

**DES MOINES RIVER BASIN**

**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 in storage room of city power plant in Jackson.

DRAINAGE AREA.--1,220 mi<sup>2</sup>, approximately.

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 mean sea level. 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. Regulation at times from Yankton, Long, Shetek, and Heron Lakes.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 900 ft<sup>3</sup>/s and maximum (\*)

**DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
1	108	145	679	e185	e112	e136	5230	1390	821
2290	699	134							
2	117	177	645	e190	e110	e135	5200	1430	798
2200	642	132							
3	89	260	653	e200	e110	e134	5320	1540	759
2140	605	121							
4	88	320	575	e210	e110	e133	5190	1580	735
2120	588	101							
5	78	290	606	e210	e110	e132	5130	1590	714
2100	566	91							
6	62	292	604	e200	e110	e130	5270	1540	680
2090	548	88							

7	62	283	622	e187	e110	e130	5280	1560	650
2020	525	82							
8	68	276	554	e192	e110	e140	5050	1610	628
1980	480	78							
9	76	266	548	e187	e110	e160	4640	1580	602
2020	447	76							
10	64	241	537	e175	e110	e175	5090	1420	573
1900	421	76							
11	60	129	549	e158	e110	e200	5440	1370	555
1720	386	73							
12	61	110	535	e160	e110	e250	5280	1310	531
1570	379	65							
13	56	174	558	e165	e110	e310	4770	1240	510
1460	368	65							
14	48	178	582	e162	e110	e340	4100	1210	476
1400	345	64							
15	44	330	446	e150	e110	e350	3640	1130	461
1390	348	60							
16	46	523	330	e130	e110	e360	3370	1070	444
1300	320	68							
17	125	775	e320	e115	e110	e390	3150	1040	375
1290	294	78							
18	205	822	e305	e109	e112	e470	2990	956	375
1230	273	71							
19	219	801	e280	e108	e125	e580	2840	925	359
1130	264	75							
20	186	805	e270	e109	e139	e1000	2710	855	380
1030	316	54							
21	185	803	e275	e110	e150	1650	2590	820	390
943	277	45							
22	185	793	e280	e112	e148	1950	2450	793	426
894	239	50							
23	189	748	e210	e115	e142	2190	2310	769	660
917	231	57							
24	180	623	e180	e116	e141	2350	2180	976	1010
927	224	64							
25	173	564	e160	e110	e140	2490	2050	1000	1120
933	203	67							
26	169	571	e165	e109	e138	3020	1920	969	1290
877	198	65							
27	171	743	e165	e107	e137	3890	1820	947	1340
879	190	61							
28	173	744	e165	e105	e137	4410	1680	931	1340
853	177	51							
29	151	707	e170	e104	---	4890	1570	922	1320
830	160	49							
30	156	691	e175	e109	---	5170	1480	894	1820
807	166	51							
31	186	---	e180	e113	---	5450	---	862	---
757	158	---							
TOTAL	3780	14184	12323	4512	3381	43115	109740	36229	22142

43997	11037	2212							
MEAN	122	473	398	146	121	1391	3658	1169	738
1419	356	73.7							
MAX	219	822	679	210	150	5450	5440	1610	1820
2290	699	134							
MIN	44	110	160	104	110	130	1480	769	359
757	158	45							
AC-FT	7500	28130	24440	8950	6710	85520	217700	71860	43920
87270	21890	4390							
CFSM	.10	.39	.33	.12	.10	1.14	3.00	.96	.60
1.16	.29	.06							
IN.	.12	.43	.38	.14	.10	1.31	3.35	1.10	.68
1.34	.34	.07							

• e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1997, BY WATER YEAR (WY)**

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
MEAN	170	180	105	49.3	67.6	471	1070	649	633
549	234	181							
MAX	1724	1833	792	298	504	2250	6045	3923	4892
6018	2192	2243							
(WY)	1987	1980	1980	1980	1983	1983	1969	1993	1993
1993	1993	1942							
MIN	.000	.000	.000	.000	.000	11.8	9.37	2.59	3.76
1.04	.13	.000							
(WY)	1956	1956	1956	1956	1936	1959	1959	1934	1931
1931	1955	1931							

*SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1930 - 1997*

ANNUAL TOTAL	207163	306652	
ANNUAL MEAN	566	840	385
HIGHEST ANNUAL MEAN			
2098a	1993		
LOWEST ANNUAL MEAN			
15.1	1956		
HIGHEST DAILY MEAN	4010	Jun 24	5450 Mar 31
15500	Apr 11 1969		
LOWEST DAILY MEAN	44	Oct 15	44 Oct 15
.00	Jul 19 1931		
ANNUAL SEVEN-DAY MINIMUM	54	Oct 10	54 Oct 10
.00	Jul 19 1931		
INSTANTANEOUS PEAK FLOW			5610 Mar 31
15700	Apr 11 1969		
INSTANTANEOUS PEAK STAGE			14.63 Mar 31
19.45	Apr 11 1969		
INSTANTANEOUS LOW FLOW			41 Oct 15
.00b	Jul 19 1931		
ANNUAL RUNOFF (AC-FT)	410900	608200	
279100			

ANNUAL RUNOFF (CFSM)	.46	.69	.32
ANNUAL RUNOFF (INCHES)	6.32	9.35	
4.29			
10 PERCENT EXCEEDS	1220	2130	
1030			
50 PERCENT EXCEEDS	320	348	87
90 PERCENT EXCEEDS	109	86	3.0

a Median of annual mean discharges is 257 ft<sup>3</sup>/s.  
b Many days, several years.