

CROW RIVER BASIN

05280000 CROW RIVER AT ROCKFORD, MN

LOCATION.--Lat 45° 05'12", long 93° 44'02", in sec. 29, T.119 N., R.24 W., Hennepin County, Hydrologic Unit 07010204, on right bank at Rockford, 150 ft downstream from bridge on State Highway 55, 2 miles downstream from confluence of North and South Forks, and 23 miles upstream from confluence with the Mississippi River.

DRAINAGE AREA.--2,640 mi² (revised from 2,520 mi² in 1997).

PERIOD OF RECORD.--April to July 1906 (published as "near Dayton"), June 1909 to September 1917, April to November 1929, March 1930 to September 1931, April to November 1932, March to November 1933, March 1934 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1115: 1932. WSP 1508: 1933. WDR MN-77-2: 1972 (M)(m).

GAGE.--Water-stage recorder. Datum of gage is 893.08 ft above mean sea level. Apr. 13 to July 21, 1906, nonrecording gage at Berning Mill 14 mi downstream at different datum. June 4, 1909 to Sept. 30, 1917, nonrecording gage at site 600 ft downstream at different datum;. Apr. 23, 1929 to Aug. 21, 1934, nonrecording gage at site 600 ft downstream at present datum.

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

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	102	223	524	e300	e300	e292	5120	3570	917
1200	6180	2640							
2	102	215	e526	e300	e310	e289	5840	3400	885
1640	5890	2410							
3	101	240	e510	e298	e290	e284	6570	3280	856
2090	5560	2170							
4	97	241	e495	e296	e290	e279	7360	3130	830
2600	5160	1960							
5	95	252	480	e295	e300	e278	8480	2990	805
3360	4710	1810							
6	92	255	464	e294	e300	e277	9820	2830	774
4200	4370	1680							
7	91	239	486	e293	e300	e277	11000	2690	755
4850	4010	1550							
8	93	227	454	e292	e290	e278	11700	2590	728
5310	3690	1450							
9	92	226	446	e290	e290	e285	11800	2470	696

5530	3390	1410							
10	92	226	435	e290	e285	e295	11400	2350	632
5590	3130	1340							
11	93	218	425	e285	e285	e300	10700	2240	602
5470	2880	1290							
12	91	181	417	e285	e280	e300	9880	2120	569
5260	2660	1250							
13	91	207	410	e285	e280	e300	9090	2000	543
4990	2470	1190							
14	91	194	e395	e285	e270	e300	8410	1900	521
4760	2300	1120							
15	95	164	e380	e285	e270	e298	7840	1820	502
4520	2140	1070							
16	102	231	e370	e280	e275	e295	7380	1730	484
4260	1980	1060							
17	124	416	e360	e280	e290	e293	7010	1650	457
3960	1890	1230							
18	146	615	e350	e280	e300	e293	6680	1590	442
3690	1800	1350							
19	161	755	e350	e280	e300	e298	6410	1530	430
3600	1790	1340							
20	173	693	e340	e280	322	e300	6150	1470	418
3530	2140	1270							
21	182	573	e340	e285	320	e325	5890	1440	408
3490	2470	1210							
22	184	e600	e330	e285	314	e350	5610	1390	392
3780	2810	1130							
23	182	e560	e320	e285	310	e430	5350	1330	378
4050	3120	1070							
24	174	e540	e310	e285	308	e600	5090	1270	365
4470	3330	1030							
25	161	e510	e300	e280	e305	e720	4840	1220	359
5230	3450	983							
26	163	e490	e300	e280	e302	e940	4590	1170	348
5740	3580	943							
27	172	e480	e300	e275	e298	e1250	4360	1110	363
e6100	3690	895							
28	172	e490	e290	e275	e294	e1800	4140	1060	391
e6250	3710	857							
29	179	e500	e290	e280	---	2480	3930	1010	449
e6400	3560	824							
30	197	511	e290	e280	---	3130	3750	985	767
e6550	3260	798							
31	201	---	e300	e290	---	4230	---	956	---
6350	2920	---							
TOTAL	4091	11272	11987	8873	8278	22066	216190	60291	17066
138820	104040	40330							
MEAN	132	376	387	286	296	712	7206	1945	569
4478	3356	1344							
MAX	201	755	526	300	322	4230	11800	3570	917

6550	6180	2640							
MIN	91	164	290	275	270	277	3750	956	348
1200	1790	798							
AC-FT	8110	22360	23780	17600	16420	43770	428800	119600	33850
275300	206400	79990							
CFSM	.05	.15	.15	.11	.12	.28	2.86	.77	.23
1.78	1.33	.53							
IN.	.06	.17	.18	.13	.12	.33	3.19	.89	.25
2.05	1.54	.60							

o e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 1997, BY WATER YEAR (WY)

MEAN	449	425	295	173	165	859	2192	1446	1256
1023	561	492							
MAX	3809	1909	1477	928	1115	4085	9026	5992	6166
6759	3356	4941							
(WY)	1986	1972	1983	1992	1966	1983	1965	1986	1906
1993	1997	1991							
MIN	16.6	28.3	17.3	12.4	12.5	25.1	57.1	26.7	14.8
5.76	5.87	13.0							
(WY)	1934	1937	1938	1938	1959	1934	1934	1934	1934
1934	1934	1933							

<i>SUMMARY STATISTICS</i>	<i>FOR 1996 CALENDAR YEAR</i>	<i>FOR 1997 WATER YEAR</i>	<i>WATER YEARS 1906 - 1997</i>	
ANNUAL TOTAL	370264	643304		
ANNUAL MEAN	1012	1762		810a
HIGHEST ANNUAL MEAN				
2754	1986			
LOWEST ANNUAL MEAN				
64.5	1931			
HIGHEST DAILY MEAN	4200	Apr 2	11800	Apr 9
Apr 16 1965				22100
LOWEST DAILY MEAN	86	Sep 19	91	Oct 7
Aug 4 1934				3.8
ANNUAL SEVEN-DAY MINIMUM	91	Sep 17	92	Oct 7
Jul 31 1934				4.0
INSTANTANEOUS PEAK FLOW			11800	Apr 8
Apr 16 1965				22400
INSTANTANEOUS PEAK STAGE			14.42	Apr 8
Apr 16 1965				19.27b
INSTANTANEOUS LOW FLOW			91	Oct 6
Nov 15 1936				1.8c
ANNUAL RUNOFF (AC-FT)	734400	1276000		586700
ANNUAL RUNOFF (CFSM)	.40	.70		.32
ANNUAL RUNOFF (INCHES)	5.47	9.50		4.37
10 PERCENT EXCEEDS	3240	5240		2240
50 PERCENT EXCEEDS	347	526		265
90 PERCENT EXCEEDS	112	217		38

MAR										
28...	0.620	0.060	1.3	1.8	3.60	0.510	0.270	0.240	100	85