

Water-Data Report 2009

05286000 RUM RIVER NEAR ST. FRANCIS, MN

Upper Mississippi Basin
Rum Subbasin

LOCATION.--Lat 45°19'40", long 93°22'20" referenced to North American Datum of 1927, in SW ¼ SE ¼ SE ¼ sec.19, T.33 N., R.24 W., Anoka County, MN, Hydrologic Unit 07010207, on left bank at upstream side of County Highway 22 bridge, 4 mi south of St. Francis and 15.8 mi upstream from mouth.

DRAINAGE AREA.--1,360 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May to November 1929, March 1930 to September 1931, April to November 1932, March 1933 to current year.

REVISED RECORDS.--WSP 1308: 1930(M), 1932(M). Unpublished, 2009: 1987(M).

GAGE.--Water-stage recorder. Datum of gage is 860.74 ft above sea level (NGVD of 1929, levels by Anoka County Highway Department). Prior to Nov. 9, 1933, nonrecording gage at site 50 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional regulation from Ogechie Lake (also controls Mille Lacs Lake) and Lake Onamia.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	283	311	e221	e170	e170	e232	5,310	894	363	292	412	374
2	263	304	e215	e172	e169	e228	4,500	915	354	281	388	351
3	254	302	e214	e174	e166	e221	3,750	919	347	269	363	331
4	247	300	e210	e174	e165	e214	3,110	911	338	265	350	312
5	239	297	e203	e174	e167	e216	2,590	890	330	253	334	296
6	238	310	e194	e174	e167	e216	2,180	858	323	240	318	282
7	253	329	e189	e174	e165	e214	1,940	820	318	233	309	271
8	274	342	e185	e174	e165	e216	1,810	785	360	220	313	258
9	282	352	e180	e178	e165	e229	1,740	753	396	207	293	245
10	303	363	e180	e178	e170	e237	1,670	727	396	200	277	235
11	350	391	e180	e178	e186	e245	1,590	704	382	194	269	229
12	409	415	e180	e177	e203	e282	1,470	681	366	186	257	224
13	440	430	e180	e175	e227	e277	1,370	669	352	180	247	214
14	446	434	e178	e173	e238	e305	1,280	651	340	177	234	203
15	429	433	e175	e172	e248	e335	1,180	629	325	198	226	196
16	429	425	e174	e171	e252	e394	1,110	610	324	187	246	193
17	418	417	e173	e170	e252	e516	1,060	636	330	186	239	189
18	408	412	e171	e176	e251	e692	1,030	645	323	222	223	182
19	396	414	e170	e178	e247	e911	985	623	324	266	282	178
20	380	392	e170	e179	e240	e1,060	948	593	315	283	482	174
21	363	e310	e170	e179	e238	e1,230	921	576	301	304	615	175
22	359	e325	e170	e181	e236	e1,540	895	540	304	311	666	175
23	353	e320	e170	e181	e236	2,130	869	523	305	292	662	167
24	347	e313	e170	e180	e237	2,580	846	494	297	307	658	163
25	340	e272	e173	e178	e246	2,650	821	474	306	408	663	165
26	333	e252	e171	e174	e248	2,590	799	451	313	481	637	169
27	332	e246	e170	e175	e245	2,960	784	437	340	517	582	168
28	322	e238	e170	e175	e240	4,070	775	418	342	515	525	165
29	315	e236	e171	e175	---	5,490	769	397	325	484	478	162
30	310	e221	e171	e174	---	6,180	820	385	306	446	433	160
31	311	---	e170	e174	---	5,950	---	376	---	421	400	---
Total	10,426	10,106	5,618	5,437	5,939	44,610	48,922	19,984	10,045	9,025	12,381	6,606
Mean	336	337	181	175	212	1,439	1,631	645	335	291	399	220
Max	446	434	221	181	252	6,180	5,310	919	396	517	666	374
Min	238	221	170	170	165	214	769	376	297	177	223	160
Ac-ft	20,680	20,050	11,140	10,780	11,780	88,480	97,040	39,640	19,920	17,900	24,560	13,100
Cfs/m	0.25	0.25	0.13	0.13	0.16	1.06	1.20	0.47	0.25	0.21	0.29	0.16
In.	0.29	0.28	0.15	0.15	0.16	1.22	1.34	0.55	0.27	0.25	0.34	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	489	450	326	246	247	620	1,587	1,129	896	644	417	437
Max	2,309	1,715	1,051	660	813	2,699	4,269	3,899	3,400	2,532	2,251	2,362
(WY)	(2006)	(1972)	(1983)	(1987)	(1966)	(1966)	(1969)	(1986)	(1984)	(1954)	(1972)	(1986)
Min	65.4	71.8	55.8	51.5	59.2	75.8	154	73.6	43.7	34.5	37.3	47.1
(WY)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1934)	(1933)

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1929 - 2009	
Annual total	236,818		189,099			
Annual mean	647		518		640	
Highest annual mean					1,512	1986
Lowest annual mean					66.1	1934
Highest daily mean	3,720	May 3	6,180	Mar 30	10,000	Apr 13, 1969
Lowest daily mean	137	Feb 20	160	Sep 30	30	Aug 3, 1934
Annual seven-day minimum	140	Feb 15	165	Sep 24	31	Aug 1, 1934
Maximum peak flow			6,220	Mar 30	^a 10,100	Apr 20, 1965
Maximum peak stage			8.63	Mar 30	11.63	Apr 13, 1969
Instantaneous low flow			160	Sep 25	29	Aug 18, 1934
Annual runoff (ac-ft)	469,700		375,100		463,900	
Annual runoff (cfsm)	0.476		0.381		0.471	
Annual runoff (inches)	6.48		5.17		6.40	
10 percent exceeds	1,940		911		1,410	
50 percent exceeds	305		304		379	
90 percent exceeds	155		173		120	

^a Also occurred Apr. 13, 1969.

^b Also occurred Sep. 30

