Water-Data Report 2012

04230500 OATKA CREEK AT GARBUTT, NY

Southwestern Lake Ontario Basin
Lower Genesee Subbasin

LOCATION.--Lat 43°00′36″, long 77°47′29″ referenced to North American Datum of 1983, Monroe County, NY, Hydrologic Unit 04130003, on right bank 40 ft downstream from bridge on Union Street in Garbutt, 1.5 mi west of Scottsville, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--200 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1945 to current year.

REVISED RECORDS.--WDR NY-82-3: Drainage area. WDR NY-71-1: 1960 (M). WDR NY-93-3: 1991. WDR NY-97-3: 1996 (P).

GAGE.--Water-stage recorder. Datum of gage is 560.86 ft above NGVD of 1929.

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, 7,050 ft^3/s, Mar. 31, 1960, gage height, 8.64 ft; minimum discharge, 3.3 ft^3/s, Sept. 11, 12, 1958; minimum gage height, 1.88 ft, June 19, 1959, result of regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 25	0700	*928	*4.42

Minimum discharge, 29 ft^3/s, part or all of each day, Sept. 25-30, gage height, 2.28 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	71	199	338	353	615	326	185	215	83	52	79	35
2	67	168	280	378	784	385	279	295	89	52	106	34
3	129	149	233	371	840	427	295	259	130	52	64	34
4	213	136	211	230	553	437	218	300	158	51	51	43
5	143	122	199	241	407	433	185	269	226	51	58	44
6	103	114	332	260	356	309	167	207	158	51	75	37
7	82	109	468	281	329	268	154	169	127	54	54	36
8	70	105	468	321	310	279	145	172	100	51	50	38
9	65	100	353	272	281	357	139	209	89	50	48	37
10	61	98	273	223	258	409	137	194	86	51	48	35
11	57	95	234	210	250	351	136	155	78	50	48	34
12	56	98	203	267	210	299	133	135	102	49	46	34
13	60	98	185	438	210	286	134	122	225	49	45	33
14	68	96	174	416	229	292	130	114	288	49	49	34
15	114	211	196	265	224	265	126	109	172	49	48	34
16	311	370	372	226	222	235	126	104	113	47	45	33
17	400	393	424	357	239	218	125	98	94	46	44	32
18	e438	231	369	663	285	208	119	93	85	45	43	35
19	289	168	254	574	277	206	115	88	89	45	42	34
20	275	154	241	601	243	223	114	84	102	45	41	32
21	382	155	250	e350	217	239	120	81	89	44	40	31
22	391	142	287	e300	215	202	145	86	76	42	40	32
23	315	372	415	310	289	183	227	170	69	41	39	31
24	216	668	445	398	374	172	472	203	62	40	39	31
25	165	848	387	433	489	171	590	116	59	40	38	30
26	162	538	299	378	445	185	520	93	58	42	38	29
27	333	317	292	491	365	174	490	82	57	43	38	29
28	448	255	323	666	348	156	404	75	56	43	38	30
29	461	280	336	723	333	151	271	72	55	40	37	30
30	387	316	286	544	---	158	215	74	53	51	36	30
31	256	---	314	417	---	168	---	109	---	52	35	---
Total	6,588	7,105	9,441	11,957	10,197	8,172	6,616	4,552	3,228	1,467	1,502	1,011
Mean	213	237	305	386	352	264	221	147	108	47.3	48.5	33.7
Max	461	848	468	723	840	437	590	300	288	54	106	44
Min	56	95	174	210	210	151	114	72	53	40	35	29
Cfsm	1.06	1.18	1.52	1.93	1.76	1.32	1.10	0.73	0.54	0.24	0.24	0.17
In.	1.23	1.32	1.76	2.22	1.90	1.52	1.23	0.85	0.60	0.27	0.28	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	81.9	142	233	247	303	547	491	248	136	77.3	59.9	63.5
Max	400	567	798	881	868	1,048	1,069	623	760	355	294	748
(WY)	(1978)	(1986)	(1978)	(1998)	(1976)	(1956)	(1947)	(2011)	(1989)	(1998)	(1992)	(1977)
Min	18.0	17.2	20.1	22.9	33.4	244	117	99.7	45.6	31.8	22.5	19.2
(WY)	(1966)	(1965)	(1961)	(1961)	(1958)	(1965)	(1946)	(1995)	(1949)	(1965)	(1965)	(1965)

