Water-Data Report 2013

06470000 JAMES RIVER AT JAMESTOWN, ND

James Basin
Upper James Subbasin

LOCATION.--Lat 46°53′23″, long 98°40′54″ referenced to North American Datum of 1983, in NW ¼ NE ¼ sec.6, T.139 N., R.63 W., Stutsman County, ND, Hydrologic Unit 10160003, on left bank 200 ft upstream from Interstate 94 bridge at southeast corner of Jamestown and 3 mi downstream from Pipestem Creek.

DRAINAGE AREA.--2,820 mi^2 of which 1,650 mi^2 probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--DAILY DISCHARGE--July 1928 to September 1933, March to May 1935, September 1937 to September 1939, April 1943 to current year. Monthly discharge only for some periods, published in WSP 1309.

PERIOD OF RECORD.--DAILY GAGE HEIGHT--October 2000 to current year.

REVISED RECORDS.--WSP 1239: 1938(M). WSP 1917: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,373.27 ft above National Geodetic Vertical Datum of 1929. October 1, 1949, to September 30, 1965, at former bridge 0.5 mi upstream at datum 2.00 ft higher. See WSP 1729 or 1917 for history of changes prior to October 1, 1949.

REMARKS.--Records good except for estimated daily discharges, which are poor.

REGULATION.--Flow regulated by Jamestown Reservoir, capacity, 220,980 acre-ft, since 1953, Pipestem Lake, capacity 147,110 acre-ft, since 1973 and several other lakes with a combined capacity of approximately 25,000 acre-ft.

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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	1.7	4.9	e7.2	e5.6	e4.2	e4.4	e6.6	262	1,260	944	752	362
2	1.6	4.8	e7.3	e6.1	e4.2	e4.3	e8.0	356	1,260	951	724	357
3	1.5	5.7	e7.4	e6.7	e4.2	e4.3	e11	471	1,250	953	684	334
4	6.1	6.5	e7.5	e7.0	e4.3	e4.4	e22	562	1,180	946	676	279
5	2.0	6.5	e7.4	e7.1	e4.3	e4.5	e39	567	1,190	944	676	256
6	1.6	5.7	e7.4	e7.1	e4.4	e4.5	e53	599	1,250	943	730	217
7	1.6	6.5	e7.5	e7.0	e4.4	e4.6	e57	683	1,250	943	697	187
8	1.5	7.2	e7.6	e7.1	e4.4	e4.6	e57	806	1,240	941	693	179
9	1.4	7.4	e7.4	e7.1	e4.4	e4.6	e56	961	1,250	936	702	206
10	1.4	e7.4	e7.2	e7.2	e4.4	e4.6	e55	1,070	1,240	e934	697	171
11	1.3	e7.3	e7.0	e7.1	e4.3	e4.7	e54	1,080	1,240	923	693	157
12	2.2	e6.8	e7.0	e6.9	e4.3	e4.7	e53	1,080	1,250	929	666	143
13	2.5	e6.5	e6.9	e6.7	e4.3	e4.8	e53	1,080	1,250	e930	623	93
14	2.8	e6.7	e6.8	e6.5	e4.4	e4.8	e52	1,090	1,250	930	610	100
15	3.5	e6.9	e6.8	e6.4	e4.4	e4.9	e52	1,090	1,240	e931	595	95
16	3.4	e7.1	e6.7	e6.2	e4.4	e4.8	e52	1,090	1,240	935	590	92
17	7.9	e7.4	e6.5	e6.1	e4.5	e4.8	e51	1,030	1,240	936	583	93
18	12	e7.6	e6.3	e6.0	e4.5	e4.7	e51	942	1,250	914	581	93
19	9.5	e7.8	e6.2	e5.8	e4.6	e4.7	e51	1,120	1,250	902	585	95
20	6.4	e7.9	e6.1	e5.7	e4.7	e4.7	e51	1,060	1,170	911	611	95
21	5.2	e8.0	e6.0	e5.5	e4.7	e4.7	e53	1,090	971	906	605	93
22	3.8	e8.0	e5.9	e5.3	e4.6	e4.7	e52	1,170	962	903	600	91
23	4.9	e7.9	e5.8	e5.2	e4.5	e4.8	e54	1,220	954	899	595	91
24	4.9	e7.8	e5.7	e5.1	e4.4	e4.8	e63	1,250	952	868	589	91
25	4.0	e7.7	e5.6	e5.0	e4.4	e4.8	e80	1,250	953	900	590	91
26	3.9	e7.6	e5.5	e4.9	e4.4	e4.9	e115	1,250	957	856	575	89
27	4.3	e7.4	e5.5	e4.7	e4.4	e5.0	157	1,250	953	810	512	90
28	4.9	e7.3	e5.5	e4.6	e4.4	e5.1	271	1,250	950	807	503	101
29	4.8	e7.2	e5.5	e4.5	---	e5.2	191	1,210	949	804	479	93
30	6.0	e7.2	e5.5	e4.3	---	e5.4	185	1,170	946	775	411	92
31	5.1	---	e5.5	e4.2	---	e5.8	---	1,260	---	751	369	---
Total	123.7	210.7	202.2	184.7	123.4	147.6	2,105.6	30,369	34,297	27,955	18,996	4,526
Mean	3.99	7.02	6.52	5.96	4.41	4.76	70.2	980	1,143	902	613	151
Max	12	8.0	7.6	7.2	4.7	5.8	271	1,260	1,260	953	752	362
Min	1.3	4.8	5.5	4.2	4.2	4.3	6.6	262	946	751	369	89
Ac-ft	245	418	401	366	245	293	4,180	60,240	68,030	55,450	37,680	8,980

