04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY

Oswego Basin
Seneca Subbasin

LOCATION.--Lat 42°51′18″, long 76°08′24″ referenced to North American Datum of 1927, Onondaga County, NY, Hydrologic Unit 04140201, on right side of 9-in flume, 250 ft downstream from main depression area, about 2,100 ft east of Tully Farms Road, 1,500 ft south of Otisco Road, 400 ft upstream from mouth, and 4.2 mi northwest of Tully.

DRAINAGE AREA.--0.32 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1991 to June 1999, October 1999 to current year.

REVISED RECORDS.--WDR NY-93-3: 1992 (M).

GAGE.--Water-stage recorder and flume. Datum of gage is 555.93 ft above NGVD of 1929. Prior to Aug 16, 2000, at datum 0.15 ft lower.

REMARKS.-- Records fair. No estimated daily discharges. Flow may include inflow from depressurizing wells, some originating outside the basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge prior to flow being diverted to Tributary No. 5 on June 12, 1992, 45 ft^3/s, Mar. 27, 1992, gage height, 2.08 ft, datum then in use. Maximum discharge since diversion to Tributary No. 5 on June 12, 1992, 23 ft^3/s, Mar. 24, 1994, gage height 1.96 ft, datum then in use, and Aug. 30, 2004, gage height, 2.96 ft; no flow part of each day, July 29, 1993, June 20, 1994, result of dam construction.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10 ft^3/s, Sept. 30, gage height, 1.94 ft; minimum discharge, 0.30 ft^3/s, Aug. 14, 15, 19, 20, 21, gage height, 0.22 ft.

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.46	0.78	0.80	0.73	0.87	0.75	1.2	0.73	0.74	0.59	0.40	0.53
2	0.47	0.73	0.77	0.71	0.84	0.79	1.1	0.74	0.63	0.56	0.39	0.51
3	0.54	0.73	0.86	0.69	0.82	0.85	0.99	0.72	0.78	0.54	0.44	0.51
4	0.47	0.71	0.78	0.68	0.80	0.83	0.95	0.68	0.66	0.53	0.41	0.50
5	0.45	0.72	0.76	0.69	0.79	0.79	1.9	0.66	2.0	0.52	0.46	0.50
6	0.45	0.77	0.74	0.68	0.77	0.77	1.2	0.89	1.2	0.50	0.39	0.48
7	0.76	0.72	0.71	0.69	0.73	0.83	1.1	0.74	0.89	0.48	0.37	0.49
8	0.58	0.72	0.70	0.69	0.74	1.0	1.00	1.1	0.78	0.48	0.37	0.54
9	0.58	0.69	0.94	0.66	0.73	1.2	0.98	1.0	0.80	0.54	0.43	0.51
10	0.61	0.68	0.94	0.65	0.77	1.3	0.93	0.85	0.82	0.59	0.42	0.54
11	0.54	0.67	0.77	0.66	0.73	2.6	0.90	0.80	0.73	0.48	0.38	0.48
12	0.51	0.65	0.72	0.65	0.72	2.6	0.87	0.92	0.73	0.46	0.38	0.48
13	0.60	0.63	0.87	0.64	0.72	2.1	0.85	0.82	0.71	0.46	0.36	0.54
14	0.59	0.66	0.89	0.65	0.72	1.9	0.85	0.99	0.69	0.47	0.33	0.49
15	0.58	0.61	0.88	0.68	0.72	1.7	0.86	0.79	0.63	0.46	0.34	0.45
16	0.56	0.78	0.80	0.73	0.72	1.4	1.1	0.76	0.76	0.48	0.68	0.57
17	0.53	0.62	0.73	0.76	0.71	1.2	0.97	0.74	0.76	0.55	0.37	0.54
18	0.52	0.61	0.69	0.95	0.74	1.1	0.89	0.76	0.66	0.48	0.38	0.45
19	0.48	0.67	0.68	0.91	0.72	1.0	0.83	0.75	0.65	0.46	0.34	0.46
20	0.50	0.99	0.69	0.85	0.67	0.93	0.80	0.71	0.82	0.45	0.36	0.43
21	0.49	0.72	0.68	0.80	0.66	0.88	0.80	0.70	0.70	0.46	0.33	0.42
22	0.47	0.68	0.67	0.76	0.64	0.93	0.77	0.69	0.70	0.43	2.9	0.44
23	0.50	0.69	0.66	0.80	0.72	1.9	0.76	0.68	0.69	0.80	2.2	0.42
24	0.82	0.68	0.66	0.82	0.78	1.3	0.77	0.66	0.63	0.71	0.97	0.37
25	0.66	0.69	0.72	3.5	0.80	1.4	0.87	0.65	0.58	0.67	0.78	0.36
26	0.61	0.69	1.1	1.9	0.83	1.5	0.93	0.64	0.58	0.49	0.70	0.35
27	0.59	0.87	0.97	1.5	0.78	1.00	0.83	0.64	0.69	0.46	0.64	0.47
28	1.7	0.82	0.86	1.3	0.77	1.0	0.79	0.63	1.4	0.45	0.60	0.55
29	1.1	0.75	0.77	1.0	---	1.1	0.74	0.62	0.76	0.45	0.57	0.41
30	0.85	0.89	0.75	0.93	---	1.1	0.73	0.61	0.63	0.42	0.56	3.2
31	0.84	---	0.74	0.87	---	1.5	---	0.63	---	0.41	0.56	---
Total	19.41	21.62	24.30	28.53	21.01	39.25	28.26	23.30	23.80	15.83	18.81	16.99
Mean	0.63	0.72	0.78	0.92	0.75	1.27	0.94	0.75	0.79	0.51	0.61	0.57
Max	1.7	0.99	1.1	3.5	0.87	2.6	1.9	1.1	2.0	0.80	2.9	3.2
Min	0.45	0.61	0.66	0.64	0.64	0.75	0.73	0.61	0.58	0.41	0.33	0.35
Cfsm	1.96	2.25	2.45	2.88	2.34	3.96	2.94	2.35	2.48	1.60	1.90	1.77
In.	2.26	2.51	2.82	3.32	2.44	4.56	3.29	2.71	2.77	1.84	2.19	1.98

