Water-Data Report 2012

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 mi^2.

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.--No estimated daily discharges. Records good. 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 ft^3/s, Oct. 23, 1990, Aug. 18, 1994, and Sept. 17, 2004; maximum gage height, 13.81 ft, Sept. 17, 2004; minimum discharge, 21 ft^3/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 ft^3/s, June 23, 1972, gage height, 26.27 ft, from floodmark in gage house, from rating curve extended above 31,000 ft^3/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 ft^3/s, Sept. 1, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,030 ft^3/s, Oct. 20, gage height, 11.20 ft; minimum discharge, 86 ft^3/s, on several days during July to August, gage height, 3.04 ft.

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4,900	1,050	1,690	1,240	1,540	2,180	557	919	272	100	100	88
2	5,380	807	1,290	1,230	1,560	2,270	665	745	368	92	92	88
3	6,250	810	1,210	1,090	1,360	2,350	583	749	478	90	90	89
4	3,790	745	1,080	710	1,120	1,770	458	846	483	88	89	92
5	2,330	661	1,000	732	1,010	1,280	371	899	513	89	90	96
6	1,540	509	991	850	997	1,050	368	726	459	89	90	91
7	1,140	534	982	857	912	1,060	351	618	337	90	88	113
8	1,010	559	1,210	824	854	1,200	337	680	290	90	88	101
9	917	544	1,180	707	760	1,930	316	655	266	88	91	99
10	760	480	1,080	564	652	1,480	293	626	262	89	96	95
11	717	420	849	658	625	1,180	294	601	244	89	95	93
12	774	441	631	1,650	596	1,150	293	527	337	88	91	92
13	949	500	625	3,540	557	1,140	285	424	654	88	91	91
14	3,010	542	673	2,220	580	1,050	270	417	402	88	95	91
15	4,530	555	801	1,430	545	941	272	785	328	94	120	93
16	2,540	784	825	1,180	532	862	268	860	266	91	97	91
17	2,150	981	889	1,320	567	788	260	610	216	88	94	91
18	1,700	849	722	1,440	564	743	222	416	187	88	92	298
19	1,280	639	659	1,120	554	741	210	303	167	88	91	373
20	4,520	578	666	807	491	730	197	303	166	97	91	198
21	3,860	555	858	864	466	667	221	337	164	103	90	143
22	2,310	588	2,060	847	424	578	350	514	148	90	88	204
23	1,780	3,800	4,290	893	422	515	804	473	137	90	88	153
24	1,480	2,680	3,580	1,250	521	534	1,250	327	137	88	88	130
25	1,350	1,630	2,230	1,130	730	540	1,610	310	134	88	88	107
26	1,060	1,400	1,940	1,120	708	498	1,510	282	115	96	88	104
27	1,270	1,280	1,970	3,230	583	462	1,790	256	112	93	91	101
28	1,440	1,230	3,310	3,070	536	415	1,520	218	109	91	101	101
29	1,200	1,330	2,000	1,810	686	361	1,180	230	108	90	90	100
30	1,300	2,140	1,540	1,580	---	376	1,040	297	105	88	89	98
31	1,250	---	1,370	1,440	---	452	---	270	---	92	88	---
Total	68,487	29,621	44,201	41,403	21,452	31,293	18,145	16,223	7,964	2,813	2,860	3,704
Mean	2,209	987	1,426	1,336	740	1,009	605	523	265	90.7	92.3	123
Max	6,250	3,800	4,290	3,540	1,560	2,350	1,790	919	654	103	120	373
Min	717	420	625	564	422	361	197	218	105	88	88	88
Cfsm	2.87	1.28	1.85	1.73	0.96	1.31	0.78	0.68	0.34	0.12	0.12	0.16
In.	3.30	1.43	2.13	2.00	1.04	1.51	0.88	0.78	0.38	0.14	0.14	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	387	634	812	744	861	2,010	1,977	1,135	593	237	230	224
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)

