



2005 Water Year
WEST BRANCH SUSQUEHANNA RIVER BASIN
01551500 WB Susquehanna River at Williamsport, PA

Latitude: 41° 14' 10"

Longitude: 076° 59' 49"

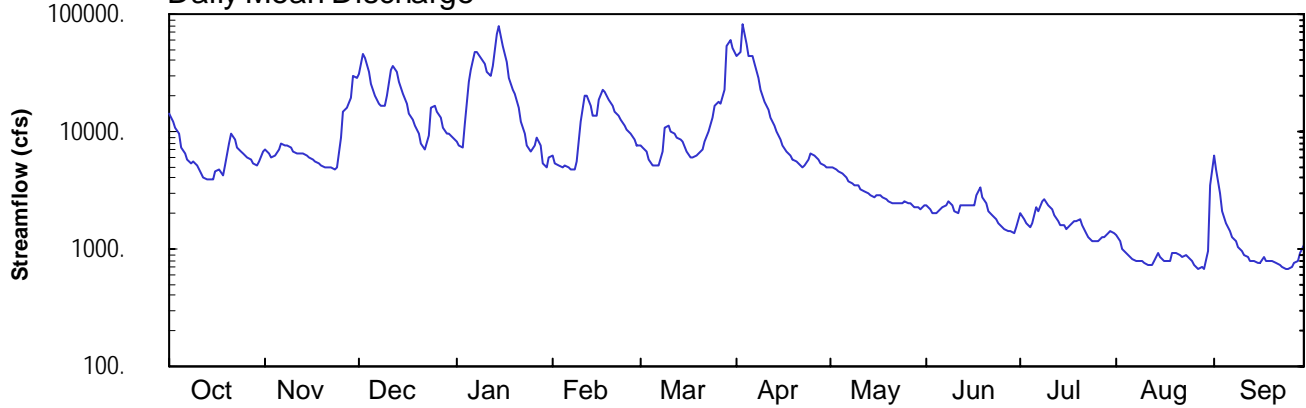
Hydrologic Unit Code: 02050206

Lycoming County

Datum: 494.98 feet

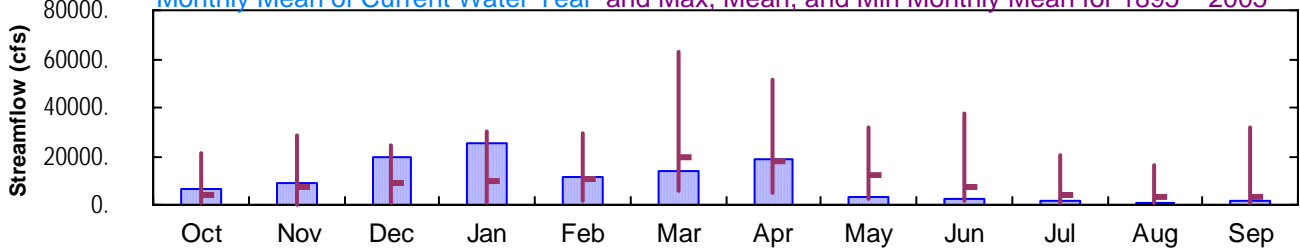
Drainage Area: 5682. mi²

Daily Mean Discharge

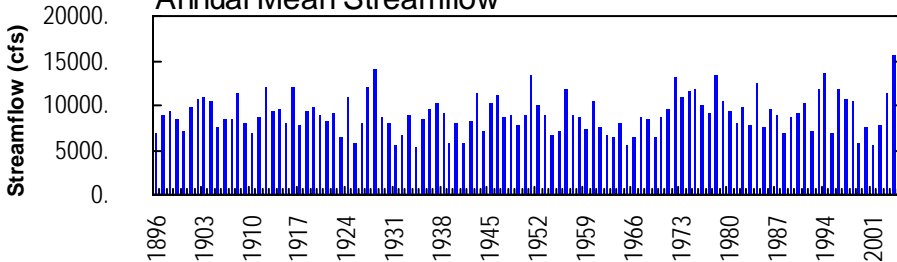


Monthly Statistics

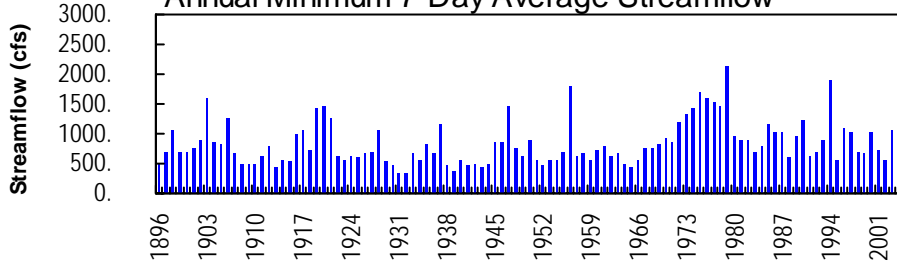
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1895 – 2005



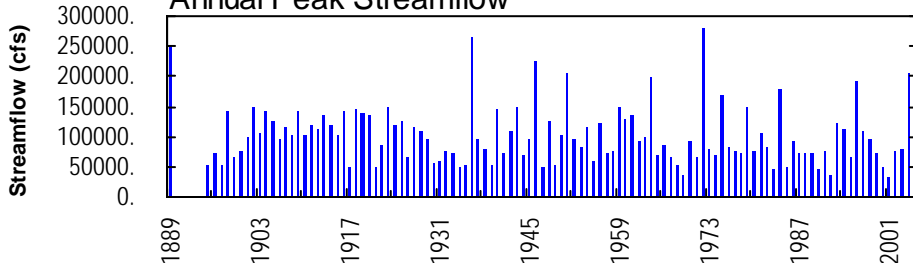
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



WEST BRANCH SUSQUEHANNA RIVER BASIN

01551500 WEST BRANCH SUSQUEHANNA RIVER AT WILLIAMSPORT, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 41°14'10", long 76°59'49", Lycoming County, Hydrologic Unit 02050206, on right bank 100 ft upstream from Market Street bridge at South Williamsport, and 350 ft upstream from Hagermans Run.

DRAINAGE AREA.--5,682 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1895 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1925-28. WSP 1502: 1895-1904, 1912-13, 1919.

GAGE.--Water-stage recorder. Datum of gage is 494.98 ft above National Geodetic Vertical Datum of 1929. Mar. 1, 1895, to Sept. 30, 1928, nonrecording gage at bridge 100 ft downstream at same datum. Prior to July 1980, 100 ft downstream on left bank at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow slightly regulated by 6 flood-control reservoirs which have a combined capacity of 440,200 acre-ft. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1895, 32.4 ft, June 1, 1889, discharge, about 252,000 ft³/s.

