Water-Data Report 2011

04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI

Southwestern Lake Superior Basin
Beartrap-Nemadji Subbasin

LOCATION.--Lat 46°38′00″, long 92°05′38″ referenced to North American Datum of 1927, in SW ¼ SW ¼ sec.14, T.48 N., R.14 W., Douglas County, WI, Hydrologic Unit 04010301, on right bank at downstream side of bridge on County Trunk Highway C, 2.0 mi south of South Superior and 7.8 mi downstream from Black River.

DRAINAGE AREA.--420 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--November 1973 to current year.

REVISED RECORDS.--WDR WI-75-1: 1974(M). WDR WI-82-1: Drainage area and 1981.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 601.10 ft above NAVD of 1988.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood of Aug. 17, 1972, may have exceeded floods at this location since then.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 04024430, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/04024430.2011.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	185	1,260	e190	e287	e116	e116	e432	2,480	963	334	585	128
2	228	1,040	e196	e261	e114	e110	e535	1,700	655	2,330	8,700	130
3	243	885	e178	e232	e114	e98	e660	1,210	512	1,540	17,500	127
4	204	765	e187	e210	e114	e111	e900	971	462	836	5,050	121
5	175	649	e174	e197	e114	e101	e1,110	857	401	543	2,450	117
6	156	561	e168	e192	e111	e101	e1,370	1,260	339	432	1,580	111
7	144	503	e159	e192	e111	e111	e1,740	1,020	295	359	3,010	106
8	135	461	e159	e195	e107	e111	e2,050	809	260	306	1,890	101
9	127	423	e153	e192	e101	e101	2,270	702	227	284	1,510	96
10	119	395	e148	e189	e96	e111	2,300	680	206	305	1,020	92
11	114	390	e150	e184	e96	e111	2,190	619	190	633	788	88
12	112	386	e147	e176	e97	e111	1,820	554	181	1,050	636	84
13	109	381	e137	e173	e98	e111	1,470	506	164	574	594	82
14	99	710	e128	e170	e101	e121	1,210	486	154	424	475	77
15	99	772	e128	e165	e107	e121	962	493	146	384	402	77
16	96	680	e128	e159	e111	e160	799	431	168	354	349	75
17	95	575	e129	e159	e131	e209	720	383	217	317	347	72
18	91	492	e129	e154	e183	e268	637	345	239	283	333	71
19	88	437	e128	e149	e266	e326	554	313	632	278	286	74
20	88	e341	e124	e143	e335	e414	497	293	614	2,180	271	77
21	87	e296	e131	e140	e278	e537	458	278	510	1,190	246	79
22	93	e280	e134	e140	e224	e691	430	351	1,080	590	230	80
23	87	e234	e134	e137	e187	e602	589	2,150	2,810	493	215	84
24	113	e221	e137	e137	e182	e552	721	1,620	2,260	749	229	83
25	679	e218	e140	e134	e162	e517	591	1,030	1,380	530	209	80
26	1,960	e206	e140	e132	e138	e477	521	753	920	411	185	77
27	6,940	e206	e137	e132	e138	e444	1,290	598	684	516	170	82
28	6,290	e212	e140	e132	e124	e409	1,540	527	543	865	155	79
29	3,990	e209	e143	e126	---	e385	1,350	544	446	527	143	73
30	2,230	e209	e170	e124	---	e363	1,110	887	374	398	129	80
31	1,620	---	e219	e124	---	e375	---	1,460	---	545	126	---
Total	26,796	14,397	4,665	5,237	4,056	8,375	32,826	26,310	18,032	20,560	49,813	2,703
Mean	864	480	150	169	145	270	1,094	849	601	663	1,607	90.1
Max	6,940	1,260	219	287	335	691	2,300	2,480	2,810	2,330	17,500	130
Min	87	206	124	124	96	98	430	278	146	278	126	71
Cfsm	2.06	1.14	0.36	0.40	0.34	0.64	2.61	2.02	1.43	1.58	3.83	0.21
In.	2.37	1.28	0.41	0.46	0.36	0.74	2.91	2.33	1.60	1.82	4.41	0.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	343	286	134	84.3	96.6	443	1,294	590	466	322	250	277
Max	1,082	1,200	418	177	336	1,097	3,474	1,355	1,357	1,145	1,607	1,485
(WY)	(1983)	(1992)	(1992)	(1984)	(1984)	(2010)	(2001)	(1979)	(1993)	(1999)	(2011)	(1986)
Min	41.0	33.9	28.2	27.3	29.8	70.6	215	119	82.9	46.6	38.7	34.4
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(2008)	(2010)	(1998)	(1988)	(1988)	(2007)	(1976)

