06	.11	.39	1.00	.70	.63	.87	.15	.05
IN.	.08	.24	.14	.07	.12	.45	1.12	.81	.70	1.01	.17	.05

e Estimated

05317200 LITTLE COTTONWOOD RIVER NEAR COURTLAND, MN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	41.8	47.6	27.9	15.0	23.3	132	173	120	134	92.2	53.7	42.1
MAX	163	134	118	80.1	105	392	463	418	750	553	248	262
(WY)	1987	1983	1992	1992	1983	1997	1983	1993	1993	1993	1993	1986
MIN	.75	.70	.21	.15	.38	5.79	9.64	4.17	2.39	.63	.81	.54
(WY)	1976	1977	1977	1977	1977	1975	1990	1981	1976	1988	1976	1976

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1974 - 1999
ANNUAL TOTAL	23804.7	22623.6	
ANNUAL MEAN	65.2	62.0	75.3
HIGHEST ANNUAL MEAN			239 1993
LOWEST ANNUAL MEAN			9.18 1989
HIGHEST DAILY MEAN	811 Apr 2	479 Jul 4	2850 Jun 20 1993
LOWEST DAILY MEAN	3.1 Sep 17	4.2 Sep 30	.02 Sep 12 1977
ANNUAL SEVEN-DAY MINIMUM	3.4 Sep 12	4.7 Sep 24	.08 Sep 11 1977
INSTANTANEOUS PEAK FLOW		548 Jul 3	3520 Jun 20 1993
INSTANTANEOUS PEAK STAGE		6.13 Jul 3	10.45 Jun 20 1993
INSTANTANEOUS LOW FLOW		4.1 Sep 29	.01 Sep 17 1977
ANNUAL RUNOFF (AC-FT)	47220	44870	54530
ANNUAL RUNOFF (CFSM)	.38	.36	.44
ANNUAL RUNOFF (INCHES)	5.21	4.95	6.02
10 PERCENT EXCEEDS	121	151	196
50 PERCENT EXCEEDS	31	32	28
90 PERCENT EXCEEDS	5.7	9.2	1.4