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	14000	6920	30500	8120	e6300	7550	44100	4970	2330	2060	1290	6250
2	12000	6520	45600	7640	e5400	7300	48500	4960	2200	1780	1150	4850
3	10600	6120	42300	7320	e5100	6670	82000	4770	2050	1680	1010	2990
4	9530	6280	32000	11700	e5000	5900	55100	4600	2040	1550	916	2070
5	7260	7010	25000	26400	e5100	5170	44100	4380	2060	1680	856	1670
6	6430	7830	20200	33700	e5000	5090	43500	4040	2300	2240	811	1450
7	5700	7710	17100	48400	e4800	5090	37500	3810	2390	2070	785	1260
8	5370	7570	16800	47300	e4700	6800	29100	3610	2570	2590	794	1150
9	5490	7220	16700	42300	e5600	10700	22700	3510	2360	2680	789	1030
10	5090	6760	20000	37500	e12000	11300	18000	3470	2100	2360	766	947
11	4400	6390	33100	32600	e20000	10100	15100	3230	2020	2220	743	892
12	4140	6460	36900	30000	20400	9700	13000	3120	2400	1970	743	860
13	3930	6540	32200	35900	16600	8900	11400	3020	2340	1750	804	802
14	3880	6340	26300	67500	13700	8490	9920	2850	2340	1620	916	790
15	3930	6110	20900	78800	13500	8230	8590	2770	2330	1570	867	766
16	4550	5790	17100	54500	18800	6790	7680	2860	2380	1480	805	765
17	4750	5640	14400	39400	22800	6120	6830	2900	2880	1580	799	867
18	4220	5450	12600	28400	21700	6060	6330	2790	3380	1730	778	798
19	5070	5120	11200	23100	18800	6230	5890	2650	2720	1730	928	797
20	7990	4970	9750	20900	16400	6390	5570	2510	2450	1790	924	787
21	9560	4910	7820	e16000	14800	7060	5270	2470	2100	1610	875	760
22	8430	4870	7000	e12000	13700	8360	5010	2450	1930	1380	871	745
23	7370	4730	9240	e9500	12600	9870	5250	2420	1790	1260	895	712
24	6840	4870	16100	e7500	11400	13200	5820	2500	1640	1180	847	678
25	6450	9060	16900	e6800	10400	16900	6540	2520	1560	1170	791	671
26	6050	14800	14800	e7700	9560	18300	6200	2480	1490	1160	726	706
27	5710	16000	13100	e9000	8580	17200	5710	2470	1420	1260	689	766
28	5440	19400	10600	e7500	7580	22700	5340	2300	1400	1270	713	794
29	5110	29600	9510	e5300	---	54300	5140	2230	1380	1350	690	935
30	5620	28700	9810	e5000	---	60200	5010	2210	1520	1430	968	1060
31	6820	---	8880	e6000	---	51500	---	2340	---	1370	3530	---
TOTAL	201730	265690	604410	773780	330320	428170	570200	97210	63870	52570	29069	39618
MEAN	6507	8856	19500	24960	11800	13810	19010	3136	2129	1696	938	1321
MAX	14000	29600	45600	78800	22800	60200	82000	4970	3380	2680	3530	6250
MIN	3880	4730	7000	5000	4700	5090	5010	2210	1380	1160	689	671
CFSM	1.15	1.56	3.43	4.39	2.08	2.43	3.35	0.55	0.37	0.30	0.17	0.23
IN.	1.32	1.74	3.96	5.07	2.16	2.80	3.73	0.64	0.42	0.34	0.19	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1895 - 2005, BY WATER YEAR (WY)

MEAN	4218	7113	9036	9881	10530	19910	18280	12250	7141	4076	2955	3086
MAX	20850	28330	24140	30210	29100	62970	51090	32030	37400	20080	16450	32070
(WY)	1991	1951	1928	1937	1981	1936	1993	1919	1972	1902	1994	2004
MIN	416	408	642	423	1965	5559	4633	2766	1501	847	592	425
(WY)	1931	1931	1931	1931	1931	1969	1946	1941	1999	1966	1910	1932

