

Water-Data Report 2013

01520500 TIOGA RIVER NEAR LINDLEY, NY

Upper Susquehanna Basin
Tioga Subbasin

LOCATION.--Lat 42°01'43", long 77°07'56" referenced to North American Datum of 1983, Steuben County, NY, Hydrologic Unit 02050104, on left bank 50 ft downstream from bridge on County Highway 120 at Lindley, and 6 mi upstream from Canisteo River.

DRAINAGE AREA.--771 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1930 to March 1995, annual maximum only--1997-2009, October 2009 to current year.

REVISED RECORDS.--WSP 871: 1938. WSP 2103: Drainage area. WDR NY-04-3: 2002-03 (M).

GAGE.--Water-stage recorder. Datum of gage is 964.50 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Since November 1979, flood flows regulated by Tioga and Hammond Lakes, and since December 1979, by Cowanesque Lake; normal regulation occasionally sufficient to affect figures of monthly runoff. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge since construction of Tioga, Hammond, and Cowanesque Lakes in 1979, 13,900 ft³/s, Oct. 23, 1990, Aug. 18, 1994, and Sept. 17, 2004; maximum gage height, 13.81 ft, Sept. 17, 2004; minimum discharge, 21 ft³/s, Aug. 28, 1980, gage height, 2.68 ft.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--Maximum discharge prior to construction of Tioga, Hammond, and Cowanesque Lakes in 1979, 128,000 ft³/s, June 23, 1972, gage height, 26.27 ft, from floodmark in gage house, from rating curve extended above 31,000 ft³/s on basis of velocity-area and slope-area studies at gage height 19.2 ft and conveyance study and slope-area measurements at gage heights 22.87 ft and 26.27 ft; minimum discharge, 6.1 ft³/s, Sept. 1, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,230 ft³/s, Jan. 31, gage height, 11.33 ft; minimum discharge, 68 ft³/s, Aug. 30, gage height, 2.99 ft.

01520500 TIOGA RIVER NEAR LINDLEY, 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	98	2,800	214	792	6,810	586	971	606	375	2,290	122	1,110
2	98	1,460	215	778	6,090	571	1,120	495	385	2,780	118	299
3	98	1,020	211	712	3,660	474	852	409	387	1,380	116	163
4	98	814	204	673	2,370	436	701	404	326	805	104	127
5	98	617	233	684	1,960	398	612	376	291	556	102	118
6	101	439	264	662	1,610	395	595	338	290	367	101	116
7	99	467	277	655	1,150	382	591	289	347	333	101	115
8	99	427	300	655	877	384	626	295	301	324	108	101
9	98	354	451	667	808	442	640	509	275	386	106	83
10	97	318	580	712	e560	731	744	743	278	389	103	82
11	93	308	1,140	822	e600	1,310	3,430	871	297	357	101	82
12	93	301	868	1,810	720	3,940	2,950	901	360	285	97	90
13	93	331	664	4,910	714	3,430	2,920	759	496	219	97	138
14	93	392	556	5,840	722	1,930	2,240	581	1,030	187	97	135
15	93	384	585	3,330	692	1,520	1,760	528	880	178	104	109
16	93	235	555	2,280	693	1,330	1,500	505	578	167	102	109
17	93	273	631	1,910	622	1,080	1,590	398	404	161	101	102
18	93	281	4,560	1,550	e450	1,000	1,450	333	320	152	91	82
19	112	263	3,520	1,320	412	1,030	1,370	330	247	150	83	81
20	104	262	2,340	1,190	471	954	1,770	325	226	149	85	81
21	100	262	4,260	993	382	801	1,500	299	199	124	84	129
22	112	259	3,790	e700	323	695	1,410	287	187	112	81	375
23	163	254	2,080	e460	328	616	1,080	282	162	286	80	164
24	217	238	1,580	e450	334	621	950	318	207	521	80	140
25	203	217	1,340	e450	315	599	1,110	286	328	314	80	129
26	218	208	1,190	e450	312	597	996	254	349	208	82	106
27	219	211	1,030	e460	450	640	801	222	283	194	81	105
28	305	217	867	e470	547	719	735	257	430	283	84	101
29	778	215	966	725	---	718	694	1,780	356	240	81	96
30	4,770	214	888	3,220	---	706	639	1,140	291	188	78	96
31	4,110	---	786	6,890	---	709	---	548	---	150	106	---
Total	13,139	14,041	37,145	47,220	34,982	29,744	38,347	15,668	10,885	14,235	2,956	4,764
Mean	424	468	1,198	1,523	1,249	959	1,278	505	363	459	95.4	159
Max	4,770	2,800	4,560	6,890	6,810	3,940	3,430	1,780	1,030	2,780	122	1,110
Min	93	208	204	450	312	382	591	222	162	112	78	81
Cfsm	0.55	0.61	1.55	1.98	1.62	1.24	1.66	0.66	0.47	0.60	0.12	0.21
In.	0.63	0.68	1.79	2.28	1.69	1.44	1.85	0.76	0.53	0.69	0.14	0.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	388	632	818	755	866	1,995	1,967	1,126	590	240	228	223
Max	2,730	2,476	2,275	2,413	2,818	7,157	8,379	3,315	4,304	1,032	2,724	2,821
(WY)	(1991)	(1978)	(1978)	(1937)	(1981)	(1936)	(1993)	(2011)	(1972)	(1984)	(1994)	(1975)
Min	17.3	27.4	52.0	59.5	86.1	445	270	184	76.0	36.8	19.3	13.1
(WY)	(1965)	(1965)	(1931)	(1931)	(1934)	(1981)	(1946)	(1934)	(1991)	(1966)	(1966)	(1964)

01520500 TIOGA RIVER NEAR LINDLEY, NY—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1930 - 2013	
Annual total	210,182		263,126			
Annual mean	574		721		821	
Highest annual mean					1,642	2011
Lowest annual mean					360	1965
Highest daily mean	4,770	Oct 30	6,890	Jan 31	63,000	Jun 23, 1972
Lowest daily mean	88	Jul 4	78	Aug 30	7.2	Sep 1, 1939
Annual seven-day minimum	89	Jul 8	81	Aug 24	9.5	Aug 28, 1939
Maximum peak flow					128,000	Jun 23, 1972
Maximum peak stage					26.27	Jun 23, 1972
Instantaneous low flow					6.1	Sep 1, 1939
Annual runoff (cfsm)	0.745		0.935		1.06	
Annual runoff (inches)	10.14		12.70		14.47	
10 percent exceeds	1,290		1,580		1,950	
50 percent exceeds	306		382		306	
90 percent exceeds	90		98		57	

