

MINNESOTA RIVER BASIN--Continued

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 60 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 current year. 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. 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 to poor. Flow affected by lakes above station.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 18	1700	232	4.80	Jun 18	1800	310	5.06
Nov 30	1200	256	4.89	Jul 9	1200	290	4.99
Feb 28	1400	245	4.83	Jul 22	2300	548	5.66
Apr 8	0300	451	5.44	Aug 18	0100	310	5.04
May 18	0200	*591	5.75	Sep 10	0800	245	4.81

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	45	180	254	e104	e81	233	340	238	261	202	279	183
2	45	176	249	e101	e82	205	330	234	254	198	253	175
3	46	154	245	e99	e84	e188	332	227	246	204	225	179
4	52	142	240	e92	e87	e182	340	222	235	200	200	211
5	68	138	235	e90	e89	e180	357	252	232	192	187	218
6	78	134	232	e87	e91	e178	383	319	238	183	176	228
7	80	132	220	e85	e97	e177	429	380	237	177	167	236
8	79	131	201	e82	e104	e178	445	440	241	208	155	240
9	76	129	e188	e79	e115	e179	435	468	253	273	169	242
10	74	135	e180	e77	e130	e178	425	454	262	260	194	243
11	70	103	e180	e75	e133	e178	425	444	268	254	209	238
12	67	118	e186	e74	e131	e177	436	454	272	238	197	235
13	62	153	186	e72	e125	e175	422	449	277	215	204	235
14	58	159	184	e70	e124	e176	409	438	283	194	242	232
15	60	141	180	e69	e125	e180	394	429	287	180	260	231
16	79	154	175	e70	e126	e189	385	464	296	181	289	226
17	143	165	174	e74	e123	e200	377	539	298	207	306	220
18	214	165	166	e76	e118	e212	363	582	307	263	306	212
19	216	e150	99	e77	e116	234	346	540	309	338	294	207
20	190	e125	e95	e78	e114	257	332	509	305	420	272	204
21	173	146	e93	e78	e112	258	320	477	294	488	251	204
22	163	195	e92	e79	e110	260	310	447	279	528	233	202
23	157	216	e93	e80	e110	267	299	422	268	525	218	196
24	165	216	e95	e80	e112	271	284	404	259	481	206	191
25	162	216	e98	e80	e130	268	272	382	241	409	197	186
26	157	234	e100	e80	164	251	265	359	229	352	187	182
27	157	249	e102	e80	197	242	261	335	218	315	177	181
28	150	252	e104	e80	237	262	257	316	211	312	172	182
29	150	253	e106	e80	---	330	250	299	214	300	171	179
30	149	255	e107	e80	---	357	242	281	209	288	179	174
31	156	---	e108	e81	---	345	---	268	---	294	182	---
TOTAL	3541	5116	4967	2509	3367	6967	10465	12072	7783	8879	6757	6272
MEAN	114	171	160	80.9	120	225	349	389	259	286	218	209
MAX	216	255	254	104	237	357	445	582	309	528	306	243
MIN	45	103	92	69	81	175	242	222	209	177	155	174
AC-FT	7020	10150	9850	4980	6680	13820	20760	23940	15440	17610	13400	12440
CFSM	.13	.19	.18	.09	.13	.25	.39	.43	.29	.32	.24	.23

e Estimated

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	68.8	66.0	44.5	28.7	29.6	165	407	214	167	148	80.2	58.2
MAX	550	402	182	141	163	675	3087	846	516	1382	752	331
(WY)	1996	1996	1987	1987	1998	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 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1931 - 1999
ANNUAL TOTAL	71518	78695	
ANNUAL MEAN	196	216	130 ^a
HIGHEST ANNUAL MEAN			420
LOWEST ANNUAL MEAN			21.1
HIGHEST DAILY MEAN	743	Apr 10	6760
LOWEST DAILY MEAN	43	Sep 30	.00 ^b
ANNUAL SEVEN-DAY MINIMUM	45	Sep 26	.00
INSTANTANEOUS PEAK FLOW		591 ^c	8890
INSTANTANEOUS PEAK STAGE		6.92 ^d	18.13
INSTANTANEOUS LOW FLOW		28 ^e	.00 ^b
ANNUAL RUNOFF (AC-FT)	141900	156100	94530
ANNUAL RUNOFF (CFSM)	.22	.24	.14
10 PERCENT EXCEEDS	383	378	293
50 PERCENT EXCEEDS	163	202	51
90 PERCENT EXCEEDS	73	80	6.7

- a Median of annual mean discharges is 98 ft³/s.
- b Many days, several years.
- c Stage, 5.75 ft.
- d Result of ice jam.
- e Result of freezeup.