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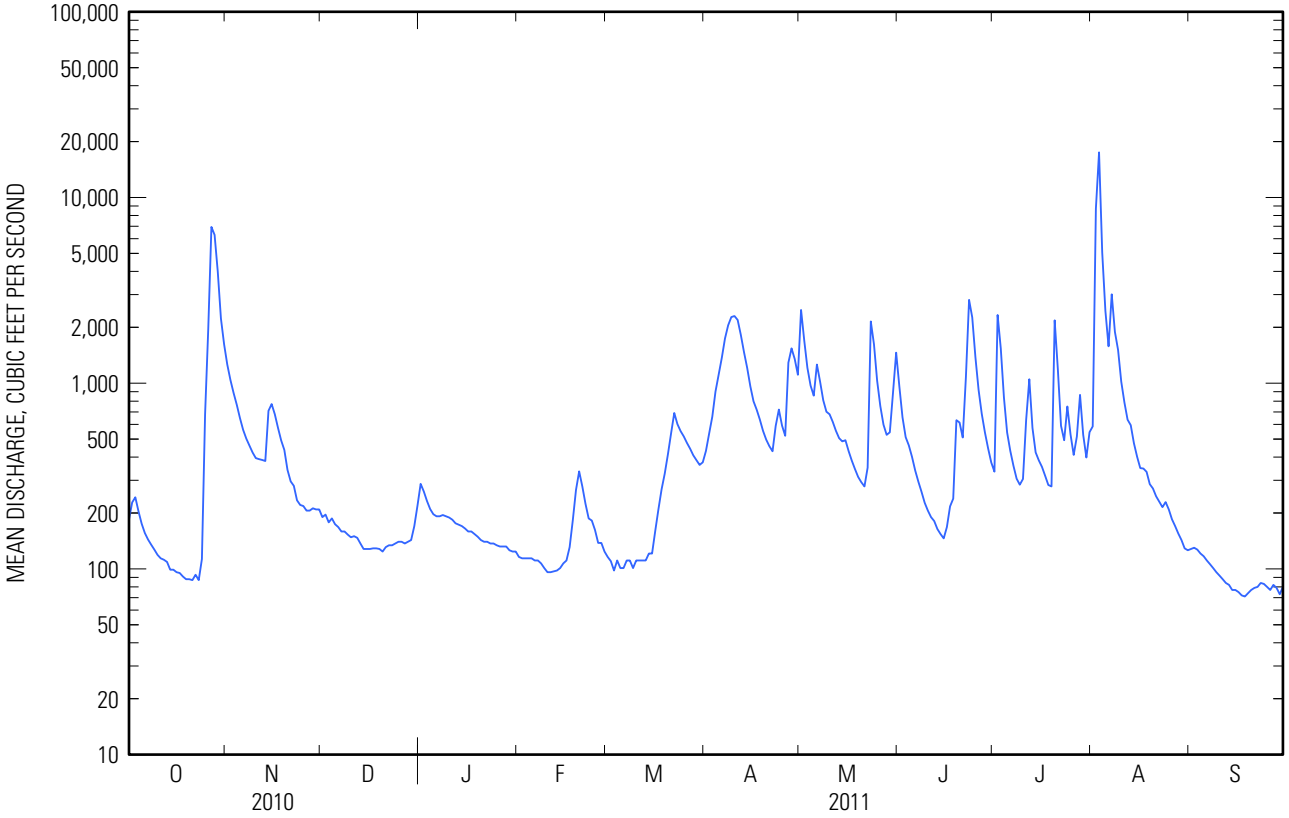
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1974 - 2011	
Annual total	150,407		213,770			
Annual mean	412		586		382	
Highest annual mean					786	1986
Lowest annual mean					138	2007
Highest daily mean	6,940	Oct 27	17,500	Aug 3	17,500	Aug 3, 2011
Lowest daily mean	[a]63	Feb 6	71	Sep 18	[a]18	Feb 20, 2007
Annual seven-day minimum	[a]64	Feb 2	75	Sep 14	[a]22	Feb 4, 2007
Maximum peak flow			33,000	Aug 3	33,000	Aug 3, 2011
Maximum peak stage			27.37	Aug 3	27.37	Aug 3, 2011
Annual runoff (cfsm)	0.981		1.39		0.908	
Annual runoff (inches)	13.32		18.93		12.34	
10 percent exceeds	844		1,270		909	
50 percent exceeds	176		239		142	
90 percent exceeds	73		99		55	

[a] Ice affected.



