

BIG SIOUX RIVER BASIN

06483000 ROCK RIVER AT LUVERNE, MN

LOCATION.--Lat 43° 39'15", long 96° 12'03", in SW1/4NE1/4 sec. 11, T.102 N., R.45 W., Rock County, Hydrologic Unit 10170204, at bridge on Main Street (County Highway 4) in Luverne.

DRAINAGE AREA.--425 mi².

PERIOD OF RECORD.-- Sept. 1911 to Sept. 1914, non-recording gage at same site, monthly discharges only for same period published in WSP 1309. October 1972 to September 1995, annual maximums only. Daily-mean discharges, October 1995 to current.

GAGE.--Water-stage recorder. Datum of gage is 1,426.26 ft above mean sea level. Staff gage from 1911-14, crest-stage gage from 1975 to 1995.

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

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	113	306	e82	e54	e64	e65	2440	357	228
e1180	112	43							
2	96	543	e80	e54	e61	e65	2540	411	206
e627	109	42							
3	87	389	e80	e53	e59	e65	1880	717	194
462	97	41							
4	82	196	e80	e52	e58	e65	1460	666	194
381	82	40							
5	80	195	e80	e52	e58	e66	1900	514	193
327	85	39							
6	77	193	e78	e52	e58	e67	8500	414	188
292	86	39							
7	74	196	e75	e52	e59	e69	4180	477	181
267	91	34							
8	71	188	e71	e52	e60	e72	1430	559	178
284	95	34							
9	71	171	e69	e52	e60	e77	913	500	169
263	83	36							
10	70	e150	e71	e53	e59	e82	813	419	161
225	79	38							
11	69	e135	e73	e54	e59	e84	682	367	158
208	78	35							
12	69	e130	e71	e52	e59	e86	625	325	168

190	77	34							
13	71	e127	e69	e51	e60	e88	646	308	176
183	74	35							
14	71	e111	e64	e50	e60	e92	694	288	171
223	71	34							
15	67	e105	e61	e50	e60	e95	682	264	161
310	67	35							
16	70	e98	e59	e50	e62	e97	612	257	154
215	64	36							
17	119	e94	e58	e50	e64	e99	534	252	151
183	62	36							
18	272	e90	e58	e51	e63	e102	491	275	151
152	60	38							
19	306	e88	e59	e53	e62	e110	481	211	155
136	59	32							
20	258	e86	e58	e55	e62	e200	463	231	173
131	65	30							
21	219	e84	e57	e58	e62	e400	451	239	179
211	60	30							
22	192	e82	e57	e55	e62	e800	462	224	233
285	57	34							
23	175	e80	e56	e54	e62	e1500	418	216	213
234	54	42							
24	167	e77	e56	e54	e63	e2070	379	297	251
192	52	44							
25	158	e78	e56	e54	e64	e2800	344	377	325
174	50	43							
26	155	e86	e56	e55	e64	e3800	e333	336	296
155	49	40							
27	136	e89	e56	e57	e64	e3900	e311	305	265
165	48	38							
28	121	e88	e55	e56	e64	10000	302	290	241
163	47	35							
29	128	e86	e54	e56	---	5770	287	294	e311
141	48	33							
30	163	e84	e54	e57	---	3110	322	289	e1550
124	46	32							
31	308	---	e54	e65	---	2650	---	260	---
114	45	---							
TOTAL	4115	4425	2007	1663	1712	38546	35575	10939	7374
8197	2152	1102							
MEAN	133	148	64.7	53.6	61.1	1243	1186	353	246
264	69.4	36.7							
MAX	308	543	82	65	64	10000	8500	717	1550
1180	112	44							
MIN	67	77	54	50	58	65	287	211	151
114	45	30							
AC-FT	8160	8780	3980	3300	3400	76460	70560	21700	14630
16260	4270	2190							
CFSM	.31	.35	.15	.13	.14	2.93	2.79	.83	.58
.62	.16	.09							

IN.	.36	.39	.18	.15	.15	3.37	3.11	.96	.65
.72	.19	.10							

o e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
JUL	AUG	SEP								
MEAN	192	90.0	36.3	44.5	62.1	474	320	198	548	
103	55.9	67.8								
MAX	444	224	76.1	53.6	91.7	1243	1186	353	1951	
264	90.3	135								
(WY)	1996	1996	1996	1997	1912	1997	1997	1997	1914	
1997	1996	1996								
MIN	12.9	10.5	7.74	35.3	33.6	84.0	29.2	82.8	21.6	
10.9	19.2	14.2								
(WY)	1913	1913	1913	1996	1996	1912	1914	1912	1912	
1912	1912	1912								
<i>SUMMARY STATISTICS</i>	<i>FOR 1996 CALENDAR YEAR</i>		<i>FOR 1997 WATER YEAR</i>			<i>WATER YEARS 1911 - 1997</i>				
ANNUAL TOTAL	52749		117807							
ANNUAL MEAN	144		323			250				
HIGHEST ANNUAL MEAN	323		1997							
LOWEST ANNUAL MEAN	178		1996							
HIGHEST DAILY MEAN	1540		Jun 18		10000		Mar 28		11200	Jun
13	1914								6.0a	Feb
LOWEST DAILY MEAN	22		Feb 1		30		Sep 20		6.0	Feb
1	1912								6.0	
ANNUAL SEVEN-DAY MINIMUM	23		Jan 29		34		Sep 16		6.0	
Feb 1	1912								6.0	
INSTANTANEOUS PEAK FLOW	13600		Mar 28		35400		May			
8	1993									
INSTANTANEOUS PEAK STAGE	11.69		Mar 28		14.23		May			
8	1993									
ANNUAL RUNOFF (AC-FT)	104600		233700		181200					
ANNUAL RUNOFF (CFSM)	.34		.76		.59					
ANNUAL RUNOFF (INCHES)	4.62		10.31		8.00					
10 PERCENT EXCEEDS	279		495		309					
50 PERCENT EXCEEDS	92		88		57					
90 PERCENT EXCEEDS	35		50		10					

a Backwater from ice.