Water-Data Report 2008

06476000 JAMES RIVER AT HURON, SD

James Basin
Middle James Subbasin

LOCATION.--Lat 44°21′49″, long 98°11′56″ referenced to North American Datum of 1927, in SW ¼ SE ¼ NE ¼ sec.6, T.110 N., R.61 W., Beadle County, SD, Hydrologic Unit 10160006, on right bank 15 ft upstream from city dam at Huron, 135 ft downstream from Dakota Minnesota and Eastern Railroad bridge, and 165 ft upstream from bridge on 3rd Street SE.

DRAINAGE AREA.--15,869 mi^2 of which 4,148 mi^2 probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1928 to September 1932, August 1943 to current year. Monthly discharge only for some periods from August 1928 to September 1932, published in WSP 1309. Gage-height records collected at site about 100 ft downstream for period of open water each year July 1902 to June 1914 and for period March to June 1915-23 are in reports of the National Weather Service.

REVISED RECORDS.--WDR SD-84-1: Drainage area. WDR SD-86-1: Drainage area.

GAGE.--Water-stage recorder, wire-weight gage, and concrete dam. Datum of gage is 1,223.44 ft above NGVD of 1929. Aug. 29, 1928, to Mar. 15, 1929, nonrecording gage at site 100 ft downstream at about same datum. Mar. 16, 1929, to June 30, 1932, nonrecording gage 165 ft downstream at present datum. Aug. 3, 1943, to Oct. 17, 1951, nonrecording gage at site 15 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Low flow regulated by dams forming Arrowwood and Jim Lakes, combined capacity, 16,530 acre-ft, and by dam forming Jamestown Reservoir, capacity, 229,470 acre-ft, since May 1953, and by dam forming Pipestem Reservoir, capacity, 147,000 acre-ft, since May 1974. Satellite data-collection platform at station. Water temperature and specific conductance are measured with each discharge measurement.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood between Apr. 11 and 13, 1881, reached a stage of 19.8 ft, from U.S. Weather Bureau publication. Flood of Mar. 22, 1922, reached a stage of 16.5 ft.

06476000 JAMES RIVER AT HURON, SD—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	680	283	e170	e135	e95	90	406	183	142	409	285	171
2	717	303	e165	e130	e98	87	391	219	134	437	254	424
3	664	285	e160	e132	e100	85	450	238	132	389	273	555
4	686	285	e165	e138	e99	87	445	224	128	353	289	511
5	647	332	e170	e140	e98	87	407	218	158	312	288	461
6	620	274	e170	e142	e96	e85	468	209	375	347	267	378
7	669	240	e160	144	e94	e83	433	218	472	328	256	347
8	618	255	e155	144	e93	e80	365	210	401	313	226	320
9	619	262	e160	143	e92	e80	346	215	367	279	223	265
10	581	239	e165	142	e91	e81	e340	280	336	247	208	231
11	531	256	e170	140	e90	85	e440	263	261	236	192	264
12	547	246	e170	139	e88	93	405	200	351	246	214	266
13	539	230	e175	e137	e85	96	371	256	577	227	213	249
14	568	285	e165	e135	e84	95	340	231	696	204	217	272
15	590	236	e160	e135	e84	94	309	236	707	199	257	219
16	602	220	e165	e130	e85	90	620	237	638	188	288	204
17	584	226	e165	e125	e83	96	532	263	595	227	302	196
18	590	216	e170	e125	e82	101	557	229	592	218	287	174
19	317	235	e170	e120	e80	104	486	234	594	232	266	189
20	275	247	169	e115	e78	108	369	221	577	258	257	191
21	398	e240	166	e115	e78	112	465	189	546	277	246	175
22	431	e220	164	e110	76	117	381	177	518	279	294	162
23	450	e210	162	e105	76	127	338	161	478	261	320	184
24	409	e210	160	e100	77	128	370	142	449	268	292	186
25	326	e205	160	e96	77	142	e380	174	531	291	261	157
26	407	e200	158	e100	76	151	e260	205	489	256	225	164
27	404	e195	158	e110	78	182	324	179	576	250	268	163
28	334	e190	156	e115	81	205	309	159	676	257	275	155
29	336	e180	155	e105	86	222	192	157	548	303	248	164
30	337	e170	e150	e92	---	392	157	158	457	291	203	163
31	364	---	e145	e93	---	428	---	155	---	293	169	---
Total	15,840	7,175	5,053	3,832	2,500	4,013	11,656	6,440	13,501	8,675	7,863	7,560
Mean	511	239	163	124	86.2	129	389	208	450	280	254	252
Max	717	332	175	144	100	428	620	280	707	437	320	555
Min	275	170	145	92	76	80	157	142	128	188	169	155
Ac-ft	31,420	14,230	10,020	7,600	4,960	7,960	23,120	12,770	26,780	17,210	15,600	15,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	165	146	96.9	50.7	48.5	446	1,261	1,080	714	486	375	225
Max	1,488	1,565	1,150	447	328	3,421	16,590	7,185	3,883	2,328	2,221	1,782
(WY)	(2000)	(1999)	(1999)	(1999)	(1996)	(1994)	(1997)	(1997)	(1995)	(1997)	(1997)	(1999)
Min	0.00	0.00	0.00	0.00	0.00	3.29	1.37	0.00	0.00	0.00	0.00	0.00
(WY)	(1946)	(1946)	(1946)	(1946)	(1956)	(1965)	(1959)	(1959)	(1959)	(1959)	(1959)	(1949)

