Water-Data Report 2013

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 mi^2.

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 Unpublished, 2009: 1987(M).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, non-recording 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 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	259	260	251	e178	e153	e163	e435	2,050	2,610	4,510	598	313
2	251	257	260	e175	e153	e163	e543	2,210	2,210	3,940	580	311
3	249	255	261	e175	e153	e162	e659	2,390	1,880	3,350	560	307
4	250	253	259	e174	e154	e162	878	2,560	1,670	2,780	541	310
5	244	253	e228	e172	e154	e162	1,070	2,570	1,540	2,190	537	307
6	244	264	233	e171	e154	e163	1,290	2,430	1,430	1,680	524	306
7	236	270	243	e170	e156	e163	1,470	2,160	1,330	1,380	525	307
8	235	268	233	e170	e157	e163	1,700	1,840	1,310	1,250	513	301
9	238	269	194	e169	e157	e163	1,960	1,620	1,450	1,200	496	308
10	241	269	e160	e170	e160	e163	2,040	1,440	1,700	1,160	485	312
11	240	276	e190	e169	e161	e163	2,010	1,300	1,980	1,110	474	315
12	234	277	e205	e168	e161	e164	1,960	1,190	2,180	1,070	461	327
13	233	274	e217	e167	e161	e165	1,930	1,120	2,210	1,110	446	314
14	235	269	e220	e166	e160	e165	1,900	1,070	2,080	1,140	435	308
15	231	274	e219	e166	e160	e165	1,820	1,010	1,870	1,170	429	341
16	230	266	e214	e167	e160	e165	1,660	948	1,640	1,170	422	343
17	228	266	e213	e165	e162	e165	1,510	887	1,440	1,100	411	345
18	231	267	e213	e165	e163	e165	1,420	864	1,270	1,010	401	364
19	237	261	e211	e164	e164	e166	1,340	880	1,130	920	393	384
20	240	257	e207	e161	e165	e166	1,320	974	1,010	855	386	471
21	241	261	e204	e160	e166	e167	1,320	1,200	1,080	804	381	522
22	241	260	e202	e159	e167	e167	1,340	1,440	1,160	764	369	497
23	245	260	e200	e158	e167	e167	1,380	1,670	1,280	723	359	462
24	248	255	e198	e156	e165	e168	1,480	1,900	1,540	692	350	439
25	271	246	e192	e154	e165	e169	1,570	2,260	1,980	672	343	418
26	282	236	e191	e153	e163	e170	1,650	2,680	2,560	671	338	400