WATER-QUALITY RECORDS

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 1 of 9

[ft³/s, cubic feet per second; µg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Sample start time	Discharge, instantaneous, ft³/s (00061)	Bisphenol A-d3, surrogate, Schedule 4433 and Labcode 8033 (WWWW), water, unfiltered, percent recovery (62839)	Caffeine-13C, surrogate, Schedule 4433 and Labcode 8033 (WWWW), water, unfiltered, percent recovery (62840)	Decafluorobiphenyl, surrogate, Schedule 4433 and Labcode 8033 (WWWW), water, unfiltered, percent recovery (62841)	Fluoranthene-d10, surrogate, Schedule 4433 and Labcode 8033 (WWWW), water, unfiltered, percent recovery (62842)	Sample volume, Schedule 4433 and Labcode 8033 (WWWW), milliliters (99963)	Sampling method (82398)	1,4-Dichlorobenzene, water, unfiltered, recoverable, µg/L (34571)
08-09-2011	**1109**	1,670	121	74.3	54.6	71.1	935	Grab sample(dip)	< .1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 9

[ft³/s, cubic feet per second; µg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Sample start time	Atrazine, water, unfiltered, recoverable, micrograms per liter (39630)	Bromacil, water, unfiltered, recoverable, micrograms per liter (30234)	Camphor, water, unfiltered, recoverable, micrograms per liter (62817)	Carbaryl, water, unfiltered, recoverable, micrograms per liter (39750)	Carbazole, water, unfiltered, recoverable, micrograms per liter (77571)	Chlorpyrifos, water, unfiltered, recoverable, micrograms per liter (38932)	DEET, water, unfiltered, recoverable, micrograms per liter (61947)	Diazinon, water, unfiltered, recoverable, micrograms per liter (39570)	Dichlorvos, water, unfiltered, recoverable, micrograms per liter (30218)
08-09-2011	**1109**	< .16	< .2	< .1	< 0.06	< 0.02	< .3	.1	< .3	< 0.08

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 9

[ft³/s, cubic feet per second; µg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Sample start time	Metalaxyl, water, unfiltered, recoverable, micrograms per liter (04254)	Metolachlor, water, unfiltered, recoverable, micrograms per liter (82612)	p-Cresol, water, unfiltered, recoverable, micrograms per liter (77146)	Pentachlorophenol, water, unfiltered, recoverable, µg/L (39032)	Prometon, water, unfiltered, recoverable, micrograms per liter (39056)	1-Methylnaphthalene, water, unfiltered, recoverable, micrograms per liter (81696)	2,6-Dimethylnaphthalene, water, unfiltered, recoverable, micrograms per liter (62805)	2-Methylnaphthalene, water, unfiltered, recoverable, micrograms per liter (30194)	3,4-Dichlorophenyl isocyanate, water, unfiltered, recoverable, micrograms per liter (63145)
08-09-2011	**1109**	< .2	< 0.04	< 0.08	< 2	< .2	< 0.04	< 0.04	< 0.04	< .32

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 4 of 9
[ft³/s, cubic feet per second; µg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Sample start time	3-beta-Coprostanol, water, unfiltered, recoverable, micrograms per liter (62806)	3-Methyl-1H-indole, water, unfiltered, recoverable, micrograms per liter (62807)	3-tert-Butyl-4-hydroxyanisole, water, unfiltered, recoverable, micrograms per liter (61702)	4-Cumylphenol, water, unfiltered, recoverable, micrograms per liter (62808)	4-n-Octylphenol, water, unfiltered, recoverable, micrograms per liter (62809)	4-Nonylphenol (sum of all isomers), water, unfiltered, recoverable, micrograms per liter (62829)	4-Nonylphenol diethoxylate (sum of all isomers), water, unfiltered, recoverable, micrograms per liter (61703)	4-Nonylphenol monoethoxylate (sum of all isomers), water, unfiltered, recoverable, micrograms per liter (61704)	4-tert-Octylphenol diethoxylate, water, unfiltered, recoverable, micrograms per liter (62486)
08-09-2011	1109	< 2	< 0.04	< 0.16	< 0.04	< 0.02	< 2	< 2	< 1.6	< 0.20