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	92.8	43.0	13.2	6.75	11.5	82.6	309	309	245	176	133	111
Max	2,068	568	144	47.9	111	731	2,434	3,020	1,963	1,732	1,885	2,401
(WY)	(2012)	(2001)	(2001)	(1995)	(1930)	(1966)	(1950)	(2009)	(2009)	(2011)	(2011)	(2011)
Min	0.29	0.35	0.66	0.29	0.60	1.74	1.00	1.06	1.27	0.67	0.23	0.20
(WY)	(1990)	(1939)	(1939)	(1991)	(1939)	(1944)	(1939)	(1939)	(1931)	(1933)	(1933)	(1933)

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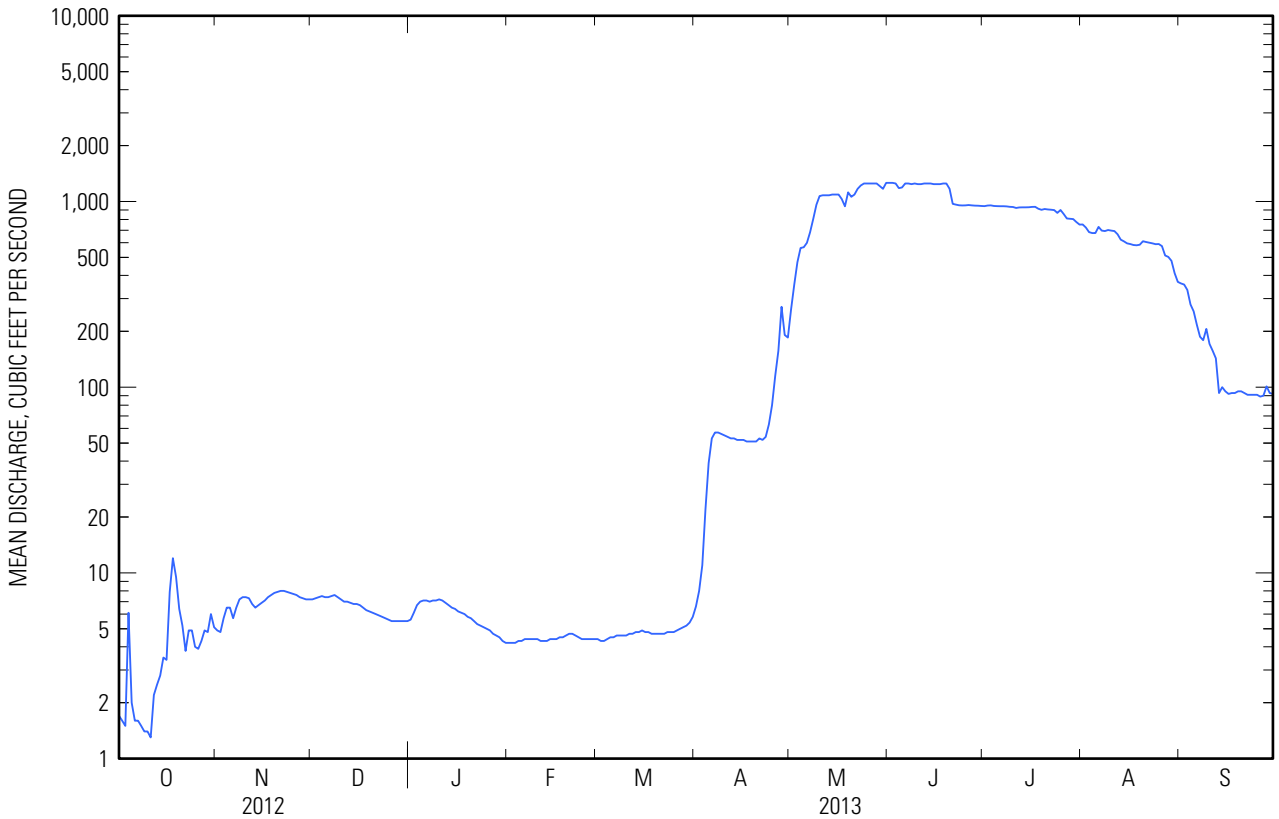
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1928 - 2013	
Annual total	20,081.0		119,240.9			
Annual mean	54.9		327		129	
Highest annual mean					925	2011
Lowest annual mean					2.38	1938
Highest daily mean	233	Apr 27	1,260	May 31	6,170	May 13, 1950
Lowest daily mean	1.3	Oct 11	1.3	Oct 11	0.00	Jun 28, 1933
Annual seven-day minimum	1.5	Oct 5	1.5	Oct 5	0.00	Oct 26, 1989
Maximum peak flow			1,300	Jun 20	[a]6,390	May 13, 1950
Maximum peak stage			9.59	Jun 20	16.94	Apr 11, 1969
Annual runoff (ac-ft)	39,830		236,500		93,090	
10 percent exceeds	152		1,080		360	
50 percent exceeds	41		9.5		12	
90 percent exceeds	4.2		4.4		1.4	

