



2005 Water Year
SUSQUEHANNA RIVER BASIN
01531500 Susquehanna River at Towanda, PA

Latitude: 41° 45 ' 55"

Longitude: 076° 26 ' 28"

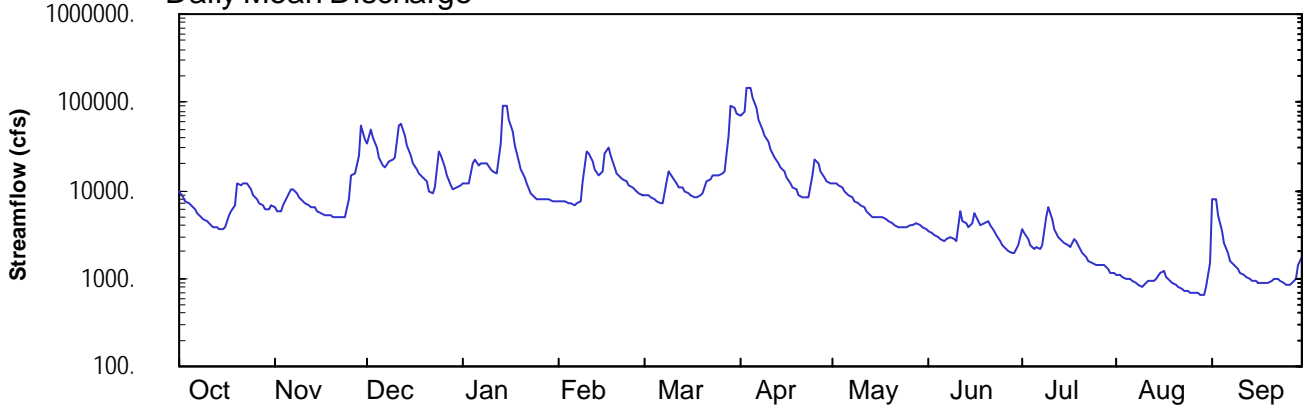
Hydrologic Unit Code: 02050106

Bradford County

Datum: 694.38 feet

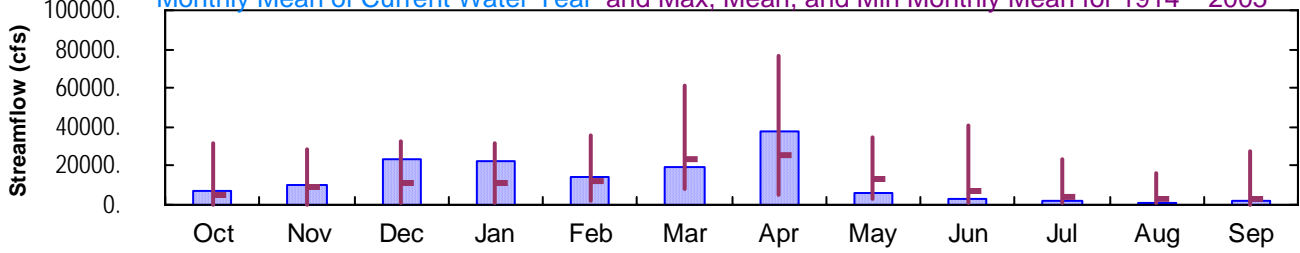
Drainage Area: 7797. mi²

Daily Mean Discharge

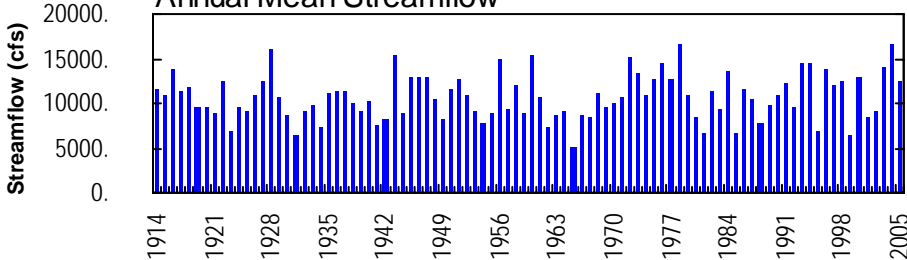


Monthly Statistics

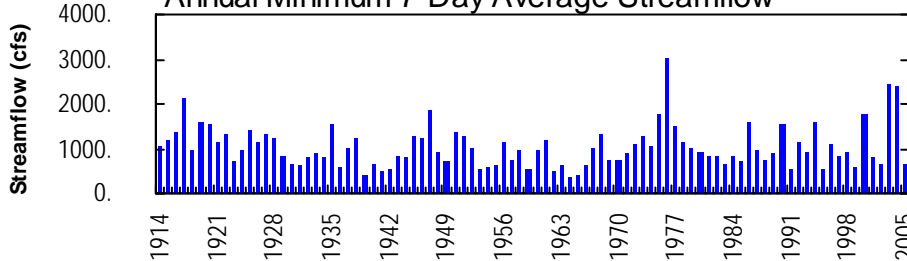
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1914 – 2005



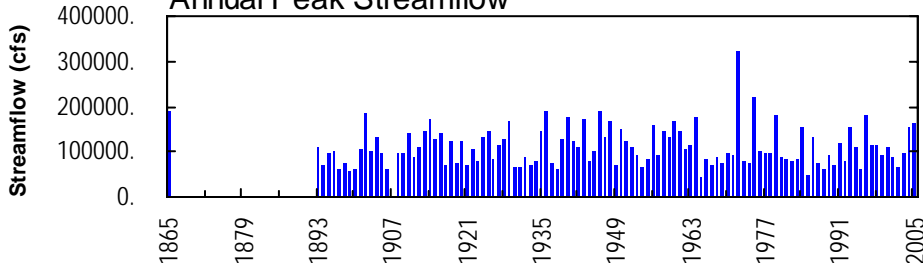
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



SUSQUEHANNA RIVER BASIN

01531500 SUSQUEHANNA RIVER AT TOWANDA, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 41°45'55", long 76°26'28", Bradford County, Hydrologic Unit 02050106, on right bank at Bridge Street in Towanda, and 1.8 mi upstream from Towanda Creek.

DRAINAGE AREA.--7,797 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1913 to current year. Gage-height records collected at same site since October 1892 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1922, 1929.