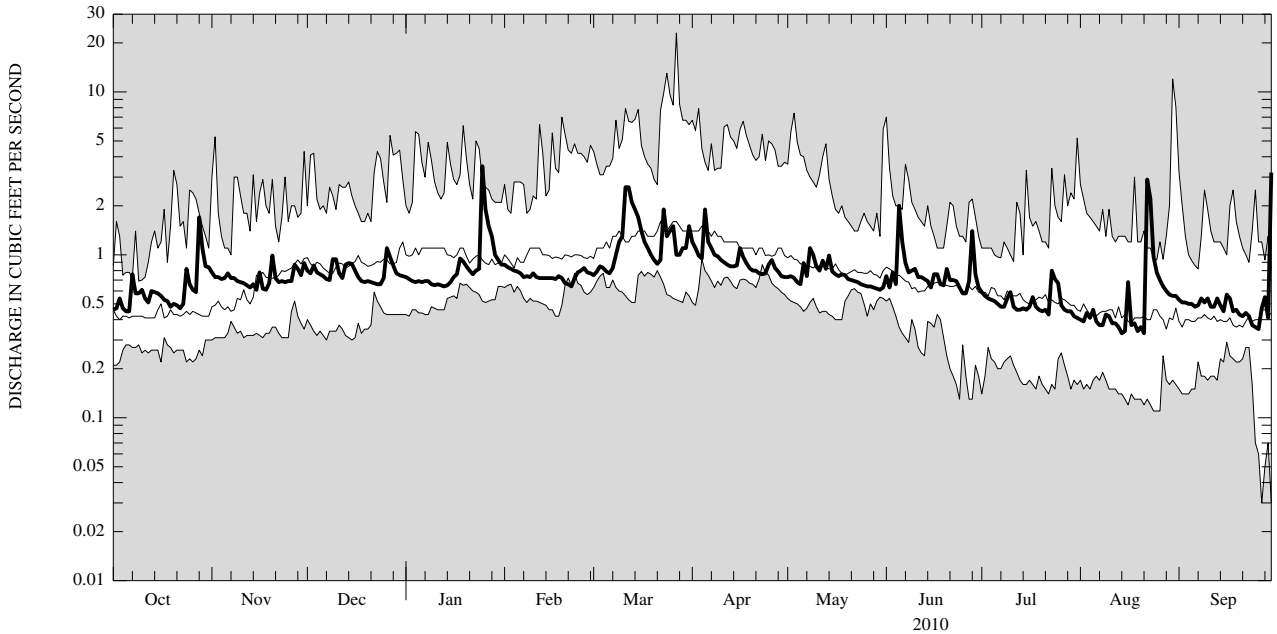
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.55	0.80	0.99	1.09	1.09	1.56	1.40	0.91	0.70	0.57	0.52	0.46
Max	1.04	1.33	1.84	1.78	1.63	3.31	3.13	1.56	1.25	1.05	1.31	1.30
(WY)	(2006)	(2006)	(1997)	(1998)	(1998)	(1994)	(1993)	(2000)	(2000)	(2006)	(2004)	(2004)
Min	0.29	0.35	0.39	0.63	0.66	0.90	0.73	0.51	0.31	0.21	0.15	0.23
(WY)	(1994)	(1999)	(1999)	(2001)	(1995)	(2002)	(1999)	(1999)	(1999)	(1999)	(1999)	(1999)

