

05476000 DES MOINES RIVER AT JACKSON, MN

LOCATION.--Lat 43°37'10", long 94°59'10", in SE¼SW¼ sec. 24, T.102 N., R.35 W., Jackson County, Hydrologic Unit 07100001, on right bank at old dam structure in Jackson.

DRAINAGE AREA.--1,250 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1909 to December 1913, August 1930 to current year (winter record incomplete prior to 1936). Published as "Des Moines River near Jackson", 1930-35, as "West Fork Des Moines River near Jackson", 1936-44, and as "West Fork Des Moines River at Jackson", 1945-69.

REVISED RECORDS.--WSP 1115: 1942. WSP 1175: Drainage area. WSP 1238: 1950. WSP 1308: 1938(M).

GAGE.--Water-stage recorder. Datum of gage is 1,287.75 ft above sea level (NGVD of 1929). May 31, 1909 to Dec. 20, 1913, nonrecording gage at site 0.6 mi downstream at datum 0.99 ft lower. Aug. 22, 1930 to Sept. 30, 1944, nonrecording gage at site 7 mi upstream at datum 17.10 ft higher. Oct. 1, 1944 to Oct. 26, 1949, nonrecording gage at site 600 ft upstream at datum 10.64 ft higher. Oct. 27, 1949 to Dec. 15, 1965, water-stage recorder 200 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair to poor. Regulation at times from Yankton, Long, Shetek, and Heron Lakes.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 540 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Apr 24	1300	1,170	6.92	Jun 29	0030	902	6.14
May 15	1430	*1,380	*7.52	Jul 10	1300	718	5.55
Jun 11	1400	938	6.25				

Minimum discharge, 2.1 ft<sup>3</sup>/s, Sep 8, gage height, 2.21 ft.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	173	e120	e76	e19	e13	e220	815	743	829	82	7.2
2	35	153	e118	e75	e18	e14	e185	778	749	783	72	5.6
3	37	207	e115	e73	e17	e14	e165	745	722	729	65	5.6
4	59	190	e112	e68	e16	e15	e150	747	693	678	55	5.8
5	56	207	e108	e67	e16	e14	e155	783	663	628	60	5.4
6	83	236	e100	e68	e15	e14	e150	791	652	596	65	4.4
7	111	236	e88	e67	e15	e14	e150	771	657	551	65	3.2
8	159	236	e84	e65	e14	e15	e155	777	691	534	65	2.7
9	181	212	e82	e64	e14	e15	e155	816	774	604	60	3.5
10	207	193	e82	e61	e14	e16	e160	871	867	690	62	5.1
11	209	184	e82	e52	e13	e17	e170	962	925	667	61	10
12	216	164	e82	e47	e14	e19	e190	1,170	914	675	56	35
13	211	165	e83	e49	e14	23	e195	1,250	895	651	51	37
14	198	178	e84	e41	e14	47	194	1,330	852	612	48	26
15	199	180	e84	e37	e14	75	197	1,370	806	560	38	24
16	194	176	e86	e34	e14	118	194	1,340	766	495	28	53
17	200	155	e88	e31	e15	159	236	1,330	729	453	22	51
18	216	174	e90	e28	e15	194	297	1,290	697	422	20	49
19	209	176	e85	e25	e15	288	490	1,310	652	390	50	49
20	209	170	e87	e23	e16	356	856	1,330	605	353	42	42
21	212	e230	e88	e21	e16	349	1,010	1,270	570	313	25	43
22	208	e220	e78	e19	e15	303	1,080	1,210	563	282	19	36
23	199	e210	e72	e18	e14	277	1,120	1,160	542	240	15	28
24	198	e160	e77	e18	e13	217	1,150	1,110	600	227	14	22
25	195	e110	e74	e18	e13	207	1,140	1,070	735	217	18	23
26	194	e84	e73	e18	e13	197	1,080	1,040	848	212	18	19
27	190	e115	e72	e18	e13	e210	1,010	997	868	196	14	18
28	185	e200	e72	e18	e13	e450	949	961	885	170	12	19
29	189	e185	e74	e18	---	e430	870	918	887	157	10	13
30	199	e130	e76	e18	---	e360	833	875	853	149	9.4	9.9
31	194	---	e77	e19	---	e280	---	824	---	112	8.8	---
TOTAL	5,183	5,409	2,693	1,254	412	4,720	14,906	32,011	22,403	14,175	1,230.2	655.4
MEAN	167	180	86.9	40.5	14.7	152	497	1,033	747	457	39.7	21.8
MAX	216	236	120	76	19	450	1,150	1,370	925	829	82	53
MIN	31	84	72	18	13	13	150	745	542	112	8.8	2.7
AC-FT	10,280	10,730	5,340	2,490	817	9,360	29,570	63,490	44,440	28,120	2,440	1,300
CFSM	0.13	0.14	0.07	0.03	0.01	0.12	0.40	0.83	0.60	0.37	0.03	0.02
IN.	0.15	0.16	0.08	0.04	0.01	0.14	0.44	0.95	0.67	0.42	0.04	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2003, BY WATER YEAR (WY)

MEAN	162	180	109	50.1	68.9	448	1,096	681	638	535	227	169
MAX	1,724	1,833	792	298	504	2,250	6,045	3,923	4,892	6,018	2,192	2,243
(WY)	(1987)	(1980)	(1980)	(1980)	(1983)	(1983)	(1969)	(1993)	(1993)	(1993)	(1993)	(1942)
MIN	0.000	0.000	0.000	0.000	0.000	11.8	9.37	2.59	3.76	1.04	0.13	0.000
(WY)	(1956)	(1956)	(1956)	(1956)	(1936)	(1959)	(1959)	(1934)	(1931)	(1931)	(1955)	(1931)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1930 - 2003	
ANNUAL TOTAL	74,376.8		105,051.6			
ANNUAL MEAN	204		288		a384	
HIGHEST ANNUAL MEAN					2,098	1993
LOWEST ANNUAL MEAN					15.1	1956
HIGHEST DAILY MEAN	687	May 13	1,370	May 15	15,500	Apr 11, 1969
LOWEST DAILY MEAN	5.0	Aug 2	2.7	Sep 8	b0.00	Jul 19, 1931
ANNUAL SEVEN-DAY MINIMUM	9.3	Jul 28	4.3	Sep 4	0.00	Jul 19, 1931
MAXIMUM PEAK FLOW			1,380	May 15	15,700	Apr 11, 1969
MAXIMUM PEAK STAGE			7.52	May 15	19.45	Apr 11, 1969
INSTANTANEOUS LOW FLOW			2.1	Sep 8	b0.00	Jul 19, 1931
ANNUAL RUNOFF (AC-FT)	147,500		208,400		278,100	
ANNUAL RUNOFF (CFSM)	0.16		0.23		0.31	
ANNUAL RUNOFF (INCHES)	2.21		3.13		4.17	
10 PERCENT EXCEEDS	507		867		1,060	
50 PERCENT EXCEEDS	120		150		96	
90 PERCENT EXCEEDS	45		14		4.3	

- a Median of annual mean discharges is 260 ft<sup>3</sup>/s.
- b Many days, several years.
- c Estimated.