GAGE.--Water-stage recorder. Datum of gage is 694.38 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 18, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow slightly regulated by 7 flood-control reservoirs which have a combined capacity of 356,800 acre-ft. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 68,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 15	0100	110,000	17.37	Apr. 4	0030	*162,000	*23.05
Mar. 29	1400	96,900	15.90				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9660	6380	34000	11900	e7700	8930	70800	12100	3420	3710	1110	7820
2	8360	5840	50200	12100	e7600	8620	79000	12200	3310	3240	1080	7850
3	7590	5700	40400	12000	e7400	8160	144000	11600	3180	2760	1050	5350
4	7170	6670	31200	19900	7250	7900	146000	10700	2990	2340	1000	3430
5	6700	8380	23400	22600	7080	7400	113000	9760	2830	2120	974	2480
6	6120	10000	19500	19600	6930	7120	88300	8960	2720	2230	928	1900
7	5540	10000	18000	20600	7070	7220	64000	8300	2850	2120	887	1580
8	5020	9340	21600	20000	7570	12400	49700	7690	2900	2390	848	1390
9	4660	8330	21900	20400	12700	16600	41600	7180	2740	5020	819	1270
10	4390	7580	24000	17500	27800	13800	35100	6770	2660	6260	830	1180
11	4150	7070	54600	16000	26200	12000	28400	6360	5680	4750	920	1100
12	3920	6810	57700	15900	20900	11000	23600	5820	4450	3610	947	1040
13	3760	6590	42800	33500	17400	10600	20600	5350	4330	2880	931	988
14	3680	6320	32600	89300	14600	9970	18300	5050	3810	2720	993	950
15	3650	5900	25200	90200	16300	9060	16200	4920	4320	2510	1170	915
16	3810	5530	20200	62100	26500	8600	14000	5050	5510	2430	1230	900
17	5300	5340	17500	45900	31200	8250	12000	4980	4580	2330	1010	906
18	5690	5200	15700	32200	24700	8440	11000	4820	4030	2800	960	882
19	6810	5100	13900	e21000	18300	8850	10100	4550	4330	2640	883	882
20	11800	4970	12500	e17000	16000	9410	8790	4240	4520	2190	829	924
21	11500	4990	9960	e14000	14400	12300	8460	4010	3970	1930	788	991
22	11900	5030	e9400	e12000	13500	13000	8320	3870	3430	1730	751	989
23	12100	5020	10800	e9200	12900	14500	8240	3760	3120	1570	729	953
24	10400	5030	28000	e8500	11600	14400	15000	3730	2640	1480	718	893
25	8960	7970	24900	e8000	10800	14400	22100	3820	2360	1430	694	856
26	7980	15100	18400	e7900	9780	15600	20300	3920	2180	1400	689	854
27	7300	15200	14800	e7800	9050	16700	16400	3950	2010	1420	671	885
28	6710	24600	11200	e7800	8850	42800	14000	4140	1930	1390	662	971
29	6230	54600	10100	e7800	---	93200	12800	3920	1910	1260	650	1440
30	6070	37800	10800	e7700	---	87800	12200	3740	2420	1180	808	1720
31	6780	---	11600	e7700	---	73700	---	3580	---	1140	1510	---
TOTAL	213710	312390	736860	698100	402080	592730	1132310	188840	101130	76980	28069	54289
MEAN	6894	10410	23770	22520	14360	19120	37740	6092	3371	2483	905	1810
MAX	12100	54600	57700	90200	31200	93200	146000	12200	5680	6260	1510	7850
MIN	3650	4970	9400	7700	6930	7120	8240	3580	1910	1140	650	854
CFSM	0.88	1.34	3.05	2.89	1.84	2.45	4.84	0.78	0.43	0.32	0.12	0.23
IN.	1.02	1.49	3.52	3.33	1.92	2.83	5.40	0.90	0.48	0.37	0.13	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2005, BY WATER YEAR (WY)

MEAN	5396	9439	11360	10750	11760	23580	25330	13160	7304	4185	3126	3541
MAX	31270	28940	32550	31200	35700	60780	76640	34770	41150	23840	16210	27940
(WY)	1978	1928	1997	1996	1976	1936	1993	1943	1972	1915	1915	2004
MIN	507	495	1459	1273	1821	8417	4975	3297	1381	783	571	432
(WY)	1965	1965	1931	1931	1920	1981	1946	1985	1999	1962	1964	1964

e Estimated.

