

05294000 POMME DE TERRE RIVER AT APPLETON, MN

LOCATION.--Lat 45°12'10", long 96°01'20", in SW¹/₄NW¹/₄ sec. 14, T.120 N., R.43 W., Swift County, Hydrologic Unit 07020002, on left bank 400 ft upstream from bridge on U.S. Highway 59 and State Highway 119 at Appleton and 8 mi upstream from mouth.

DRAINAGE AREA.--864 mi².

PERIOD OF RECORD.--March 1931 to September 1935 (no winter records), October 1935 to September 1999, June 2003 to current year. Peak flows available for water years 2000-2002. Prior to October 1953, published as "near Appleton."

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

GAGE.--Water-stage recorder. Datum of gage is 978.00 ft above sea level (NGVD of 1929). Prior to Dec. 22, 1952, nonrecording gage at site 4 mi upstream at datum 25.17 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow affected by lakes above station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 230 ft³/s and maximum (*):

	Time	Discharge (ft ³ /s)	Gage height (ft)	Time	Discharge (ft ³ /s)	Gage height (ft)
	Oct 4 0700	445	6.50	0800	598	6.79
	Oct 30 1000	277	5.83	0500	346	5.97
	Apr 1 1900	319	5.86	0700	*1,400	*8.46

Minimum discharge, 40 ft³/s, Dec. 14, gage height, 3.96 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	333	272	195	e126	e125	e141	319	301	288	450	e202	150
2	370	264	191	e126	e127	e140	310	292	280	425	e195	147
3	426	261	205	e124	e128	e139	298	285	271	409	e188	148
4	436	259	222	e123	e127	e140	288	278	270	397	191	150
5	431	256	221	e121	e132	e145	283	267	293	385	181	151
6	433	255	210	e121	e136	e157	284	260	314	374	175	158
7	436	252	213	e120	e132	e167	285	263	316	362	172	180
8	429	255	213	e120	e135	e175	277	264	457	349	170	176
9	419	258	222	e119	e132	e180	270	262	624	345	169	169
10	396	255	205	e117	e132	e190	266	266	765	333	167	161
11	368	249	201	e117	e131	e193	310	265	854	328	164	154
12	338	246	196	e117	e132	e195	431	262	923	349	163	156
13	318	239	96	e117	e133	e198	542	270	991	320	164	168
14	305	234	72	e117	e144	e194	594	284	1,130	308	163	194
15	290	231	185	e115	e147	e192	583	291	1,210	297	161	191
16	279	230	235	e117	e139	e190	573	298	1,320	282	159	179
17	270	229	225	e115	e139	e189	571	294	1,380	265	155	171
18	257	228	204	e117	e141	e188	569	286	1,340	252	164	172
19	242	231	e179	e115	e138	e186	550	287	1,270	e234	176	178
20	232	235	e162	e117	e143	e190	523	294	1,210	e234	176	177
21	227	237	e153	e116	e138	e193	502	301	1,130	e224	173	172
22	226	235	e146	e118	e141	e197	474	304	1,060	e221	168	164
23	227	231	e140	e119	e141	e200	446	301	971	e208	160	160
24	233	227	e134	e123	e139	e216	421	298	873	e215	153	157
25	237	225	e130	e123	e140	e219	398	294	782	e211	145	158
26	234	221	e128	e122	e139	e222	376	326	698	e211	180	164
27	231	219	e126	e125	e138	e223	361	343	623	e205	197	166
28	246	215	e125	e125	e140	e229	344	330	556	e202	179	161
29	265	207	e126	e123	---	e250	327	319	504	e205	169	158
30	273	184	e126	e125	---	287	311	308	471	e202	163	156
31	273	---	e126	e125	---	309	---	298	---	e192	156	---
TOTAL	9,680	7,140	5,312	3,725	3,809	6,034	12,086	8,991	23,174	8,994	5,298	4,946
MEAN	312	238	171	120	136	195	403	290	772	290	171	165
MAX	436	272	235	126	147	309	594	343	1,380	450	202	194
MIN	226	184	72	115	125	139	266	260	270	192	145	147
AC-FT	19,200	14,160	10,540	7,390	7,560	11,970	23,970	17,830	45,970	17,840	10,510	9,810
CFSM	0.35	0.26	0.19	0.13	0.15	0.22	0.45	0.32	0.85	0.32	0.19	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

MEAN	71.9	68.2	46.4	29.9	31.0	164	403	214	177	153	82.3	60.9
MAX	550	402	182	141	163	675	3,087	846	772	1,382	752	331
(WY)	(1996)	(1996)	(1987)	(1987)	(1998)	(1995)	(1997)	(1969)	(2005)	(1993)	(1993)	(1986)
MIN	0.00	3.52	1.00	0.00	0.00	2.04	20.9	8.09	2.17	0.45	0.10	0.05
(WY)	(1989)	(1989)	(1937)	(1937)	(1936)	(1969)	(1934)	(1934)	(1933)	(1988)	(1988)	(1988)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1931 - 2005	
ANNUAL TOTAL	55,744.7		99,189			
ANNUAL MEAN	152		272		a132	
HIGHEST ANNUAL MEAN					420 1997	
LOWEST ANNUAL MEAN					21.1 1977	
HIGHEST DAILY MEAN	436	Oct 4	1,380	Jun 17	6,760	Apr 6, 1997
LOWEST DAILY MEAN	7.9	Feb 11	b72	Dec 14	c0.00	Aug 3, 1934
ANNUAL SEVEN-DAY MINIMUM	8.0	Feb 7	116	Jan 15	0.00	Feb 1, 1936
MAXIMUM PEAK FLOW			1,400	Jun 17	d8,890	Apr 7, 1997
MAXIMUM PEAK STAGE			8.46	Jun 17	d18.13	Apr 7, 1997
INSTANTANEOUS LOW FLOW			b40	Dec 14	c0.00	Aug 3, 1934
ANNUAL RUNOFF (AC-FT)	110,600		196,700		95,770	
ANNUAL RUNOFF (CFSM)	0.168		0.300		0.146	
10 PERCENT EXCEEDS	274		436		306	
50 PERCENT EXCEEDS	140		219		56	
90 PERCENT EXCEEDS	14		126		8.6	

- a Median of annual mean discharges is 100 ft³/s.
- b Result of freezeup.
- c Many days, several years.
- d Due in part to dam failure; from highwater mark.
- e Estimated.

