Water-Data Report 2013

04214500 BUFFALO CREEK AT GARDENVILLE, NY

Eastern Lake Erie Basin
Buffalo-Eighteenmile Subbasin

LOCATION.--Lat 42°51′17″, long 78°45′18″ referenced to North American Datum of 1983, Erie County, NY, Hydrologic Unit 04120103, on left bank 300 ft downstream from bridge on Union Road in Gardenville, 2.0 mi upstream from Cayuga Creek, and 10.1 mi upstream from mouth.

DRAINAGE AREA.--142 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1337: 1939-52. WDR NY-78-1: 1939-1976 (P), 1972. WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 603.65 ft above NGVD of 1929. Prior to Sept. 26, 1968, at site 400 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft^3/s, Mar. 1, 1955, Mar 7, 1956; maximum gage height, 14.34 ft, Mar. 21, 1978 (ice jam); minimum discharge, 0.2 ft^3/s, Sept. 1, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 16,000 ft^3/s, sometime in June 1937, provided by the U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,750 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 30	1000	*6,090	*7.12
Apr 10	2300	3,900	5.75
Apr 12	1645	3,840	5.70
Jun 7	0100	5,260	6.65
Jun 13	1515	5,800	6.96

Minimum discharge, 12 ft^3/s, on several days during August and September, gage height, 0.46 ft.

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 04214500, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/04214500.2013.pdf