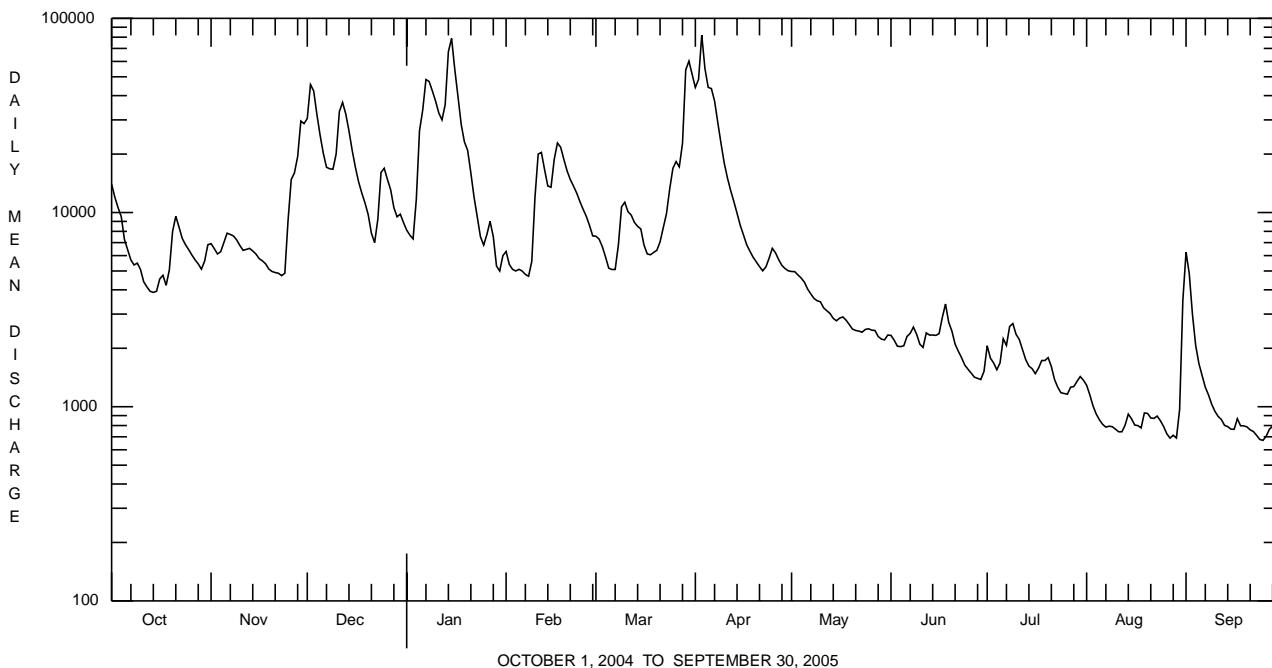
e Estimated.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01551500 WEST BRANCH SUSQUEHANNA RIVER AT WILLIAMSPORT, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1895 - 2005	
ANNUAL TOTAL	5265370		3456637			
ANNUAL MEAN	14390		9470		9039	
HIGHEST ANNUAL MEAN					15580	2004
LOWEST ANNUAL MEAN					5357	1934
HIGHEST DAILY MEAN	171000	Sep 19	82000	Apr 3	240000	Jun 23 1972
LOWEST DAILY MEAN	2170	Jul 4	671	Sep 25	251	Sep 13 1932
ANNUAL SEVEN-DAY MINIMUM	2550	Jun 29	720	Sep 21	328	Nov 25 1930
MAXIMUM PEAK FLOW			89400	Apr 3	^a 279000	Jun 23 1972
MAXIMUM PEAK STAGE			17.34	Apr 3	34.75	Jun 23 1972
INSTANTANEOUS LOW FLOW					162	Sep 17 1943
ANNUAL RUNOFF (CFSM)	2.53		1.67		1.59	
ANNUAL RUNOFF (INCHES)	34.47		22.63		21.61	
10 PERCENT EXCEEDS	30500		23900		21000	
50 PERCENT EXCEEDS	9010		5250		5100	
90 PERCENT EXCEEDS	4000		869		1060	

^a From rating curve extended above 210,000 ft³/s on basis of slope-area measurement at gage height 33.57 ft.



WEST BRANCH SUSQUEHANNA RIVER BASIN

01551500 WEST BRANCH SUSQUEHANNA RIVER AT WILLIAMSPORT, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

REMARKS.--Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods.

