Water-Data Report 2013

04058200 SCHWEITZER CREEK NEAR PALMER, MI

Northwestern Lake Michigan Basin
Escanaba Subbasin

LOCATION.--Lat 46°24′40″, long 87°37′27″ referenced to North American Datum of 1927, in SW ¼ sec.1, T.46 N., R.27 W., Marquette County, MI, Hydrologic Unit 04030110, on right bank 10 ft upstream from bridge on County Road PFS, 1.0 mi downstream from Schweitzer Reservoir, and 2.5 mi southwest of Palmer.

DRAINAGE AREA.--23.6 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since Oct. 1, 1963. Datum of gage is 1,268.28 ft above NGVD 29 (Cliffs Natural Resources Inc. bench mark). Prior to Aug. 21, 1961, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Since August 1962, flow completely regulated by Schweitzer Reservoir (station 04058190) 1.0 mi upstream. Prior to June 1994, some diversion from headwaters of basin for municipal supply and the effluent discharged to the Carp River basin. An average of 29 ft^3/s (figure furnished by Cliffs Natural Resources Inc.) was diverted from Schweitzer Reservoir by industry for iron ore processing, some returned to the Middle Branch Escanaba River via Green Creek and some returned via Goose Lake Outlet and East Branch Escanaba River. Diversion into Schweitzer Reservoir from Greenwood Reservoir (station 04057811) via Greenwood Diversion (station 04057813). Gage-height telemeter at station.

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 04058200, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/04058200.2013.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	4.5	4.3	3.8	e3.8	e3.8	3.7	3.9	364	34	31	13	4.2
2	4.5	4.1	3.9	e3.8	e3.8	3.7	3.9	295	44	23	6.3	3.8
3	4.6	4.1	4.0	3.7	e3.7	e3.9	4.1	194	39	16	3.4	3.8
4	4.5	4.0	3.9	3.8	e3.8	e3.8	4.4	145	29	12	3.2	3.8
5	4.5	4.0	3.7	3.7	e3.7	3.7	4.5	124	23	9.8	3.4	3.8
6	4.5	4.0	3.7	3.7	e3.8	3.7	4.6	95	20	8.3	3.8	3.8
7	4.5	4.1	3.6	3.7	e3.8	3.7	4.8	76	18	7.9	3.7	3.8
8	4.5	4.0	3.6	e3.8	3.8	3.7	4.8	70	15	18	3.7	3.8
9	4.7	4.0	3.6	e3.7	e3.8	3.8	4.7	61	12	37	3.6	3.8
10	4.5	4.2	3.6	3.7	3.8	3.9	4.7	53	9.7	32	3.6	3.8
11	4.7	4.8	3.6	3.8	3.9	3.9	4.6	49	9.7	20	3.7	3.7
12	4.4	4.6	3.6	3.9	3.9	3.8	4.7	44	8.0	14	3.5	3.6
13	4.3	4.2	3.6	3.8	3.8	3.8	4.5	39	7.1	11	3.7	3.8
14	4.2	4.2	3.6	3.7	3.8	3.7	4.5	36	5.8	8.8	3.9	4.0
15	4.3	4.1	3.7	e3.7	e3.8	3.7	e4.8	34	5.7	9.2	3.9	4.0
16	4.1	4.1	3.8	e3.8	e3.9	3.7	e4.8	28	7.2	12	3.8	4.0
17	4.1	4.1	3.7	e3.8	e3.9	3.7	e4.8	25	8.3	11	3.8	4.4
18	4.3	4.0	3.7	e3.8	e3.9	3.8	e4.8	23	7.8	14	3.7	4.6
19	4.3	3.9	3.7	e3.7	e3.9	e3.9	e4.8	22	8.1	37	3.8	5.0
20	4.3	3.9	3.7	e3.7	e3.8	3.8	e5.1	20	8.5	41	3.8	5.2
21	4.1	3.9	4.0	e3.8	e3.8	3.7	e5.1	25	11	26	3.8	4.6
22	4.1	3.9	3.7	e3.7	3.7	3.7	e5.1	33	23	19	3.8	4.6
23	4.1	3.9	3.7	e3.7	3.7	3.7	e6.1	33	26	25	3.9	4.7
24	4.2	3.8	3.6	e3.7	3.8	3.8	13	29	24	22	3.8	4.6
25	6.7	3.8	3.7	e3.7	3.7	3.7	68	28	20	22	3.9	4.6
26	5.0	3.8	3.7	3.8	3.8	3.8	98	23	17	57	4.1	4.5
27	4.5	3.8	3.7	3.7	3.8	3.8	122	19	40	91	4.2	4.6
28	4.4	3.8	3.7	3.8	3.8	4.0	197	16	61	68	3.9	4.6
29	4.4	3.8	3.7	3.9	---	4.1	286	13	57	45	3.9	4.6
30	4.6	3.8	3.7	3.8	---	4.2	324	14	42	29	4.1	4.5
31	4.5	---	3.7	3.8	---	4.2	---	27	---	20	3.9	---
Total	138.9	121.0	115.0	116.5	106.5	118.1	1,216.1	2,057	640.9	797.0	128.6	126.6
Mean	4.48	4.03	3.71	3.76	3.80	3.81	40.5	66.4	21.4	25.7	4.15	4.22
Max	6.7	4.8	4.0	3.9	3.9	4.2	324	364	61	91	13	5.2
Min	4.1	3.8	3.6	3.7	3.7	3.7	3.9	13	5.7	7.9	3.2	3.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	9.66	10.0	7.01	5.29	4.87	6.97	42.9	25.2	13.9	7.75	6.66	7.75
Max	41.8	41.3	24.0	13.5	9.98	35.3	115	98.1	55.8	25.7	28.9	56.5
(WY)	(1986)	(1989)	(1966)	(1966)	(1961)	(1966)	(1985)	(1972)	(1968)	(2013)	(1973)	(1978)
Min	2.85	3.02	2.90	2.15	1.92	2.40	1.45	1.69	3.90	3.80	3.46	3.62
(WY)	(2000)	(1999)	(1999)	(1963)	(1963)	(1963)	(1963)	(1963)	(2009)	(1999)	(1963)	(1963)

