Water-Data Report 2011

01526500 TIOGA RIVER NEAR ERWINS, NY

Upper Susquehanna Basin
Tioga Subbasin

LOCATION.--Lat 42°07′16″, long 77°07′46″ referenced to North American Datum of 1927, Steuben County, NY, Hydrologic Unit 02050104, on right bank 20 ft downstream from bridge on Mulholland Road, 1.1 mi northeast of Erwins, and 1.1 mi downstream from Canisteo River.

DRAINAGE AREA.--1,377 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1918 to current year.

REVISED RECORDS.--WSP 891: 1935-38. WSP 1672: 1919 (M), 1927 (M), 1929 (M). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 931.24 ft above NGVD of 1929. Prior to June 21, 1931, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. High flows regulated by upstream reservoirs. Since March 1979, flood flows regulated by Tioga Lake; normal regulation occasionally sufficient to affect figures of monthly runofff. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, since construction of Tioga Reservoir in 1979, 45,600 ft^3/s, Jan. 19, 1996, gage height 16.98 ft; minimum discharge, 52 ft^3/s, Oct. 1, 2, 6, 1980.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--Maximum discharge, prior to construction of Tioga Reservoir in 1979, 190,000 ft^3/s, June 23, 1972, from rating curve extended above 90,000 ft^3/s, on basis of computation of peak flow at Lindley and Canisteo River at Erwins, 7.2 mi and 2.0 mi upstream, respectively, adjusted for flow from intervening area, gage height, 26.74 ft, from floodmarks; minimum discharge, 18 ft^3/s, Sept. 2, 3, 1939; minimum gage height, 0.40 ft, Sept. 8, 9, 1954, July 23, Aug. 10, 11, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,100 ft^3/s, Apr. 28, gage height, 12.26 ft; minimum discharge, 120 ft^3/s, July 28, 29, 30, gage height, 0.52 ft.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 01526500, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/01526500.2011.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4,980	741	11,700	630	e380	11,000	3,450	8,160	e3,340	287	126	160
2	3,620	686	13,100	1,330	405	8,430	3,590	7,410	2,320	276	127	153
3	1,950	546	11,400	1,200	e430	4,740	3,910	7,510	1,650	270	124	150
4	1,040	551	7,800	884	e440	3,370	4,870	10,700	1,420	260	129	134
5	1,100	667	3,730	743	462	3,470	13,900	8,250	1,400	245	127	148
6	4,970	708	2,930	646	568	11,800	11,400	5,930	1,200	235	128	400
7	5,910	673	2,140	578	588	10,100	10,700	4,710	974	225	134	1,550
8	3,140	623	1,850	557	530	9,870	9,080	3,500	930	211	141	2,630
9	1,710	615	1,590	550	e520	9,000	6,120	2,630	818	206	141	870
10	1,220	587	1,240	588	e500	9,080	4,490	2,050	699	192	140	1,550
11	1,030	545	1,170	538	e480	15,100	4,210	1,760	649	180	157	3,230
12	1,720	502	1,290	e520	e480	8,740	4,040	1,530	870	169	154	4,290
13	1,790	446	2,400	e520	e470	11,600	4,940	1,450	708	161	146	4,610
14	1,220	442	1,930	e510	433	10,400	5,770	1,490	608	157	135	4,480
15	1,020	511	1,480	e490	468	9,710	4,180	1,870	549	152	187	4,320
16	824	547	1,440	470	537	10,100	3,830	5,430	462	148	271	3,010
17	838	2,710	1,430	e440	624	10,500	10,300	3,840	441	144	222	1,080
18	718	3,160	1,360	428	1,550	12,300	7,900	3,750	437	143	188	661
19	671	1,900	1,200	e440	5,340	12,100	6,440	4,760	412	142	160	515
20	557	1,710	897	e440	4,820	8,240	7,360	13,800	384	142	153	454
21	531	1,490	920	429	3,440	8,890	5,750	9,390	453	141	153	429
22	525	1,200	889	493	2,570	9,680	4,200	7,090	689	138	154	427
23	514	1,140	810	506	1,910	6,850	5,740	4,640	1,170	135	142	432
24	505	1,240	657	463	1,640	4,910	7,610	6,080	774	132	132	695
25	520	1,080	648	403	1,810	3,930	6,480	5,220	624	133	146	858
26	622	1,450	619	e410	1,850	3,120	9,970	4,060	590	146	189	522
27	1,550	1,660	600	e400	1,810	2,890	12,600	4,980	472	134	207	533
28	1,640	1,310	635	e400	3,110	2,850	17,400	5,710	415	124	191	3,120
29	1,150	1,290	641	e390	---	2,530	13,700	e3,500	345	121	175	8,370
30	871	1,320	594	e385	---	2,480	11,400	e6,820	310	120	155	7,120
31	780	---	592	e385	---	3,210	---	e4,990	---	124	160	---
Total	49,236	32,050	79,682	17,166	38,165	240,990	225,330	163,010	26,113	5,393	4,894	56,901
Mean	1,588	1,068	2,570	554	1,363	7,774	7,511	5,258	870	174	158	1,897
Max	5,910	3,160	13,100	1,330	5,340	15,100	17,400	13,800	3,340	287	271	8,370
Min	505	442	592	385	380	2,480	3,450	1,450	310	120	124	134