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY—Continued

SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1993 - 2010	
Annual total	313.75		281.11			
Annual mean	0.86		0.77		0.89	
Highest annual mean					1.08	2004
Lowest annual mean					0.57	1999
Highest daily mean	6.3	Feb 12	3.5	Jan 25	13	Mar 24, 1994
Lowest daily mean	0.36	Sep 25	0.33	Aug 14	0.03	Sep 27, 1996
Annual seven-day minimum	0.39	Sep 20	0.38	Aug 9	0.07	Sep 24, 1996
Annual runoff (cfsm)	2.69		2.41		2.77	
Annual runoff (inches)	36.47		32.68		37.68	
10 percent exceeds	1.3		1.1		1.5	
50 percent exceeds	0.77		0.71		0.75	
90 percent exceeds	0.47		0.45		0.35	



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.

04237946 ONONDAGA CREEK TRIBUTARY NO. 6 BELOW MAIN MUDBOIL DEPRESSION AREA AT TULLY, NY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1991 to current year.
CHEMICAL DATA: Water years 1991 (c), 1992 to 2002 (b), 2003 (a), 2004 (e).
SEDIMENT DATA: Water years 1991 (c), 1992 to current year (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: October 1991 to June 1999, October 1999 to September 2002.
SUSPENDED-SEDIMENT DISCHARGE: October 1991 to June 1999, October 1999 to September 2002.

REMARKS.--Unpublished records of daily suspended-sediment concentration and daily suspended-sediment discharge for the 2003 and 2004 water years are available in the files of the U.S. Geological Survey. During the 2003 water year, the sampling location for suspended-sediment was moved further downstream to include a new area of additional mudboil activity. Since the 2003 water year, records are not equivalent to previously published records because of the difference in sampling areas.

EXTREMES FOR PERIOD OF RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 27,200 mg/L, Oct. 1, 1991; minimum daily mean, 22 mg/L, Aug.19, 1993.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily mean, 148 tons, Mar.11, 1992; minimum daily mean, 0.02 tons, on many days during August and September 1993.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
[ft^3/s, cubic feet per second; mg/L, milligrams per liter]

Date	Sample start time	Discharge, instantaneous, ft^3/s (00061)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)
10-12-2009	1600	.42	110	.12
10-20-2009	1730	.39	136	.14
10-27-2009	1630	.51	181	.25
11-04-2009	1630	.67	162	.29
11-17-2009	1700	.59	98	.16
12-07-2009	1700	.73	79	.16
12-19-2009	1700	.73	104	.20
12-27-2009	1430	.97	780	2.0
01-03-2010	1530	.70	88	.17
01-12-2010	1645	.64	100	.17
01-16-2010	1630	.76	95	.19
01-23-2010	1200	.70	110	.21
02-01-2010	1730	.88	71	.17
02-09-2010	1730	.76	1,770	3.6
02-21-2010	1300	.67	337	.61
03-15-2010	1800	1.6	87	.38
03-23-2010	1730	1.6	190	.82
03-29-2010	1730	1.1	379	1.1
04-07-2010	1645	1.1	259	.77
04-12-2010	1800	.85	244	.56
04-18-2010	1230	.91	294	.72
05-02-2010	1630	.73	431	.85
05-11-2010	1530	.82	296	.66
05-19-2010	1700	.73	321	.63
05-24-2010	1930	.64	299	.52
06-11-2010	1930	.70	10,000	19
06-24-2010	1900	.64	651	1.1
07-05-2010	2000	.49	513	.68
07-06-2010	0815	.54	2,500	3.6