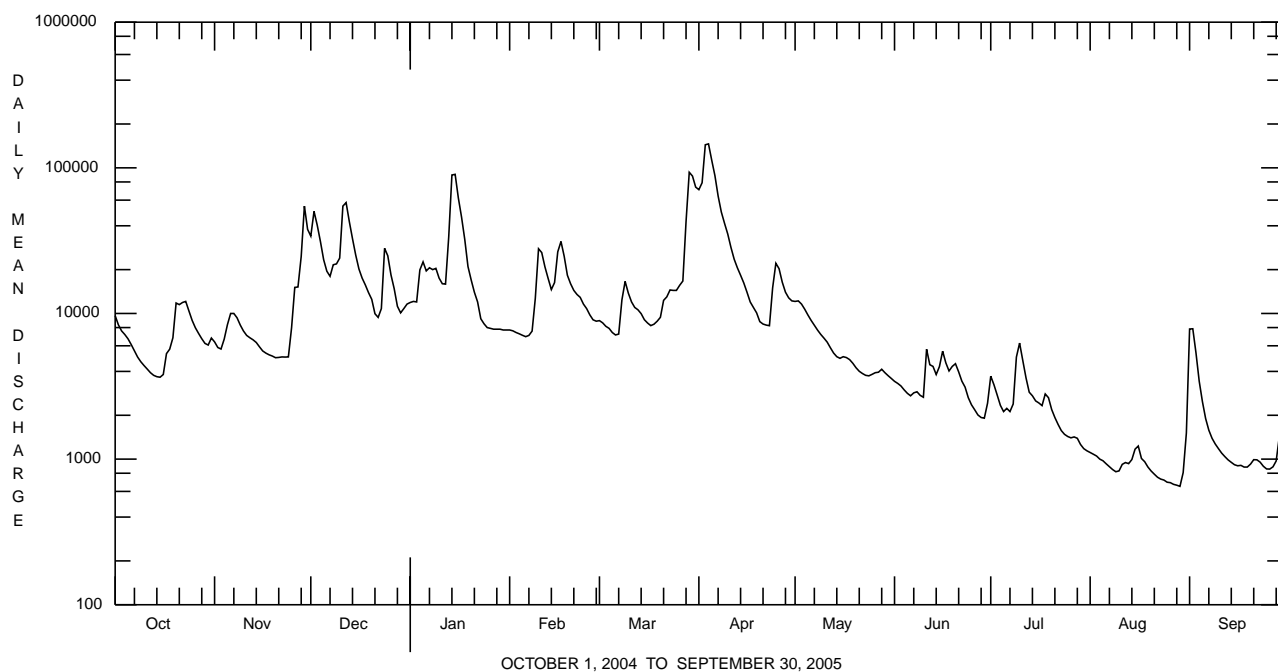
SUSQUEHANNA RIVER BASIN

01531500 SUSQUEHANNA RIVER AT TOWANDA, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1914 - 2005	
ANNUAL TOTAL	5599510		4537488			
ANNUAL MEAN	15300		12430		10730	
HIGHEST ANNUAL MEAN					16720	2004
LOWEST ANNUAL MEAN					5104	1965
HIGHEST DAILY MEAN	127000	Sep 18,19	146000	Apr 4	283000	Jun 23 1972
LOWEST DAILY MEAN	2140	Jul 7	650	Aug 29	340	Sep 23 1964
ANNUAL SEVEN-DAY MINIMUM	2410	Jul 1	688	Aug 23	348	Sep 18 1964
MAXIMUM PEAK FLOW			162000	Apr 4	^a 320000	Jun 24 1972
MAXIMUM PEAK STAGE			23.05	Apr 4	^b 33.43	Jun 24 1972
INSTANTANEOUS LOW FLOW					334	Sep 23,24 1964
ANNUAL RUNOFF (CFSM)	1.96		1.59		1.38	
ANNUAL RUNOFF (INCHES)	26.72		21.65		18.70	
10 PERCENT EXCEEDS	31500		25600		26000	
50 PERCENT EXCEEDS	11000		7120		5590	
90 PERCENT EXCEEDS	4470		989		1250	

a From rating curve extended above 180,000 ft³/s.

b From floodmark.



SUSQUEHANNA RIVER BASIN

01531500 SUSQUEHANNA RIVER AT TOWANDA, PA--Continued
(Pennsylvania Water-Quality Network Station)BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

REMARKS.--Samples were collected using a D-Frame net with a mesh size of 500 μ m. Samples represent counts per 100 animal (approximate) subsamples.

Date	10/27/04
Benthic macroinvertebrate	Count
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	24
Insecta	
Ephemeroptera (MAYFLIES)	
Ephemerellidae	
<i>Serratella</i>	4
Heptageniidae	
<i>Stenonema</i>	4
Isonychiidae	
<i>Isonychia</i>	11
Potamanthidae	
<i>Anthopotamus</i>	10
Plecoptera (STONEFLIES)	
Capniidae	1
Perlidae	
<i>Agnatina</i>	17
Taeniopterygidae	
<i>Taenionema</i>	5
<i>Taeniopteryx</i>	1
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<i>Cheumatopsyche</i>	3
<i>Hydropsyche</i>	1
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Optioservus</i>	2
<i>Stenelmis</i>	4
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	
	13
Total Organisms	100
Total Taxa	14