

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.

REVISED RECORD.--Unpublished: 1977 discharges < 0.1 cfs.

GAGE.--Water-stage recorder. Datum of gage is 788.25 ft above sea level (NGVD of 1929).

REMARKS.--Records good to fair.

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

	Time	Discharge (ft ³ /s)	Gage height (ft)	Time	Discharge (ft ³ /s)	Gage height (ft)
	Apr 12 1900	419	5.99	1400	*556	*6.59
	Apr 17 1400	369	5.77	1100	223	4.91

Minimum discharge, 2.5 ft³/s, Sept. 5, 6, gage height, 2.65 ft.

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	52	27	26	12	10	18	121	74	102	57	19	3.4
2	49	28	25	12	11	18	99	69	99	53	18	3.2
3	46	29	23	11	11	17	79	65	96	53	15	3.0
4	44	31	26	11	12	18	72	59	99	51	16	3.1
5	42	30	22	9.7	14	19	67	56	152	50	14	2.7
6	38	31	24	8.9	21	22	65	72	157	54	13	3.3
7	37	30	24	8.5	15	22	62	83	166	52	13	7.5
8	35	28	22	7.9	15	22	61	104	192	54	12	22
9	33	28	22	7.5	14	22	60	134	215	53	14	21
10	33	28	21	7.2	14	20	58	181	200	50	14	18
11	31	27	20	7.1	15	19	78	224	183	45	11	20
12	30	27	20	7.1	15	20	309	311	179	46	10	31
13	29	26	10	7.1	17	20	384	521	171	43	8.0	40
14	28	26	15	6.2	25	19	319	529	147	40	7.0	44
15	29	26	18	5.0	28	19	291	483	131	37	6.8	38
16	29	28	18	4.1	23	19	292	449	120	34	6.4	37
17	29	27	17	3.4	23	19	353	431	118	31	5.6	39
18	29	27	17	3.2	22	19	323	410	110	28	12	36
19	28	29	14	3.8	22	19	285	386	95	25	10	40
20	28	30	13	4.4	23	17	261	345	86	23	11	34
21	28	32	14	4.9	22	17	228	312	105	22	8.0	31
22	28	32	11	5.0	21	17	193	293	91	19	7.5	29
23	30	34	8.7	5.3	20	19	163	259	81	16	6.4	25
24	30	34	6.7	7.1	19	24	140	216	71	13	6.0	23
25	30	29	7.1	9.9	19	31	124	185	66	14	5.0	28
26	31	32	7.9	9.4	19	42	112	169	60	21	6.5	34
27	31	31	8.2	8.7	19	55	103	153	57	20	6.1	44
28	30	28	8.7	8.6	18	66	93	139	56	22	5.2	55
29	30	27	9.7	8.8	---	87	87	125	54	26	4.8	68
30	29	22	12	9.3	---	109	80	116	59	24	4.3	68
31	28	---	11	9.6	---	124	---	107	---	22	3.9	---
TOTAL	1,024	864	502.0	233.7	507	979	4,962	7,060	3,518	1,098	299.5	851.2
MEAN	33.0	28.8	16.2	7.54	18.1	31.6	165	228	117	35.4	9.66	28.4
MAX	52	34	26	12	28	124	384	529	215	57	19	68
MIN	28	22	6.7	3.2	10	17	58	56	54	13	3.9	2.7
AC-FT	2,030	1,710	996	464	1,010	1,940	9,840	14,000	6,980	2,180	594	1,690
CFSM	0.19	0.17	0.10	0.04	0.11	0.19	0.97	1.34	0.69	0.21	0.06	0.17
IN.	0.22	0.19	0.11	0.05	0.11	0.21	1.09	1.54	0.77	0.24	0.07	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2005, BY WATER YEAR (WY)

	37.1	42.4	25.9	14.1	21.3	113	181	124	139	85.7	47.5	37.5
MEAN	37.1	42.4	25.9	14.1	21.3	113	181	124	139	85.7	47.5	37.5
MAX	163	134	118	80.1	105	392	980	418	750	553	248	262
(WY)	(1987)	(1983)	(1992)	(1992)	(1983)	(1997)	(2001)	(1993)	(1993)	(1993)	(1993)	(1986)
MIN	0.75	0.70	0.21	0.15	0.38	5.79	9.64	4.17	2.39	0.63	0.81	0.54
(WY)	(1976)	(1977)	(1977)	(1977)	(1977)	(1975)	(1990)	(1981)	(1976)	(1988)	(1976)	(1976)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1974 - 2005	
ANNUAL TOTAL	15,018.9		21,898.4		72.5	
ANNUAL MEAN	41.0		60.0		9.18	
HIGHEST ANNUAL MEAN					239	1993
LOWEST ANNUAL MEAN					9.18	1989
HIGHEST DAILY MEAN	380	Jun 10	529	May 14	2,850	Jun 20, 1993
LOWEST DAILY MEAN	1.2	Jan 24	2.7	Sep 5	0.10	Sep 11, 1977
ANNUAL SEVEN-DAY MINIMUM	1.3	Jan 23	3.2	Aug 31	0.12	Sep 11, 1977
MAXIMUM PEAK FLOW			556	May 13	a3,520	Jun 20, 1993
MAXIMUM PEAK STAGE			6.59	May 13	b11.60	Apr 4, 1997
INSTANTANEOUS LOW FLOW			2.5	Sep 5	<0.10	Sep 17, 1977
ANNUAL RUNOFF (AC-FT)	29,790		43,440		52,490	
ANNUAL RUNOFF (CFSM)	0.241		0.353		0.426	
ANNUAL RUNOFF (INCHES)	3.29		4.79		5.79	
10 PERCENT EXCEEDS	85		159		187	
50 PERCENT EXCEEDS	27		28		26	
90 PERCENT EXCEEDS	2.8		7.4		1.7	

a Gage-height, 10.45 ft.
 b Backwater from the Minnesota River.