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	750	1,219	1,641	1,539	1,686	3,108	3,378	1,744	1,180	554	513	640
Max	4,160	4,401	3,719	4,870	4,219	7,774	11,970	5,258	4,579	2,099	3,257	5,868
(WY)	(1991)	(1997)	(2004)	(1996)	(1981)	(2011)	(1993)	(2011)	(1989)	(2004)	(1994)	(2004)
Min	96.5	139	155	165	340	843	1,227	371	142	95.9	102	72.0
(WY)	(1992)	(1999)	(1999)	(1981)	(1980)	(1981)	(2010)	(1985)	(1999)	(1991)	(2001)	(1980)

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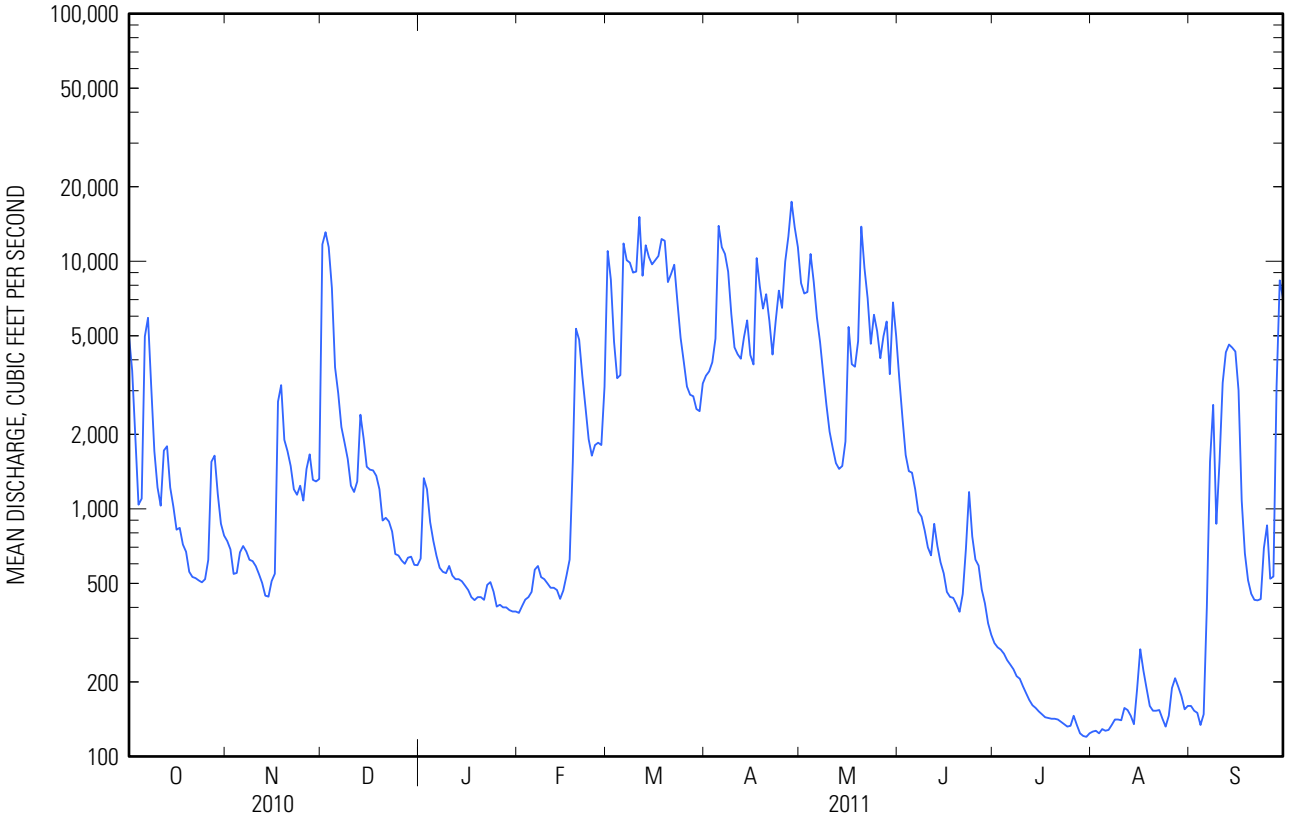
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1980 - 2011	
Annual total	482,392		938,930			
Annual mean	1,322		2,572		1,493	
Highest annual mean					2,649	2004
Lowest annual mean					786	1999
Highest daily mean	14,500	Mar 14	17,400	Apr 28	28,000	Jan 19, 1996
Lowest daily mean	78	Sep 26	120	Jul 30	52	Oct 1, 1980
Annual seven-day minimum	87	Sep 21	124	Jul 28	55	Sep 30, 1980
10 percent exceeds	2,970		8,240		3,590	
50 percent exceeds	660		871		653	
90 percent exceeds	116		153		139