

CROW WING RIVER BASIN

05244000 CROW WING RIVER AT NIMROD, MN

LOCATION.--Lat 46° 38'25", long 94° 52'44", in SE1/4NW1/4 sec. 32, T. 137 N., R. 33 W., Wadena County, Hydrologic Unit 07010106, on right bank 200 ft upstream from highway bridge, 0.2 mi north of Nimrod, and 0.7 mi upstream from Cat River.

DRAINAGE AREA.--1,010 mi² (2,620 km²), approximately.

PERIOD OF RECORD.--April 1910 to September 1914, July 1930 to September 1981, October 1991 to current year (winter records incomplete prior to 1940). October 1981 to September 1987, annual maximums only.

REVISED RECORDS.--WSP 1508: 1910-11, 1913-14, 1937, 1942(M), 1944(M).

GAGE.--Water-stage recorder. Datum of gage is 1,313.27 ft above sea level (levels by Wadena County Highway Department from Minnesota Department of Transportation bench mark). Apr. 15, 1910 to Sept. 30, 1914, nonrecording gage at same site, at datum 2.2 ft lower. July 28, 1930 to Nov. 4, 1949, nonrecording gages at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow affected by natural storage in many lakes.

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	421	702	e660	e380	e375	e370	e600	1100	711
817	753	487							
2	417	705	e650	e380	e370	e370	e900	1070	664
940	715	494							
3	417	704	e640	e380	e370	e380	e1100	1040	643
1050	716	485							
4	429	661	e630	e380	e370	e380	1510	996	628
1200	701	490							
5	434	667	e620	e380	e370	e380	1730	961	621
1200	672	475							
6	434	680	e600	e380	e370	e380	2020	933	605
1180	678	454							
7	423	691	e585	e375	e370	e380	1770	908	595
1220	660	444							
8	407	683	e565	e375	e365	e380	e1650	921	581
1320	644	462							
9	395	660	e555	e375	e365	e380	e1560	901	565

1340	629	463							
10	382	e630	e540	e375	e365	e380	e1600	864	548
1320	622	461							
11	371	e620	e530	e375	e365	e380	e1700	840	531
1290	605	455							
12	357	e570	e520	e380	e365	e380	e1800	812	518
1280	589	462							
13	344	e560	e510	e380	e360	e385	1840	777	490
1330	573	473							
14	339	e565	e500	e380	e360	e385	1750	769	464
1440	558	466							
15	349	e590	e490	e380	e355	e380	1670	752	475
1420	546	465							
16	352	e620	e460	e380	e350	e380	1590	726	473
1360	535	473							
17	425	e680	e435	e380	e350	e380	1510	709	463
1300	533	479							
18	490	e650	e415	e380	e350	e380	1440	695	469
1230	518	480							
19	508	e720	e390	e375	e345	e380	1400	679	468
1190	518	486							
20	514	e780	e370	e375	e345	e390	1370	644	514
1140	526	491							
21	529	e770	e370	e375	e350	e390	1350	625	471
1090	516	501							
22	526	e750	e370	e375	e355	e395	1310	630	447
1050	503	491							
23	509	e730	e375	e375	e360	e400	1270	707	503
1010	506	471							
24	497	e720	e380	e375	e365	e410	1230	811	578
989	501	447							
25	486	e700	e380	e375	e370	e420	1200	818	652
973	506	432							
26	494	e690	e380	e375	e370	e430	1190	810	626
946	509	419							
27	538	e690	e380	e375	e370	e440	1190	802	614
913	495	412							
28	500	e680	e380	e375	e370	e450	1170	802	701
876	489	425							
29	529	e680	e380	e375	---	e460	1140	800	824
843	480	439							
30	702	e670	e380	e375	---	e480	1120	787	804
812	470	448							
31	687	---	e380	e375	---	e500	---	759	---
783	457	---							
TOTAL	14205	20218	14820	11690	10145	12375	42680	25448	17246
34852	17723	13930							
MEAN	458	674	478	377	362	399	1423	821	575
1124	572	464							
MAX	702	780	660	380	375	500	2020	1100	824

1440	753	501							
MIN	339	560	370	375	345	370	600	625	447
783	457	412							
AC-FT	28180	40100	29400	23190	20120	24550	84660	50480	34210
69130	35150	27630							
CFSM	.45	.67	.47	.37	.36	.40	1.41	.81	.57
1.11	.57	.46							

o e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1997, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
JUL	AUG	SEP							
MEAN	409	402	337	298	300	403	760	670	571
443	375	383							
MAX	1463	871	596	462	456	780	1624	1615	1354
1124	1452	929							
(WY)	1974	1972	1952	1966	1966	1995	1966	1950	1965
1997	1944	1944							
MIN	137	146	131	125	170	171	202	181	149
84.0	74.3	131							
(WY)	1937	1937	1940	1940	1940	1940	1911	1911	1934
1936	1936	1934							

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1910 - 1997

ANNUAL TOTAL		199944		235332		
ANNUAL MEAN		546		645		477
HIGHEST ANNUAL MEAN						
719		1966				
LOWEST ANNUAL MEAN						
230		1940				
HIGHEST DAILY MEAN		1510	Apr 25	2020	Apr 6	3580 Oct
10 1973						
LOWEST DAILY MEAN		250	Sep 1	339	Oct 14	45
Aug 7 1936						
ANNUAL SEVEN-DAY MINIMUM		258	Jul 20	349	Feb 15	55
Aug 3 1936						
INSTANTANEOUS PEAK FLOW				2050	Apr 6	3700 Oct
10 1973						
INSTANTANEOUS PEAK STAGE				6.60a	Nov 21	7.64b Apr
20 1950						
INSTANTANEOUS LOW FLOW				333	Oct 14	45
Aug 7 1936						
10 PERCENT EXCEEDS		898		1190		798
50 PERCENT EXCEEDS		460		510		377
90 PERCENT EXCEEDS		313		370		200

o a Ice jam.

b Backwater from ice.