

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 mi².

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 ft³/s and maximum (*):

	Time	Discharge (ft ³ /s)	Gage height (ft)	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 29	1800	716	5.55	0800	690	5.39
Apr 20	0300	1,360	7.36	0600	656	5.28
May 13	0200	2,090	9.05	0300	*3,250	*11.34
Jun 15	0630	1,280	7.15			

Minimum discharge, 11 ft³/s, Dec. 13, gage height, 2.40 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	653	221	156	e90	e39	e112	583	811	987	795	434	e110
2	624	225	221	e89	e41	e97	540	779	973	718	370	e106
3	583	222	204	e85	e44	e94	497	731	934	687	321	e101
4	499	222	235	e82	e48	106	466	699	925	648	292	e97
5	478	219	212	e77	e56	111	453	665	958	590	268	e88
6	480	211	219	e71	e64	127	438	659	1,010	536	269	99
7	480	205	205	e67	e68	152	435	829	1,030	498	250	100
8	466	194	201	e62	e62	159	449	842	1,090	486	219	139
9	443	190	200	e58	e57	154	465	1,070	1,130	493	208	213
10	421	199	200	e57	e57	152	473	1,310	1,160	494	184	229
11	413	197	186	e55	e55	160	536	1,270	1,170	466	187	209
12	410	174	162	e54	e59	154	748	1,350	1,210	432	175	185
13	402	176	88	e52	e102	130	939	1,790	1,230	400	161	197
14	376	179	102	e50	e147	116	1,080	1,680	1,240	382	145	297
15	369	182	118	e48	e153	139	1,200	1,590	1,270	356	134	406
16	367	182	129	e46	e147	155	1,300	1,520	1,240	333	126	552
17	342	184	194	e44	e123	147	1,330	1,450	1,230	288	127	628
18	335	181	e182	e43	e109	113	1,330	1,420	1,180	266	333	637
19	339	190	e175	e42	e108	85	1,340	1,470	1,110	236	483	596
20	335	207	e153	e41	e108	131	1,350	1,500	1,080	222	431	540
21	324	217	e159	e41	e112	111	1,330	1,510	1,040	268	335	544
22	317	211	e128	e40	e111	113	1,300	1,510	1,000	364	261	581
23	259	212	e99	e40	e108	135	1,230	1,440	1,010	330	e193	527
24	251	202	e77	e40	e108	180	1,150	1,330	1,040	286	e153	513
25	234	178	e67	e41	e105	222	1,110	1,310	1,040	287	e131	2,640
26	228	188	e67	e43	e100	263	1,070	1,280	1,020	347	e216	3,080
27	239	211	e67	e41	e103	403	1,010	1,220	976	432	e243	3,200
28	247	182	e69	e40	e112	596	955	1,170	914	618	e202	2,950
29	257	146	e73	e39	---	661	903	1,110	861	675	e151	2,730
30	255	137	e81	e39	---	686	854	1,060	839	604	e129	2,610
31	235	---	e88	e38	---	637	---	1,010	---	509	e118	---
TOTAL	11,661	5,844	4,517	1,655	2,506	6,601	26,864	37,385	31,897	14,046	7,249	24,904
MEAN	376	195	146	53.4	89.5	213	895	1,206	1,063	453	234	830
MAX	653	225	235	90	153	686	1,350	1,790	1,270	795	483	3,200
MIN	228	137	67	38	39	85	435	659	839	222	118	88
AC-FT	23,130	11,590	8,960	3,280	4,970	13,090	53,280	74,150	63,270	27,860	14,380	49,400
CFSM	0.30	0.16	0.12	0.04	0.07	0.17	0.72	0.96	0.85	0.36	0.19	0.66
IN.	0.35	0.17	0.13	0.05	0.07	0.20	0.80	1.11	0.95	0.42	0.22	0.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2005, BY WATER YEAR (WY)

	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	163	178	108	49.6	68.3	443	1,082	683	658	545	230	182	(1987)	(1988)	(1989)	(1990)	(1991)	(1992)	(1993)	(1994)	(1995)	(1996)	(1997)	(1998)	(1999)	(2000)	(2001)	(2002)	(2003)	(2004)	(2005)																																													
MAX	1,724	1,833	792	298	504	2,250	6,045	3,923	4,892	6,018	2,192	2,243	(1987)	(1988)	(1989)	(1990)	(1991)	(1992)	(1993)	(1994)	(1995)	(1996)	(1997)	(1998)	(1999)	(2000)	(2001)	(2002)	(2003)	(2004)	(2005)																																													
MIN	0.00	0.00	0.00	0.00	0.00	11.8	9.37	2.59	3.76	1.04	0.13	0.00	(1987)	(1988)	(1989)	(1990)	(1991)	(1992)	(1993)	(1994)	(1995)	(1996)	(1997)	(1998)	(1999)	(2000)	(2001)	(2002)	(2003)	(2004)	(2005)																																													
(WY)	(1956)	(1956)	(1956)	(1956)	(1936)	(1959)	(1959)	(1934)	(1931)	(1931)	(1955)	(1931)																																																																

05476000 DES MOINES RIVER AT JACKSON, MN—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1930 - 2005	
ANNUAL TOTAL	169,481.4		175,129		a386	
ANNUAL MEAN	463		480		2,098	
HIGHEST ANNUAL MEAN					15.1 1993	
LOWEST ANNUAL MEAN					15.500 1956	
HIGHEST DAILY MEAN	2,420	Jul 13	3,200	Sep 27	15,500	Apr 11, 1969
LOWEST DAILY MEAN	6.8	Jan 31	38	Jan 31	60.00	Jul 19, 1931
ANNUAL SEVEN-DAY MINIMUM	7.3	Jan 26	40	Jan 27	0.00	Jul 19, 1931
MAXIMUM PEAK FLOW			3,250	Sep 27	15,700	Apr 11, 1969
MAXIMUM PEAK STAGE			11.34	Sep 27	19.45	Apr 11, 1969
INSTANTANEOUS LOW FLOW			c11	Dec 13	60.00	Jul 19, 1931
ANNUAL RUNOFF (AC-FT)	336,200		347,400		279,300	
ANNUAL RUNOFF (CFSM)	0.370		0.384		0.308	
ANNUAL RUNOFF (INCHES)	5.04		5.21		4.19	
10 PERCENT EXCEEDS	1,440		1,220		1,070	
50 PERCENT EXCEEDS	226		243		99	
90 PERCENT EXCEEDS	11		67		4.5	

- a Median of annual mean discharges is 270 ft³/s.
- b Many days, several years.
- c Result of freezeup.
- e Estimated.