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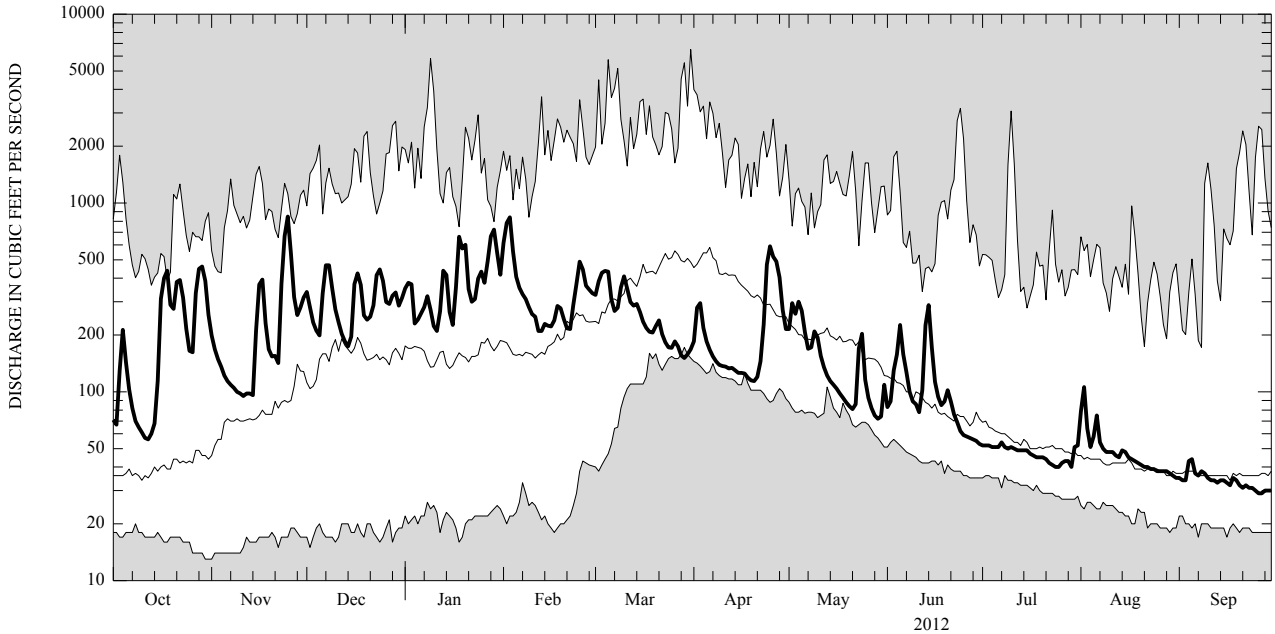
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1946 - 2012	
Annual total	109,886		71,836			
Annual mean	301		196		219	
Highest annual mean					371	1978
Lowest annual mean					117	1965
Highest daily mean	1,600	Mar 7	848	Nov 25	6,500	Mar 31, 1960
Lowest daily mean	51	Sep 21	29	Sep 26	13	Oct 30, 1966
Annual seven-day minimum	54	Sep 21	30	Sep 24	14	Oct 26, 1966
Annual runoff (cfsm)	1.51		0.981		1.09	
Annual runoff (inches)	20.44		13.36		14.85	
10 percent exceeds	707		408		508	
50 percent exceeds	185		158		114	
90 percent exceeds	65		39		31	



CURRENT WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1962, 1971, 1975 to 1977, 1989-90, 1997 to current year.
CHEMICAL DATA: Water years 1954 (a), 1962 (a), 1971 (a), 1975 (b), 1976-77 (e), 1989 (c), 1990 (d), 1997 to 2003 (e), 2004 (d), 2005 (c), 2006 (a), 2007-09 (d), 2010-12 (c).
NUTRIENT DATA: Water years 1954 (a), 1962 (a), 1971 (a), 1975 (b), 1976-77 (e), 1989 (c), 1990 (d), 1997 to 2003 (e), 2004 (d), 2005 (c), 2006 (a), 2007-09 (d), 2010-12 (c).
SEDIMENT DATA: Water years 1975 to 1977 (e), 1989 (c), 1990 (d), 1991 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1959 to March 1961.
SUSPENDED SEDIMENT DISCHARGE: 1975 to September 1977.

INSTRUMENTATION.--Automatic water sampler since July 1997.

COOPERATION.--Water-quality samples were collected and analyzed by the Monroe County Environmental Health Laboratory at Rochester, NY.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 282 mg/L Aug. 17, 1997, minimum daily mean, 0 mg/L Apr. 14, 1975.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 2,980 tons Mar. 5, 1976, minimum daily, 0 ton Apr. 14, 1975.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
[N, nitrogen; P, phosphorus; ft^3/s, cubic feet per second; mg/L, milligrams per liter; <, less than]

Begin date	Begin time	Discharge, instanta-neous, ft^3/s (00061)	Suspended solids, water, unfiltered, mg/L (00530)	Chloride, water, filtered, mg/L (00940)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, unfiltered, mg/L as N (00630)	Orthophos-phate, water, filtered, mg/L as P (00671)	Phosphorus, water, unfiltered, mg/L as P (00665)
10-12-2011	1600	54	2	60.1	0.36	0.023	1.59	0.127	0.025
01-17-2012	1820	400	35	58.8	.61	.077	3.26	.052	.132
01-18-2012	1233	676	61	48.1	1.0	.118	3.03	.101	.260
01-19-2012	1000	511	36	49.9	.55	.089	2.93	.160	.139
02-07-2012	1315	330	21	50.5	.30	.041	3.26	.012	.045
04-04-2012	1110	216	4	54.0	.33	.033	1.73	< .005	.026
04-24-2012	1030	478	26	64.8	.70	.050	1.53	.006	.094
07-30-2012	1250	56	4	53.6	.27	< .010	1.32	.006	.012