06476000 JAMES RIVER AT HURON, SD—Continued

SUMMARY STATISTICS

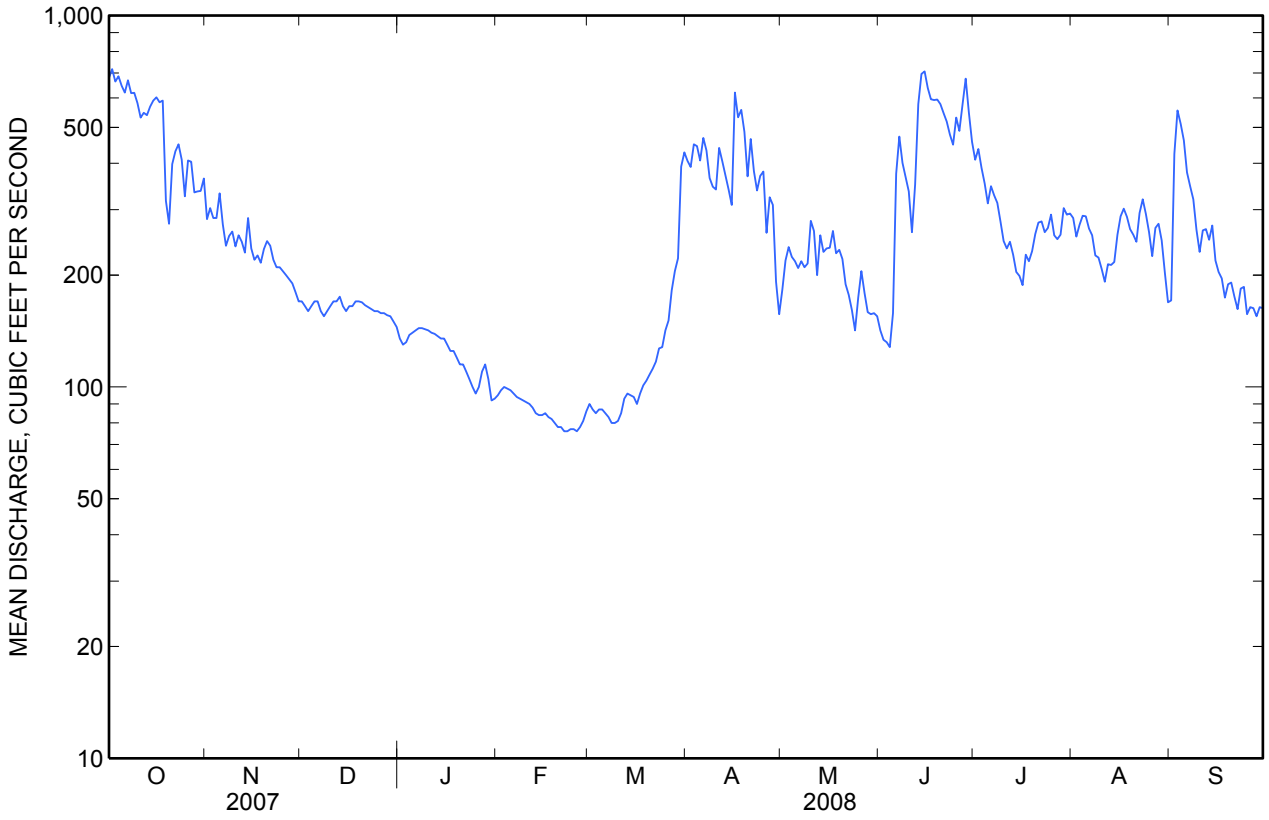
	Calendar Year 2007		Water Year 2008		Water Years 1944 - 2008	
Annual total	460,863.5		94,108			
Annual mean	1,263		257		[a]426	
Highest annual mean					2,915	1997
Lowest annual mean					0.51	1959
Highest daily mean	11,100	May 7	717	Oct 2	22,800	Apr 6, 1997
Lowest daily mean	5.5	Feb 3	76	Feb 22	[b]0.00	Oct 12, 1944
Annual seven-day minimum	5.6	Feb 3	77	Feb 20	0.00	Sep 29, 1945
Maximum peak flow			[c]778	Jun 28	23,400	Apr 6, 1997
Maximum peak stage			[c]9.85	Jun 28	[d]21.28	Apr 6, 1997
Annual runoff (ac-ft)	914,100		186,700		308,300	
10 percent exceeds	3,390		513		1,150	
50 percent exceeds	803		220		72	
90 percent exceeds	7.0		93		0.00	

[a] Median of annual mean discharges, 250 ft³/s. Median and mean includes water years 1929-1932.

[b] No flow for long periods in most years.

[c] Stage falling, maximum daily discharge, 717 ft³/s, Oct. 2; maximum gage height, 9.88 ft, Oct. 2.

[d] Backwater; from floodmark.



06476000 JAMES RIVER AT HURON, SD—Continued

WATER-QUALITY RECORDS

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf µS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
Oct					
03...	0830	685	1,270	8.0	13.5
Jan					
25...	1530	96	2,100	28.5	.0
Mar					
26...	0915	144	1,740	3.5	4.0
Apr					
04...	1005	425	1,610	11.4	7.5
22...	0950	392	1,610	5.5	9.5
Jun					
27...	0920	514	1,650	21.2	23.5