27	279	e208	e187	e153	e162	e172	1,720	3,090	3,260	673	335	383
28	273	e215	e186	e152	e163	e186	1,790	3,390	4,180	656	327	374
29	276	e223	e182	e153	---	e214	1,860	3,420	4,820	640	322	371
30	276	e232	e182	e153	---	e267	1,940	3,250	4,870	631	323	361
31	266	---	e180	e153	---	e345	---	2,960	---	615	315	---
Total	7,684	7,701	6,535	5,086	4,486	5,468	44,965	58,773	60,670	41,636	13,379	10,821
Mean	248	257	211	164	160	176	1,499	1,896	2,022	1,343	432	361
Max	282	277	261	178	167	345	2,040	3,420	4,870	4,510	598	522
Min	228	208	160	152	153	162	435	864	1,010	615	315	301
Ac-ft	15,240	15,270	12,960	10,090	8,900	10,850	89,190	116,600	120,300	82,590	26,540	21,460
Cfsm	0.18	0.19	0.16	0.12	0.12	0.13	1.10	1.39	1.49	0.99	0.32	0.27
In.	0.21	0.21	0.18	0.14	0.12	0.15	1.23	1.61	1.66	1.14	0.37	0.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	490	459	325	247	249	630	1,586	1,161	932	666	448	446
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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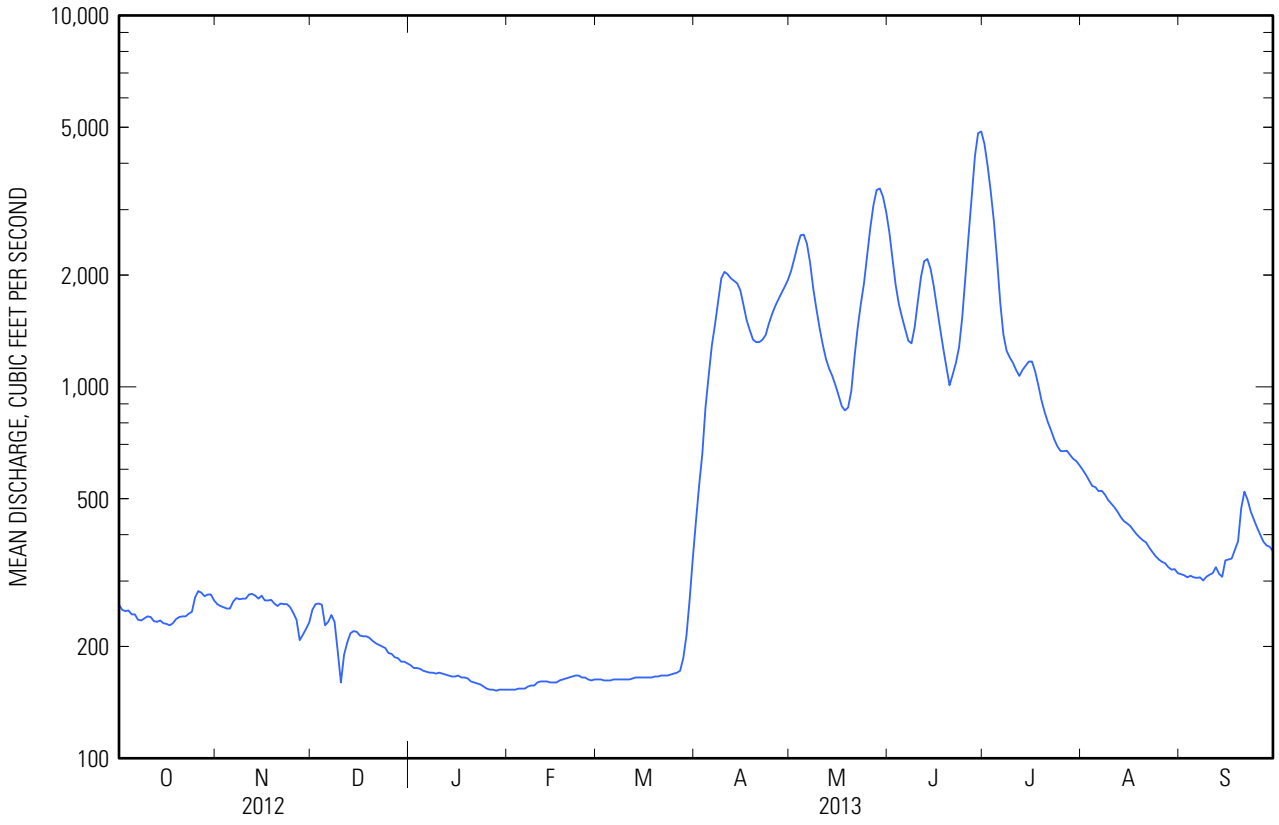
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1929 - 2013	
Annual total	266,325		267,204			
Annual mean	728		732		653	
Highest annual mean					1,512	1986
Lowest annual mean					66.1	1934
Highest daily mean	4,740	Jun 3	4,870	Jun 30	10,000	Apr 13, 1969
Lowest daily mean	160	Dec 10	[a]152	Jan 28	30	Aug 3, 1934
Annual seven-day minimum	186	Dec 25	153	Jan 26	31	Aug 1, 1934
Maximum peak flow			4,950	Jun 30	[b]10,100	Apr 20, 1965
Maximum peak stage			7.73	Jun 30	11.63	Apr 13, 1969
Instantaneous low flow			[c]103	Dec 10	29	Aug 18, 1934
Annual runoff (ac-ft)	528,300		530,000		472,900	
Annual runoff (cfsm)	0.535		0.538		0.480	
Annual runoff (inches)	7.28		7.31		6.52	
10 percent exceeds	1,470		1,930		1,450	
50 percent exceeds	341		306		385	
90 percent exceeds	233		163		123	

[a] Estimated daily-mean discharge, backwater from ice.
[b] Also occurred Apr. 13, 1969.
[c] Result of freezeup.