

## 05244000 CROW WING RIVER AT NIMROD, MN

LOCATION.--Lat 46°38'25", long 94°52'44", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 32, T. 137 N., R. 33 W., Wadena County, Hydrologic Unit 07010106, on right bank 200 ft upstream from County Highway 227 bridge, 0.2 mi north of Nimrod, and 0.7 mi upstream from Cat River.

DRAINAGE AREA.--1,030 mi<sup>2</sup>.

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 (NGVD of 1929, levels by Wadena County Highway Department from Minnesota Department of Transportation benchmark). 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, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	241	e295	e234	e202	e268	e576	372	646	197	236	181
2	193	242	e293	e233	e204	e267	558	370	646	223	241	177
3	194	239	e290	e230	e206	e266	568	362	619	285	229	167
4	191	e243	e283	e229	e206	e268	566	361	599	333	230	161
5	188	e225	e280	e227	e206	e268	548	337	601	301	226	240
6	185	e194	e280	e226	e207	e268	529	308	611	327	223	318
7	182	e187	e282	e223	e207	e269	506	289	594	440	242	318
8	179	e183	e285	e220	e208	e270	485	278	570	443	244	316
9	176	e205	e283	e218	e209	e274	484	271	524	428	260	329
10	178	e235	e275	e217	e209	e278	484	264	467	414	258	357
11	202	e270	e260	e215	e208	e286	470	256	427	477	256	359
12	222	e280	e257	e212	e208	e295	458	345	412	486	253	331
13	225	e278	e259	e211	e208	e304	447	394	391	472	250	300
14	216	e272	e264	e210	e208	e318	430	426	386	435	241	283
15	209	e270	e267	e209	e209	e327	414	455	376	403	237	344
16	204	e264	e269	e208	e210	e341	403	481	369	382	238	431
17	202	234	e269	e207	e210	e342	393	587	362	357	242	443
18	204	232	e272	e207	e215	e342	394	604	356	337	237	451
19	203	230	e270	e206	e217	e342	385	584	349	319	228	450
20	201	226	e270	e205	e225	e343	364	591	338	301	222	502
21	200	217	e268	e204	e234	e343	417	573	327	277	215	649
22	198	e240	e262	e203	e243	e343	437	543	309	254	215	667
23	198	e210	e260	e203	e248	e347	433	520	286	242	211	672
24	200	e180	e256	e202	e253	e353	427	509	278	229	202	694
25	196	e269	e251	e202	e257	e367	425	546	267	216	195	702
26	195	e275	e249	e202	e263	e388	421	551	261	203	191	701
27	203	e300	e247	e201	e266	e442	413	576	257	195	189	695
28	223	e302	e245	e200	e266	e483	409	587	253	199	185	690
29	228	e298	e242	e200	e267	e510	399	556	233	218	183	683
30	232	e290	e240	e201	---	e540	385	559	212	241	184	677
31	240	---	e236	e201	---	e565	---	602	---	242	184	---
TOTAL	6,262	7,331	8,259	6,566	6,479	10,617	13,628	14,057	12,326	9,876	6,947	13,288
MEAN	202	244	266	212	223	342	454	453	411	319	224	443
MAX	240	302	295	234	267	565	576	604	646	486	260	702
MIN	176	180	236	200	202	266	364	256	212	195	183	161
AC-FT	12,420	14,540	16,380	13,020	12,850	21,060	27,030	27,880	24,450	19,590	13,780	26,360
CFSM	0.20	0.24	0.26	0.21	0.22	0.34	0.45	0.45	0.41	0.32	0.22	0.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2004, BY WATER YEAR (WY)

	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	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
MEAN	414	414	352	305	311	412	759	678	574	454	376	384																																																																																			
MAX	1,463	871	692	462	527	780	1,624	1,615	1,354	1,124	1,452	929																																																																																			
(WY)	(1974)	(1972)	(1999)	(1966)	(2000)	(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)																																																																																			

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1910 - 2004	
ANNUAL TOTAL	117,092		115,636		481	
ANNUAL MEAN	321		316		757	
HIGHEST ANNUAL MEAN					230 1940	
LOWEST ANNUAL MEAN					3,580 Oct 10, 1973	
HIGHEST DAILY MEAN	732	May 11	702	Sep 25	55 Aug 3, 1936	
LOWEST DAILY MEAN	176	Oct 9	161	Sep 4	45 Aug 7, 1936	
ANNUAL SEVEN-DAY MINIMUM	183	Oct 4	177	Aug 29	55 Aug 3, 1936	
MAXIMUM PEAK FLOW			a704	Sep 25	b3,700 Oct 10, 1973	
MAXIMUM PEAK STAGE			4.95	Mar 31	c7.64 Apr 20, 1950	
INSTANTANEOUS LOW FLOW			d62	Nov 24	45 Aug 7, 1936	
ANNUAL RUNOFF (AC-FT)	232,300		229,400		348,100	
ANNUAL RUNOFF (CFSM)	0.318		0.313		0.476	
10 PERCENT EXCEEDS	520		544		822	
50 PERCENT EXCEEDS	269		268		400	
90 PERCENT EXCEEDS	199		201		240	

- a Gage-height, 3.50 ft.
- b Gage-height, 7.35 ft.
- c Backwater from ice.
- d Result of freezeup.
- e Estimated.