COOPERATION.--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water unfltrd recoverable, mg/L (00916)
NOV 2004 22...	1400	1028	9813	4880	40	12.7	7.8	7.8	231	216	8.8	93	22.9
JAN 2005 27...	0830	1028	9813	E9000	40	16.5	7.3	7.6	226	209	.0	85	19.6
MAR 14...	1400	1028	9813	8340	40	15.5	7.4	7.0	200	177	2.1	76	18.6
MAY 18...	1340	1028	9813	2790	40	10.9	7.7	7.7	245	244	18.3	93	22.2
JUL 20...	1400	1028	9813	1800	40	8.4	7.2	8.0	307	317	28.3	120	29.6
SEP 28...	1400	1028	9813	770	40	9.1	8.1	7.8	379	395	20.6	150	35.6

Date	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat fixed end pt, lab, mg/L as CaCO3 (00417)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 105degC wat flt mg/L (00515)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, unfltrd as N mg/L (00610)	Nitrate water, unfltrd as N mg/L (00620)	Nitrite water, unfltrd as N mg/L (00615)	Ortho-phosphate, water, unfltrd as P mg/L (70507)	Phosphorus, water, unfltrd as P mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Aluminum, water, unfltrd recoverable, mg/L (01105)
NOV 2004 22...	8.6	38	55.8	150	8	<.020	.71	<.040	<.01	<.010	.92	1.2	<200
JAN 2005 27...	8.6	22	72.1	160	<2	.230	.73	<.040	<.01	<.010	.85	.8	<200
MAR 14...	7.0	21	53.6	140	<2	.030	.66	<.040	<.01	<.010	.83	.9	360
MAY 18...	9.2	26	76.8	216	4	<.020	.48	<.040	<.01	<.010	.59	--	--
JUL 20...	11.0	47	80.2	254	8	.030	.62	<.040	.01	.023	.73	--	<200
SEP 28...	14.6	55	92.0	242	<2	.060	.76	<.040	.01	.012	.99	--	<200

Date	Copper, water, unfltrd recoverable, µg/L (01042)	Iron, water, unfltrd recoverable, µg/L (01045)	Lead, water, unfltrd recoverable, µg/L (01051)	Manganese, water, unfltrd recoverable, µg/L (01055)	Nickel, water, unfltrd recoverable, µg/L (01067)	Zinc, water, unfltrd recoverable, µg/L (01092)
NOV 2004 22...	<10	120	<1.0	390	<50	10
JAN 2005 27...	<10	180	<1.0	600	<50	30
MAR 14...	<10	460	<1.0	400	<50	30
MAY 18...	--	50	<1.0	--	--	--
JUL 20...	<10	60	<1.0	60	<50	10
SEP 28...	<10	40	<1.0	80	<50	<10

WEST BRANCH SUSQUEHANNA RIVER BASIN

01551500 WEST BRANCH SUSQUEHANNA RIVER AT WILLIAMSPORT, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

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

Date	10/27/04
Benthic macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	1
Nemertea (PROBOSCIS WORMS)	
Enopla	
Hoploneurtea	
Tetrastemmatidae	
<i>Prostoma</i>	2
Mollusca	
Bivalvia (CLAMS)	
Veneroida	
Sphaeriidae	
<i>Sphaerium</i>	2
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	36
Arthropoda	
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	2
Ephemerellidae	
<i>Serratella</i>	4
Heptageniidae	
<i>Epeorus</i>	4
<i>Leucrocuta</i>	3
<i>Rhithrogena</i>	2
<i>Stenonema</i>	20
Isonychiidae	
<i>Isonychia</i>	29
Leptophlebiidae	
<i>Paraleptophlebia</i>	1
Plecoptera (STONEFLIES)	
Capniidae	4
Perlidae	
<i>Acroneuria</i>	3
Taeniopterygidae	
<i>Taenionema</i>	1
<i>Taeniopteryx</i>	5
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<i>Cheumatopsyche</i>	8
<i>Hydropsyche</i>	2
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Optioservus</i>	1
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	5
Total Organisms	135
Total Taxa	20