[a] Gage height, 15.82 ft; site and datum then in use.



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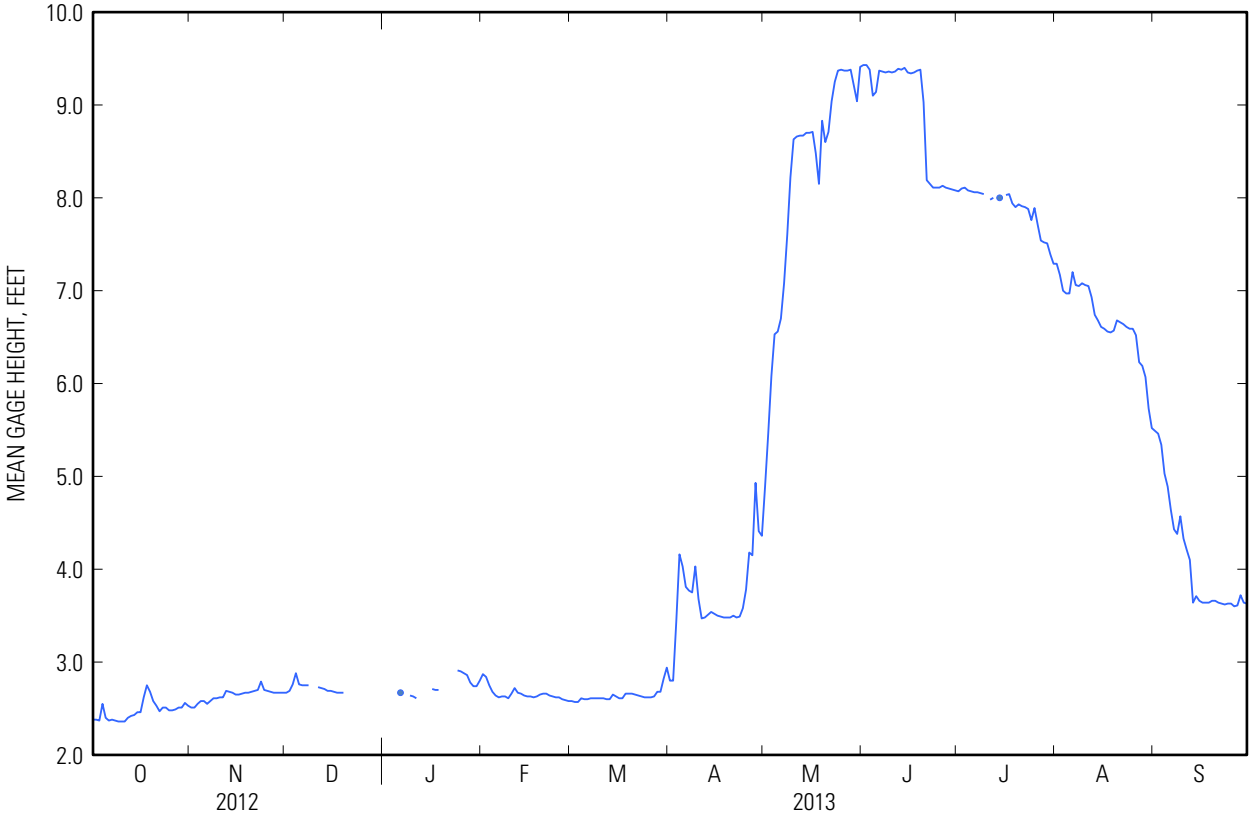
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.38	2.51	2.67	---	2.87	2.58	2.80	4.89	9.43	8.07	7.29	5.49
2	2.38	2.51	2.69	---	2.84	2.57	2.80	5.46	9.43	8.10	7.17	5.46
3	2.37	2.55	2.76	---	2.75	2.57	3.44	6.08	9.38	8.11	7.00	5.34
4	2.55	2.58	2.88	---	2.68	2.61	4.16	6.53	9.10	8.08	6.97	5.03
5	2.40	2.58	2.76	---	2.64	2.60	4.03	6.56	9.14	8.07	6.97	4.89
6	2.37	2.55	2.75	2.67	2.62	2.60	3.81	6.70	9.37	8.06	7.20	4.64
7	2.38	2.58	2.75	---	2.63	2.61	3.77	7.08	9.36	8.06	7.06	4.43
8	2.37	2.61	2.75	---	2.63	2.61	3.75	7.60	9.35	8.05	7.05	4.38
9	2.36	2.61	---	2.64	2.61	2.61	4.03	8.22	9.36	8.04	7.08	4.57
10	2.36	2.62	---	2.63	2.66	2.61	3.68	8.63	9.35	---	7.06	4.33
11	2.36	2.62	2.73	2.61	2.72	2.61	3.47	8.66	9.36	7.98	7.05	4.21
12	2.40	2.69	2.72	---	2.67	2.60	3.48	8.67	9.39	8.00	6.93	4.10
13	2.42	2.68	2.71	---	2.66	2.60	3.51	8.67	9.38	---	6.74	3.64
14	2.43	2.67	2.69	---	2.64	2.65	3.54	8.70	9.40	8.00	6.68	3.71
15	2.46	2.65	2.69	---	2.63	2.63	3.52	8.70	9.35	---	6.61	3.66
16	2.46	2.65	2.68	2.71	2.63	2.61	3.50	8.71	9.34	8.03	6.59	3.64
