

MINNESOTA RIVER BASIN

05317200 LITTLE COTTONWOOD RIVER NEAR COURTLAND, MN

LOCATION.--Lat 4414'47", long 9420'19", in SW 1 / 4 NE 1 / 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 (revised).

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 mean 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 180 ft³/s and maximum (*):

Date	Time	Discharge		Date	Time	Discharge	
		Gage height (ft)	(ft ³ /s)			Gage height (ft)	(ft ³ /s)
Feb. 26	2100	236	4.92	June 25	1600	264	5.09
Apr. 02	1200	*822	*7.55	June 28	0800	264	5.09

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	19	18	24	e13	e6.2	121	734	92	59	118	18	6.5
2	16	23	26	14	e6.2	111	811	90	60	102	17	5.5
3	18	23	25	14	e6.2	103	733	89	58	93	18	4.9
4	15	e22	23	16	e6.2	93	643	88	56	96	18	4.8
5	13	e22	19	14	e6.2	87	571	86	54	92	18	4.9
6	12	22	18	13	e6.2	84	506	83	52	83	21	5.7
7	11	23	21	14	e6.1	81	447	79	50	80	22	4.8
8	11	21	20	14	e6.1	78	400	82	48	75	21	4.4

9	12	18	19	e11	e6.1	58	355	85	47	68	18	4.0
10	11	22	19	e9.2	e6.2	e48	309	83	46	60	16	4.1
11	15	e22	19	e8.0	e6.3	e44	280	86	47	54	14	3.5
12	18	e22	19	e6.6	e6.5	e40	262	82	49	48	11	3.9
13	19	22	19	e5.6	e6.9	e39	243	78	49	42	10	3.5
14	18	21	18	e5.4	e7.5	e41	227	74	50	39	9.1	3.5
15	18	20	18	e5.5	e8.4	e42	209	85	61	62	8.6	3.4
16	18	21	19	e5.5	e9.8	e45	189	96	72	77	8.6	3.2
17	18	21	19	e5.6	17	e45	170	81	63	71	11	3.1
18	18	20	19	e5.7	57	45	154	75	76	61	9.0	3.3
19	18	19	21	e5.8	70	47	147	72	73	57	8.0	3.9
20	17	20	20	e6.0	71	48	139	67	77	67	9.2	3.7
21	16	20	18	e6.1	76	52	130	64	72	101	7.7	3.6
22	16	20	19	e6.2	80	60	122	60	60	78	6.6	4.8
23	17	19	19	e6.2	95	55	116	58	53	61	6.6	4.6
24	16	20	18	e6.2	103	55	112	58	50	50	6.3	4.1
25	17	20	17	e6.2	119	58	108	61	212	42	5.9	3.7
26	23	21	16	e6.2	185	67	107	69	189	35	5.6	4.2
27	19	21	16	e6.2	159	121	103	71	147	30	7.1	4.1
28	19	23	15	e6.2	137	450	100	68	238	27	9.7	4.1
29	18	24	15	e6.2	---	e620	97	66	183	24	8.6	5.0
30	19	25	14	e6.2	---	e740	94	63	147	22	7.6	5.2
31	20	---	e14	e6.2	---	e680	---	61	---	19	8.3	---
TOTAL	515	635	586	260.0	1276.1	4258	8618	2352	2498	1934	365.5	128.0
MEAN	16.6	21.2	18.9	8.39	45.6	137	287	75.9	83.3	62.4	11.8	4.27
MAX	23	25	26	16	185	740	811	96	238	118	22	6.5
MIN	11	18	14	5.4	6.1	39	94	58	46	19	5.6	3.1
AC-FT	1020	1260	1160	516	2530	8450	17090	4670	4950	3840	725	254
CFSM	.10	.12	.11	.05	.27	.81	1.69	.45	.49	.37	.07	.03
IN.	.11	.14	.13	.06	.28	.93	1.89	.51	.55	.42	.08	.03

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	43.0	48.0	28.2	15.2	23.5	134	173	120	135	90.0	54.8	43.5
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 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1974 - 1998		
ANNUAL TOTAL	38237		23425.6				
ANNUAL MEAN	105		64.2			75.8	
HIGHEST ANNUAL MEAN						239	1993
LOWEST ANNUAL MEAN						9.18	1989
HIGHEST DAILY MEAN	892	Mar 22	811	Apr 2	2850	Jun 20	1993
LOWEST DAILY MEAN	11	Oct 7	3.1	Sep 17	.02	Sep 12	1977
ANNUAL SEVEN-DAY MINIMUM	12	Oct 4	3.4	Sep 12	.08	Sep 11	1977
INSTANTANEOUS PEAK FLOW			822	Apr 2	3520	Jun 20	1993
INSTANTANEOUS PEAK STAGE			7.55	Apr 2	10.45	Jun 20	1993
INSTANTANEOUS LOW FLOW			2.7	Sep 17	.01	Sep 17	1977
ANNUAL RUNOFF (AC-FT)	75840		46460			54910	
ANNUAL RUNOFF (CFSM)	.62		.38			.45	
ANNUAL RUNOFF	8.37		5.13			6.06	

(INCHES)							
10 PERCENT EXCEEDS	263		121		199		
50 PERCENT EXCEEDS	41		21		28		
90 PERCENT EXCEEDS	18		5.8		1.3		