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 5 of 9
[ft³/s, cubic feet per second; µg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Sample start time	4-tert-Octylphenol monoethoxylate, water, unfiltered, recoverable, micrograms per liter (62485)	4-tert-Octylphenol, water, unfiltered, recoverable, micrograms per liter (62810)	5-Methyl-1H-benzotriazole, water, unfiltered, recoverable, micrograms per liter (61944)	9,10-Anthraquinone, water, unfiltered, recoverable, micrograms per liter (62813)	Acetophenone, water, unfiltered, recoverable, micrograms per liter (62811)	Acetyl hexamethyl tetrahydronaphthalene, water, unfiltered, recoverable, micrograms per liter (62812)	Anthracene, water, unfiltered, recoverable, µg/L (34220)	BDE congener 47, water, unfiltered, recoverable, micrograms per liter (63147)	Benzo[a]-pyrene, water, unfiltered, recoverable, µg/L (34247)
08-09-2011	1109	< 0.60	< 0.4	< 0.32	< 0.04	< .4	< 0.04	< 0.02	< 0.04	< 0.02

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 6 of 9
[ft³/s, cubic feet per second; µg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Sample start time	Benzophenone, water, unfiltered, recoverable, micrograms per liter (62814)	beta-Sitosterol, water, unfiltered, recoverable, micrograms per liter (62815)	beta-Stigmastanol, water, unfiltered, recoverable, micrograms per liter (61948)	Bis(2-ethylhexyl) phthalate, water, unfiltered, recoverable, µg/L (39100)	Bisphenol A, water, unfiltered, recoverable, micrograms per liter (62816)	Caffeine, water, unfiltered, recoverable, micrograms per liter (81436)	Cholesterol, water, unfiltered, recoverable, micrograms per liter (62818)	Cotinine, water, unfiltered, recoverable, micrograms per liter (61945)	Diethyl phthalate, water, unfiltered, recoverable, µg/L (34336)
08-09-2011	1109	< .1	< 3	< 2	< 2	< 0.04	< .1	< 2	< 0.08	< .4

04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 7 of 9
[ft³/s, cubic feet per second; µg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Sample start time	D-Limonene, water, unfiltered, recoverable, micrograms per liter (62819)	Fluoranthene, water, unfiltered, recoverable, µg/L (34376)	Hexahydrohexamethyl cyclopentabenzopyran, water, unfiltered, recoverable, micrograms per liter (62823)	Indole, water, unfiltered, recoverable, micrograms per liter (62824)	Isoborneol, water, unfiltered, recoverable, micrograms per liter (62825)	Isophorone, water, unfiltered, recoverable, µg/L (34408)	Isopropylbenzene, water, unfiltered, recoverable, µg/L (77223)	Isoquinoline, water, unfiltered, recoverable, micrograms per liter (62826)	Menthol, water, unfiltered, recoverable, micrograms per liter (62827)
08-09-2011	1109	< .2	< 0.02	< 0.04	< 0.04	< .1	M	< 0.04	< 0.04	< .3

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 8 of 9
[ft³/s, cubic feet per second; µg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Sample start time	Methyl salicylate, water, unfiltered, recoverable, micrograms per liter (62828)	Naphthalene, water, unfiltered, recoverable, µg/L (34696)	Phenanthrene, water, unfiltered, recoverable, µg/L (34461)	Phenol, water, unfiltered, recoverable, µg/L (34694)	Pyrene, water, unfiltered, recoverable, µg/L (34469)	Tetrachloroethene, water, unfiltered, recoverable, µg/L (34475)	Tribromomethane, water, unfiltered, recoverable, µg/L (32104)	Tributyl phosphate, water, unfiltered, recoverable, micrograms per liter (62832)	Triclosan, water, unfiltered, recoverable, micrograms per liter (61708)
08-09-2011	1109	< .1	< 0.02	< 0.02	< .2	< 0.02	< .2	< .2	< 0.04	< 0.32

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
Part 9 of 9
[ft³/s, cubic feet per second; µg/L, micrograms per liter; <, less than; M, presence verified but not quantified]

Date	Sample start time	Triethyl citrate, water, unfiltered, recoverable, micrograms per liter (62833)	Triphenyl phosphate, water, unfiltered, recoverable, micrograms per liter (62834)	Tris(2-butoxyethyl) phosphate, water, unfiltered, recoverable, micrograms per liter (62830)	Tris(2-chloroethyl) phosphate, water, unfiltered, recoverable, micrograms per liter (62831)	Tris(dichloroisopropyl) phosphate, water, unfiltered, recoverable, micrograms per liter (61707)
08-09-2011	1109	< 0.04	< .1	< .6	< .2	< .3