17	2.62	2.66	2.67	2.70	2.62	2.61	3.49	8.48	9.35	8.04	6.56	3.64
18	2.75	2.67	2.67	2.70	2.63	2.66	3.48	8.15	9.37	7.94	6.55	3.64
19	2.68	2.67	2.67	---	2.65	2.66	3.48	8.83	9.38	7.90	6.57	3.66
20	2.58	2.68	---	---	2.66	2.66	3.48	8.60	9.03	7.93	6.68	3.66
21	2.53	2.69	---	---	2.66	2.65	3.50	8.71	8.19	7.91	6.66	3.64
22	2.47	2.70	---	---	2.64	2.64	3.48	9.04	8.15	7.90	6.64	3.63
23	2.51	2.79	---	---	2.63	2.63	3.49	9.25	8.11	7.88	6.61	3.62
24	2.51	2.70	---	2.91	2.62	2.62	3.58	9.37	8.11	7.76	6.59	3.63
25	2.48	2.69	---	2.90	2.62	2.62	3.78	9.38	8.11	7.89	6.59	3.63
26	2.48	2.68	---	2.88	2.60	2.62	4.18	9.37	8.13	7.71	6.52	3.60
27	2.49	2.67	---	2.86	2.59	2.63	4.15	9.37	8.11	7.54	6.23	3.61
28	2.51	2.67	---	2.78	2.58	2.68	4.93	9.38	8.10	7.52	6.19	3.72
29	2.51	2.67	---	2.74	---	2.68	4.41	9.21	8.09	7.51	6.07	3.64
30	2.56	2.67	---	2.74	---	2.82	4.36	9.04	8.08	7.39	5.73	3.63
31	2.53	---	---	2.80	---	2.94	---	9.41	---	7.29	5.52	---
Mean	2.47	2.64	---	---	2.66	2.64	3.70	8.24	8.93	---	6.68	4.08
Max	2.75	2.79	---	---	2.87	2.94	4.93	9.41	9.43	---	7.29	5.49
Min	2.36	2.51	---	---	2.58	2.57	2.80	4.89	8.08	---	5.52	3.60

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