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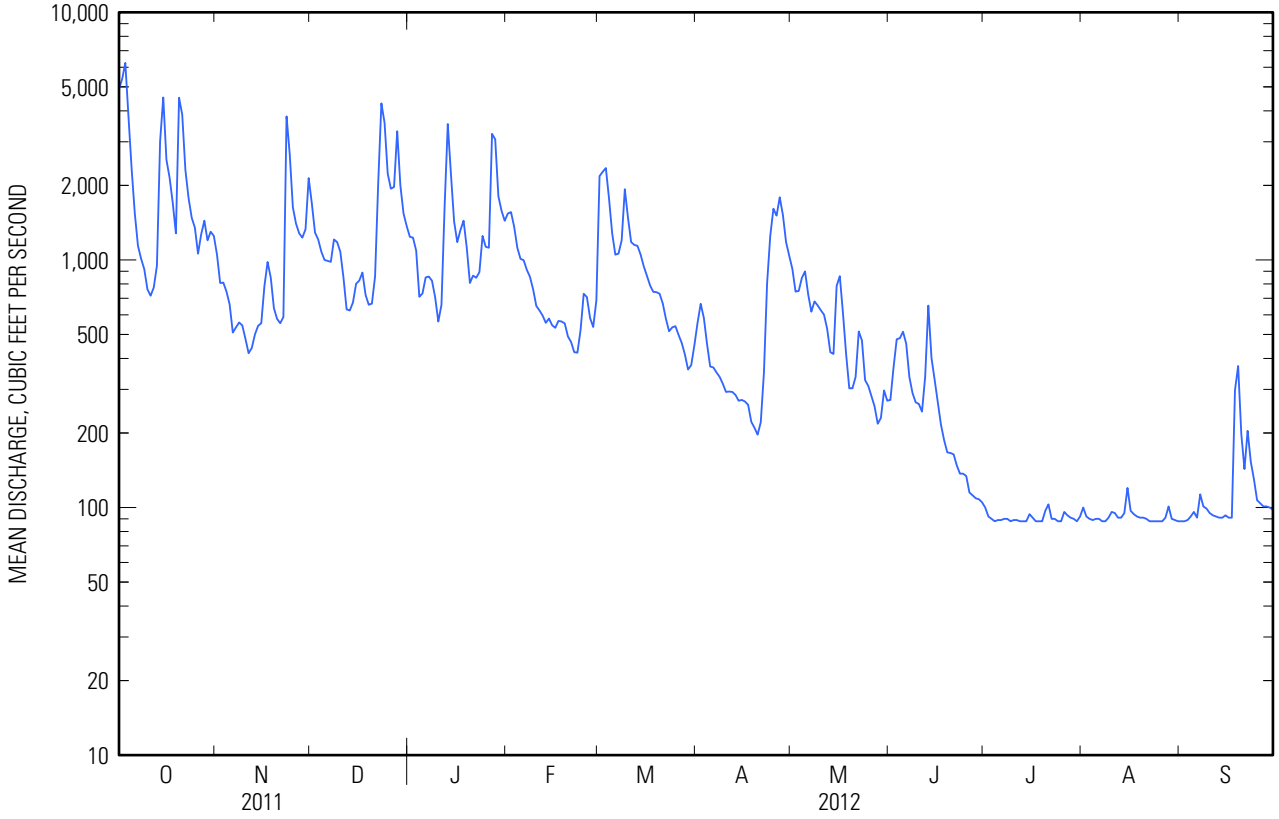
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1930 - 2012	
Annual total	647,140		288,166			
Annual mean	1,773		787		822	
Highest annual mean					1,642	2011
Lowest annual mean					360	1965
Highest daily mean	10,200	Apr 29	6,250	Oct 3	63,000	Jun 23, 1972
Lowest daily mean	68	Aug 1	88	Jul 4	7.2	Sep 1, 1939
Annual seven-day minimum	69	Aug 7	89	Jul 8	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)	2.30		1.02		1.07	
Annual runoff (inches)	31.22		13.90		14.49	
10 percent exceeds	5,460		1,690		1,960	
50 percent exceeds	810		554		304	
90 percent exceeds	83		90		57