04214500 BUFFALO CREEK AT GARDENVILLE, NY—Continued

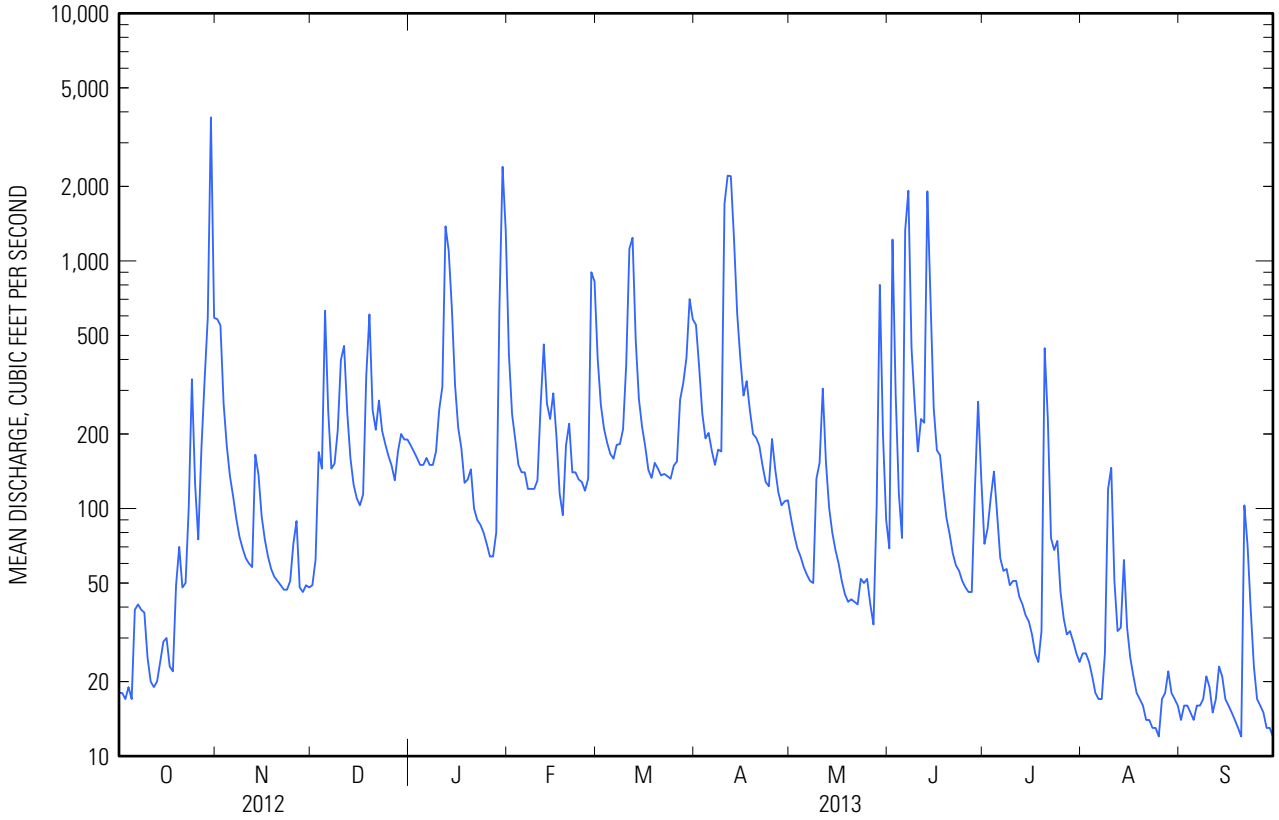
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	18	582	49	e180	419	403	552	91	69	72	26	14
2	18	549	62	e170	e240	262	374	78	1,220	83	26	16
3	17	265	169	e160	e190	210	242	69	289	111	24	16
4	19	179	145	e150	e150	184	192	64	115	141	21	15
5	17	135	629	e150	e140	166	202	58	76	95	18	14
6	39	112	247	e160	e140	159	171	54	1,330	63	17	16
7	41	91	145	e150	e120	181	150	51	1,920	56	17	16
8	39	77	152	e150	e120	182	173	50	445	57	26	17
9	38	69	207	e170	e120	209	170	132	266	49	120	21
10	25	63	398	e250	e130	382	1,700	153	170	51	146	19
11	20	60	454	e310	e260	1,120	2,210	305	230	51	51	15
12	19	58	244	1,380	e460	1,240	2,200	154	222	44	32	17
13	20	165	160	1,100	265	477	1,230	101	1,910	41	33	23
14	24	137	125	644	230	277	614	80	693	37	62	21
15	29	93	110	316	292	214	403	68	254	35	33	17
16	30	75	103	212	e195	178	286	60	172	31	25	16
17	23	64	114	175	e115	143	327	51	164	26	21	15
18	22	57	344	127	e94	133	250	45	120	24	18	14
19	49	53	608	131	e180	153	200	42	92	32	17	13
20	70	51	250	144	e220	145	193	43	79	444	16	12
21	48	49	208	e100	e140	136	179	42	66	230	14	103
22	50	47	273	e90	140	138	149	41	59	76	14	71
23	101	47	206	e86	131	135	128	52	56	68	13	39
24	333	51	182	e80	128	132	123	50	51	74	13	23
25	126	72	163	e72	118	149	191	52	48	46	12	17
26	75	89	149	e64	132	155	144	41	46	36	17	16
27	175	48	e130	e64	e900	275	116	34	46	31	18	15
28	329	46	e170	e80	827	322	103	102	120	32	22	13
29	589	49	e200	e640	---	406	107	800	270	29	18	13
30	3,800	48	e190	e2,400	---	701	108	198	132	26	17	12
31	589	---	e190	1,320	---	581	---	90	---	24	16	---
Total	6,792	3,481	6,776	11,225	6,596	9,548	13,187	3,251	10,730	2,215	923	649
Mean	219	116	219	362	236	308	440	105	358	71.5	29.8	21.6
Max	3,800	582	629	2,400	900	1,240	2,210	800	1,920	444	146	103
Min	17	46	49	64	94	132	103	34	46	24	12	12
Cfsm	1.54	0.82	1.54	2.55	1.66	2.17	3.10	0.74	2.52	0.50	0.21	0.15
In.	1.78	0.91	1.78	2.94	1.73	2.50	3.45	0.85	2.81	0.58	0.24	0.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	153	185	360	611	598	515	317	193	116	87.3	55.0	62.5
Max	518	374	769	1,606	1,432	1,162	557	562	358	232	194	196
(WY)	(2007)	(2004)	(2009)	(2009)	(2007)	(2007)	(2011)	(2011)	(2013)	(2004)	(2009)	(2005)
Min	28.7	31.5	92.4	183	116	261	132	51.0	31.8	18.5	14.4	17.4
(WY)	(1999)	(1999)	(1999)	(2011)	(2010)	(2012)	(2010)	(2008)	(1999)	(2001)	(2001)	(2012)

04214500 BUFFALO CREEK AT GARDENVILLE, NY—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1998 - 2013	
Annual total	61,021.2		75,373			
Annual mean	167		207		238	
Highest annual mean					414	2009
Lowest annual mean					162	2001
Highest daily mean	3,800	Oct 30	3,800	Oct 30	7,050	Jan 8, 1998
Lowest daily mean	5.8	Sep 3	12	Aug 25	4.2	Sep 23, 2007
Annual seven-day minimum	7.5	Aug 28	14	Aug 19	5.4	Aug 10, 2001
Annual runoff (cfsm)	1.17		1.45		1.68	
Annual runoff (inches)	15.99		19.75		22.79	
10 percent exceeds	390		429		501	
50 percent exceeds	74		108		103	
90 percent exceeds	14		18		19