Water-Data Report 2013

05244000 CROW WING RIVER AT NIMROD, MN

Mississippi Headwaters Basin
Crow Wing Subbasin

LOCATION.--Lat 46°38′25″, long 94°52′44″ referenced to North American Datum of 1927, in SE ¼ NW ¼ sec.32, T.137 N., R.33 W., Wadena County, MN, 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^2.

SURFACE-WATER RECORDS

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). Unpublished, 2009: 1964(M).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, non-recording gage at same site, at datum 2.2 ft lower. July 28, 1930 to Nov. 4, 1949, non-recording gages at same site and datum.

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

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 05244000, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/05244000.2013.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	178	264	e309	e283	e240	e218	e300	1,080	1,150	1,120	319	210
2	176	263	e316	e283	e239	e217	e311	1,050	1,110	1,030	301	210
3	179	263	e322	e282	e239	e213	e326	1,030	1,060	934	287	212
4	181	259	e320	e281	e238	e212	e336	1,050	1,030	854	276	208
5	183	258	e320	e277	e236	e210	e344	1,070	1,100	777	271	202
6	188	268	e316	e277	e236	e210	e356	1,070	1,120	723	270	209
7	201	272	e318	e275	e234	e212	e364	1,030	1,070	691	280	218
8	202	270	e316	e270	e233	e212	e371	991	1,020	661	276	234
9	206	268	e315	e266	e231	e210	e378	948	1,010	638	272	277
10	207	281	e314	e263	e228	e212	e384	904	1,040	621	266	295
11	210	320	e314	e262	e228	e210	e394	861	1,010	584	261	291
12	212	319	e313	e261	e226	e210	e409	821	965	545	256	275
13	214	303	e313	e259	e226	e208	e417	781	923	516	249	264
14	220	336	e313	e258	e224	e208	e434	752	884	566	242	268
15	218	319	e316	e256	e221	e207	e452	725	852	668	238	321
16	216	339	e312	e254	e222	e203	e461	700	826	612	231	314
17	222	356	e312	e253	e220	e202	e472	674	790	566	225	307
18	236	333	e309	e252	e218	e205	e480	695	747	538	224	300
19	271	335	e308	e252	e218	e207	e485	725	699	516	228	307
20	304	334	e307	e252	e217	e202	488	832	743	498	224	312
21	298	327	e305	e251	e215	e202	487	993	1,330	481	217	305
22	297	322	e304	e251	e217	e205	511	1,080	1,530	466	209	296
