

04215000 CAYUGA CREEK NEAR LANCASTER, NY

Eastern Lake Erie Basin
Buffalo-Eighteenmile Subbasin

LOCATION.--Lat 42°53'24", long 78°38'42" referenced to North American Datum of 1983, Erie County, NY, Hydrologic Unit 04120103, on right bank 150 ft upstream from low dam in Como Lake Park, 700 ft downstream from bridge on Bowen Road, 800 ft downstream from Little Buffalo Creek, 2.0 mi southeast of Lancaster, and 8.7 mi upstream from mouth.

DRAINAGE AREA.--96.4 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1938 to September 1968, annual maximum only--1972-74, May 1974 to current year.

REVISED RECORDS.--WDR NY-82-3: Drainage area.

GAGE.--Water-stage recorder and low concrete dam as control. Datum of gage is 672.02 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since August 1962, undetermined amount of flow diverted by Lancaster Country Club for irrigation upstream from station. Concrete dam configuration modified in September 1974 resulting in a lower point of zero flow. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,440 ft³/s, Sept. 14, 1979, gage height, 10.48 ft; maximum gage height, 13.35 ft, Jan. 23, 1999 (ice jam); practically no flow part of Aug. 8, 9, 1939, when stop logs were installed in the dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/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 2,800 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 30	0515	4,830	7.96
Apr 10	1945	2,910	6.85
Apr 12	1345	3,540	7.23
Jun 2	0815	3,020	6.92
Jun 6	2115	4,260	7.64
Jun 13	1515	*5,800	*8.50
Jul 20	0415	3,100	6.97

Minimum discharge, 2.8 ft³/s, Oct. 4, gage height, 2.57 ft.

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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	3.7	365	27	121	e190	291	360	60	48	44	16	5.9
2	3.5	317	40	106	e110	188	189	49	1,360	52	17	5.7
3	3.2	192	126	110	e120	152	141	42	223	50	17	7.3
4	3.1	139	100	104	104	e120	121	37	104	173	14	6.3
5	3.2	110	429	103	96	e110	135	33	66	104	12	5.6
6	9.8	84	142	109	89	127	109	30	1,320	53	11	5.1
7	14	68	101	119	e58	146	96	27	1,010	37	10	5.5
8	13	57	103	111	88	155	106	26	287	42	17	6.6
9	11	50	128	e120	127	177	131	141	180	53	185	6.0
10	9.2	46	282	e240	111	356	1,680	164	127	34	86	6.0
11	6.6	43	211	e430	302	737	1,350	376	244	30	30	5.4
12	5.4	40	127	1,250	394	716	1,760	146	173	23	19	5.7
13	5.6	124	94	845	202	252	580	100	2,070	21	22	7.3
14	11	95	77	399	187	e160	269	71	615	19	26	7.9
15	7.7	64	67	195	239	135	188	55	195	16	16	6.5
16	8.4	52	64	145	e140	121	171	43	145	14	12	6.3
17	7.0	44	71	127	e82	96	221	34	138	12	10	6.3
18	6.0	39	228	78	83	e76	148	29	92	11	9.1	5.7
19	16	36	268	104	158	106	131	26	70	16	8.2	4.9
20	22	34	130	117	196	e94	139	25	55	1,600	7.4	4.5
21	17	33	136	56	e116	e90	117	22	46	276	6.6	30
22	18	30	154	42	98	91	97	22	39	89	6.2	46
23	42	30	126	35	94	e86	83	29	35	60	6.0	19
24	115	30	113	42	91	e90	83	29	29	50	5.5	10
25	47	30	102	42	82	116	153	32	27	35	5.4	7.9
26	28	29	83	41	88	126	112	23	25	27	5.8	6.7
27	60	28	e37	38	941	204	85	19	24	25	8.5	5.9
28	156	27	e80	50	651	237	71	58	49	23	10	5.5
29	400	25	116	e660	---	349	78	918	180	20	9.8	5.0
30	2,930	30	124	e1,400	---	460	74	173	78	19	7.5	4.7
31	404	---	123	892	---	351	---	78	---	16	6.5	---
Total	4,386.4	2,291	4,009	8,231	5,237	6,515	8,978	2,917	9,054	3,044	622.5	261.2
Mean	141	76.4	129	266	187	210	299	94.1	302	98.2	20.1	8.71
Max	2,930	365	429	1,400	941	737	1,760	918	2,070	1,600	185	46
Min	3.1	25	27	35	58	76	71	19	24	11	5.4	4.5
Cfsm	1.47	0.79	1.34	2.75	1.94	2.18	3.10	0.98	3.13	1.02	0.21	0.09
In.	1.69	0.88	1.55	3.18	2.02	2.51	3.46	1.13	3.49	1.17	0.24	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	69.3	133	200	185	216	341	247	111	59.5	28.3	31.0	49.1
Max	438	601	528	543	484	680	623	410	338	166	323	572
(WY)	(2007)	(1986)	(2009)	(1998)	(2009)	(1942)	(1940)	(2011)	(1989)	(1998)	(1977)	(1977)
Min	2.90	4.34	5.60	9.85	25.1	146	36.5	18.7	5.88	1.06	1.87	0.80
(WY)	(1967)	(1961)	(1961)	(1961)	(1963)	(1981)	(1946)	(1941)	(1955)	(1955)	(1939)	(1960)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1939 - 2013	
Annual total	38,324.72		55,546.1			
Annual mean	105		152		139	
Highest annual mean					206	1956
Lowest annual mean					78.5	1962
Highest daily mean	2,930	Oct 30	2,930	Oct 30	5,830	Feb 24, 1985
Lowest daily mean	0.24	Sep 3	3.1	Oct 4	0.05	Aug 12, 2001
Annual seven-day minimum	0.73	Aug 28	5.7	Sep 5	0.09	Aug 10, 2001
Annual runoff (cfsm)	1.09		1.58		1.44	
Annual runoff (inches)	14.79		21.43		19.59	
10 percent exceeds	229		295		317	
50 percent exceeds	42		71		51	
90 percent exceeds	2.6		6.6		4.3	