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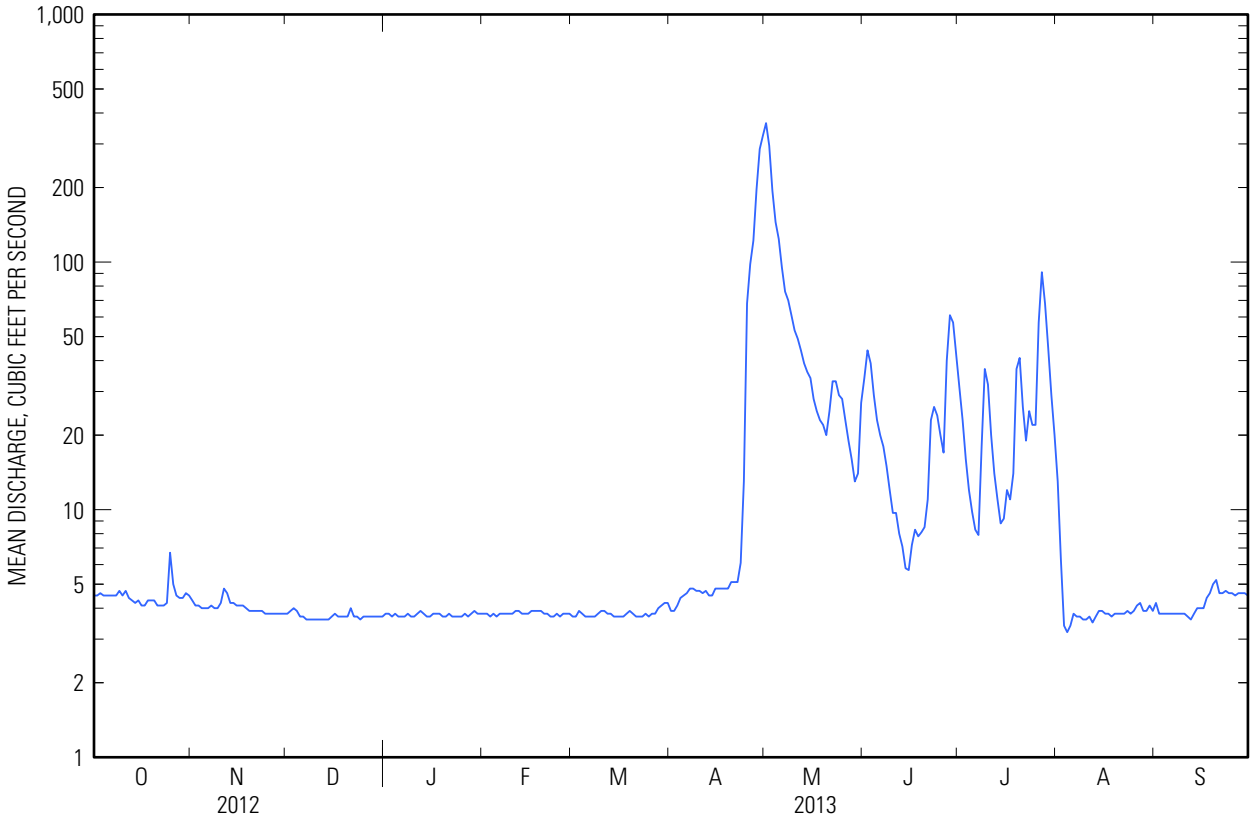
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1961 - 2013	
Annual total	1,655.2		5,682.2			
Annual mean	4.52		15.6		12.3	
Highest annual mean					26.4	1966
Lowest annual mean					4.40	2010
Highest daily mean	6.7	Oct 25	364	May 1	699	Apr 20, 1985
Lowest daily mean	3.6	Dec 7	3.2	Aug 4	1.0	Apr 9, 1963[a]
Annual seven-day minimum	3.6	Dec 7	3.5	Aug 3	1.0	Apr 9, 1963
Maximum peak flow			406	May 1	860	May 31, 1970
Maximum peak stage			5.27	May 1	6.50	May 31, 1970
Instantaneous low flow					0.40	Sep 6, 1962
10 percent exceeds	5.0		33		25	
50 percent exceeds	4.6		4.1		4.9	
90 percent exceeds	3.9		3.7		3.9	

[a] Also occurred Apr. 10-18, May 5, 6, 1963.