

MINNESOTA RIVER BASIN

05294000 POMME DE TERRE RIVER AT APPLETON, MN

LOCATION.--Lat 45° 12'10", long 96°0 01'20", in SW¼NW¼ sec. 14, T.120 N., R.43 W., Swift County, Hydrologic Unit 07020002, on left bank 60 ft upstream from bridge on U.S. Highway 59 and State Highway 119 at Appleton and 8 mi upstream from mouth.

DRAINAGE AREA.--905 mi², approximately.

PERIOD OF RECORD.--March 1931 to September 1935 (no winter records), October 1935 to current year. Prior to October 1953, published as "near Appleton."

REVISED RECORDS.--WSP 1308: 1931(M), 1937(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 978.00 ft above mean sea level. Prior to Dec. 22, 1952, nonrecording gage at site 4 mi upstream at datum 25.17 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow affected by lakes above station. Occasional regulation at low flow by old mill dam 500 ft upstream.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
1	63	219	108	e44	e26	110	975	1150	354
e300	170	144							
2	63	178	111	e44	e26	104	3460	1110	334
e450	160	143							
3	62	228	e103	e43	e26	104	4000	1070	328
574	153	135							
4	64	245	e104	e40	e26	109	4120	1020	324
450	147	142							
5	64	200	e104	e39	e26	109	5090	964	313
354	145	138							
6	60	193	e104	e37	e26	112	e6760	918	303
299	178	131							
7	58	188	e103	e35	e27	116	e6600	877	290
286	196	125							
8	58	180	e100	e33	e28	120	e5900	832	281
315	188	118							
9	60	176	e100	e31	e30	123	e5200	806	269

335	187	111							
10	60	155	e97	e28	e33	118	e4700	775	257
290	188	106							
11	60	83	e97	e24	37	110	e4200	735	252
265	183	106							
12	60	98	e96	e21	39	107	e3800	707	257
246	175	99							
13	58	133	e92	e21	43	107	e3500	e695	252
233	167	95							
14	57	132	e86	e21	47	107	e3200	681	240
224	184	92							
15	55	127	e82	e22	52	109	e3000	657	231
215	198	106							
16	70	127	e74	e20	57	113	e2800	629	221
205	202	103							
17	113	117	e60	e19	64	116	e2600	609	212
215	190	101							
18	179	111	e44	e20	67	116	2510	592	206
205	180	97							
19	209	128	38	e21	73	114	2340	567	202
203	177	93							
20	174	133	e39	e20	76	117	2230	547	199
193	183	89							
21	146	117	e39	e20	76	121	2080	520	195
185	204	88							
22	127	125	e40	e21	76	116	1930	488	192
182	198	87							
23	120	126	e40	e21	80	116	1790	465	191
178	192	84							
24	118	120	e39	e22	86	117	1670	456	199
173	183	82							
25	117	118	e38	e23	94	120	1550	442	188
172	174	81							
26	118	115	e38	e25	97	130	1450	420	182
215	167	80							
27	124	120	e37	e25	101	143	1370	399	e179
228	158	78							
28	133	118	e37	e24	108	166	1310	386	e170
230	150	76							
29	146	121	e39	e24	---	221	1260	379	e164
220	146	73							
30	227	112	e41	e24	---	322	1210	381	e162
200	156	75							
31	319	---	e43	e27	---	443	---	372	---
181	139	---							
TOTAL	3342	4343	2173	839	1547	4256	92605	20649	7147
8021	5418	3078							
MEAN	108	145	70.1	27.1	55.3	137	3087	666	238
259	175	103							

MAX	319	245	111	44	108	443	6760	1150	354
574	204	144							
MIN	55	83	37	19	26	104	975	372	162
172	139	73							
AC-FT	6630	8610	4310	1660	3070	8440	183700	40960	14180
15910	10750	6110							
CFSM	.12	.16	.08	.03	.06	.15	3.41	.74	.26
.29	.19	.11							

- o a Due in part to dam failure; from highwater mark.
- o e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
MEAN	67.5	63.9	42.1	27.0	26.0	163	406	211	165
143	77.5	55.9							
MAX	550	402	182	141	148	675	3087	846	516
1382	752	331							
(WY)	1996	1996	1987	1987	1987	1995	1997	1969	1965
1993	1993	1986							
MIN	.000	3.52	1.00	.000	.000	2.04	20.9	8.09	2.17
.45	.095	.047							
(WY)	1989	1989	1937	1937	1936	1969	1934	1934	1933
1988	1988	1988							

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1931 - 1997

ANNUAL TOTAL		94427				153418			
ANNUAL MEAN		258				420			128 ^a
HIGHEST ANNUAL MEAN									
420		1997							
LOWEST ANNUAL MEAN									
21.1		1977							
HIGHEST DAILY MEAN			1280	Mar 17		6760	Apr 6		
6760	Apr 6	1997							
LOWEST DAILY MEAN			26	Jan 19		19	Jan 17		
.00	Aug 3	1934							
ANNUAL SEVEN-DAY MINIMUM			38	Dec 23		20	Jan 16		
.00	Feb 1	1936							
INSTANTANEOUS PEAK FLOW						8890 ^b	Apr 7		
8890 ^b	Apr 7	1997							
INSTANTANEOUS PEAK STAGE						18.13 ^b	Apr 7		
18.13 ^b	Apr 7	1997							
INSTANTANEOUS LOW FLOW									
.00 ^c	Aug 3	1934							
ANNUAL RUNOFF (AC-FT)			187300			304300			
92930									
ANNUAL RUNOFF (CFSM)			.29			893			289

50 PERCENT EXCEEDS	120	133	49
90 PERCENT EXCEEDS	59	37	6.5

- a Median of annual mean discharges is 94.7 ft³/s.

b Due in part to dam failure; from highwater mark.
c Many days, several years.