23	292	304	e300	e250	e215	e210	519	1,090	1,520	444	208	295
24	289	174	e300	e250	e215	e222	540	1,070	1,510	424	203	288
25	294	247	e297	e249	e227	e231	560	1,060	1,460	415	199	282
26	291	e305	e296	e249	e230	e238	643	1,070	1,420	409	199	272
27	277	e313	e293	e246	e228	e245	870	1,080	1,370	389	201	270
28	278	e308	e293	e245	e223	e255	1,000	1,090	1,300	378	200	278
29	275	e308	e293	e244	---	e273	1,040	1,090	1,250	372	203	287
30	271	e304	e288	e242	---	e286	1,070	1,130	1,180	365	215	288
31	265	---	e287	e241	---	e293	---	1,160	---	346	217	---
Total	7,351	8,872	9,539	8,034	6,344	6,848	15,202	29,702	33,019	18,147	7,467	8,095
Mean	237	296	308	259	227	221	507	958	1,101	585	241	270
Max	304	356	322	283	240	293	1,070	1,160	1,530	1,120	319	321
Min	176	174	287	241	215	202	300	674	699	346	199	202
Ac-ft	14,580	17,600	18,920	15,940	12,580	13,580	30,150	58,910	65,490	35,990	14,810	16,060
Cfsm	0.23	0.29	0.30	0.25	0.22	0.21	0.49	0.93	1.07	0.57	0.23	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	417	420	355	311	313	419	764	688	587	451	371	376
Max	1,463	871	692	474	527	836	1,624	1,615	1,354	1,124	1,452	929
(WY)	(1974)	(1972)	(1999)	(2011)	(2000)	(2009)	(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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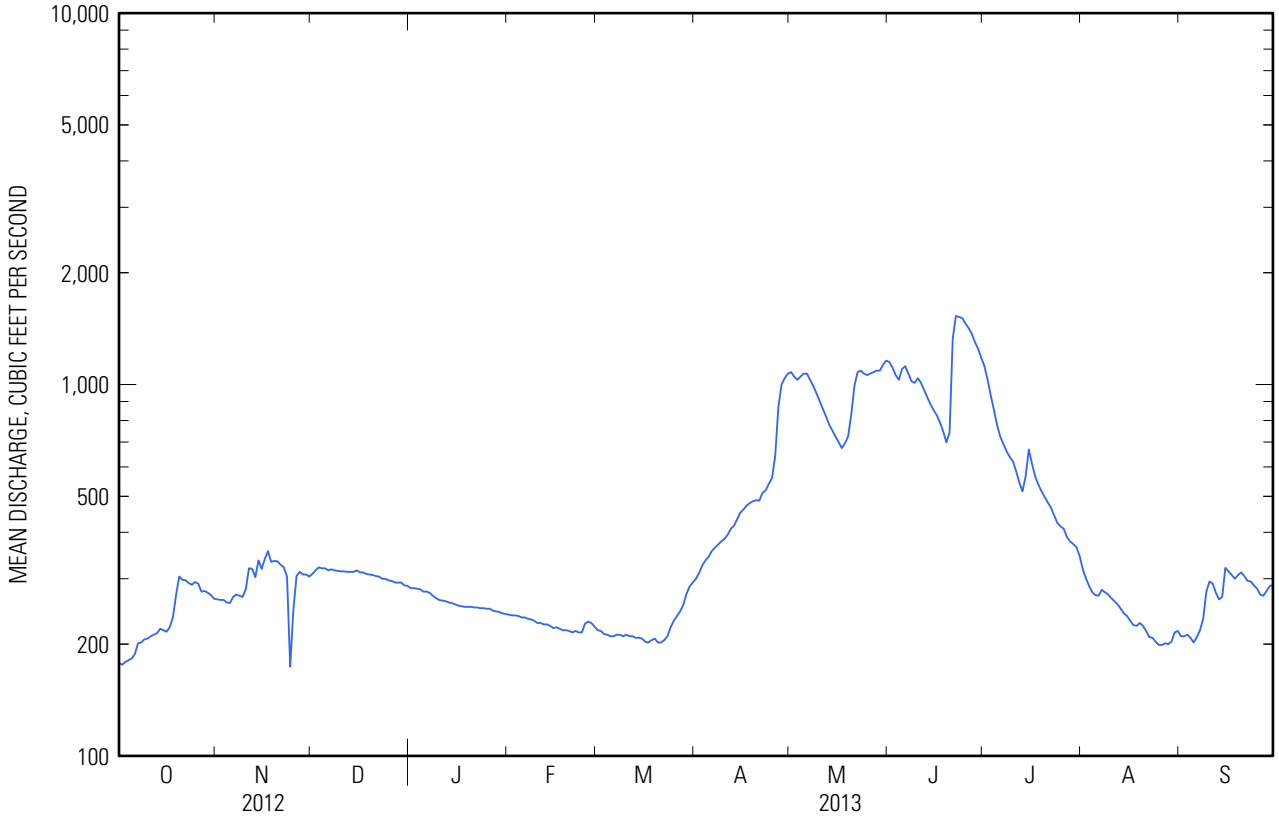
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1910 - 2013	
Annual total	142,320		158,620			
Annual mean	389		435		480	
Highest annual mean					757	1999
Lowest annual mean					230	1940
Highest daily mean	1,120	Jun 21	1,530	Jun 22	3,580	Oct 10, 1973
Lowest daily mean	160	Sep 15	174	Nov 24	45	Aug 7, 1936
Annual seven-day minimum	169	Sep 15	184	Oct 1	55	Aug 3, 1936
Maximum peak flow			[a]1,550	Jun 22	[b]3,700	Oct 10, 1973
Maximum peak stage			[c]4.70	Mar 30	[c]7.64	Apr 20, 1950
Instantaneous low flow			[d]121	Nov 24	45	Aug 7, 1936
Annual runoff (ac-ft)	282,300		314,600		347,700	
Annual runoff (cfsm)	0.378		0.422		0.466	
10 percent exceeds	627		1,030		822	
50 percent exceeds	340		293		400	
90 percent exceeds	210		210		240	

[a] Gage-height, 4.62 ft.
[b] Gage-height, 7.35 ft.
[c] Backwater from ice.
[d] As a result of freeze-up.