

## 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 mi<sup>2</sup>.

## 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 good 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 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2760	2310	12000	e5200	14100	5990	21800	18900	9130	4310	1670	840
2	2350	2180	15400	4100	18300	5520	19400	17000	7900	3600	1480	819
3	2080	2060	13200	3640	19400	5750	16800	19500	7250	3210	1480	770
4	1860	2000	11000	3660	17300	6870	14200	19600	6400	2950	1410	735
5	1670	1990	9350	3740	14700	8030	12200	17200	6010	2770	1300	684
6	1570	1960	8060	e4100	12200	7900	11200	14700	10700	2580	1290	654
7	1430	1890	6790	4040	10600	7940	10400	13100	30900	2380	1230	632
8	1360	1870	6150	3850	9370	7560	9230	11700	37500	2220	1140	625
9	1290	1740	5830	3490	8430	e7000	8330	11500	27600	2120	1050	619
10	1210	1690	5360	3440	7800	e6600	8130	14900	20300	2080	995	605
11	1160	1620	5080	3630	11900	6410	8050	19200	16200	2030	938	579
12	1130	1580	4770	3910	14900	6040	7250	18300	12200	2050	911	537
13	1110	1520	4600	3930	15700	5680	6870	38800	9980	2220	951	532
14	1160	1480	4890	3960	13700	5420	7560	73400	9310	2040	941	531
15	1480	1420	5990	3950	12100	5310	12200	65800	12000	1760	854	570
16	1770	1400	7800	3660	11200	5520	22300	50200	21600	1600	839	614
17	2110	1380	8560	3410	10400	6020	21200	36900	21300	1490	855	775
18	2300	1350	12300	e3200	9500	7390	19500	32400	17000	1400	883	1570
19	2210	1320	26700	3140	8390	7580	15200	35000	13700	1340	813	1430
20	2050	1260	24700	2830	7610	8040	13200	33400	11400	1450	796	1160
21	1830	1210	18500	2590	7340	10300	12000	27500	9280	1440	779	993
22	1720	1230	14400	2690	7520	14000	11100	21700	7820	1400	772	986
23	1710	1270	11900	3090	7480	14400	9900	17600	6920	1370	771	1290
24	2080	1280	10400	3070	7070	13000	9000	14800	6230	1420	816	1270
25	3050	1690	9410	3650	6600	12000	8250	12700	5770	1470	837	1090
26	4630	4190	8420	6110	e6100	15300	7790	11000	5240	1540	979	971
27	3780	8080	7360	8300	6110	39300	7310	9930	4860	1540	1080	1260
28	3230	7400	6670	8180	6210	49300	7350	8720	4690	1640	1220	2490
29	3020	7240	6190	7920	---	37600	13000	8320	6070	1860	1140	3540
30	2690	7520	e5400	8420	---	28500	19900	8330	5560	2000	1010	3720
31	2440	---	e5000	10600	---	25700	---	9210	---	1830	893	---
TOTAL	64240	75130	302180	139500	302030	391970	370620	711310	370820	63110	32123	32891
MEAN	2072	2504	9748	4500	10790	12640	12350	22950	12360	2036	1036	1096
MAX	4630	8080	26700	10600	19400	49300	22300	73400	37500	4310	1670	3720
MIN	1110	1210	4600	2590	6100	5310	6870	8320	4690	1340	771	531
CFSM	0.36	0.44	1.72	0.79	1.90	2.23	2.17	4.04	2.18	0.36	0.18	0.19
IN.	0.42	0.49	1.98	0.91	1.98	2.57	2.43	4.66	2.43	0.41	0.21	0.22

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1895 - 2002, BY WATER YEAR (WY)

MEAN	4146	6992	8848	9679	10630	19870	18300	12330	7135	4011	2809	2718
MAX	20850	28330	24140	30210	29100	62970	51090	32030	37400	20080	16450	20280
(WY)	1991	1951	1928	1937	1981	1936	1993	1919	1972	1902	1994	1975
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

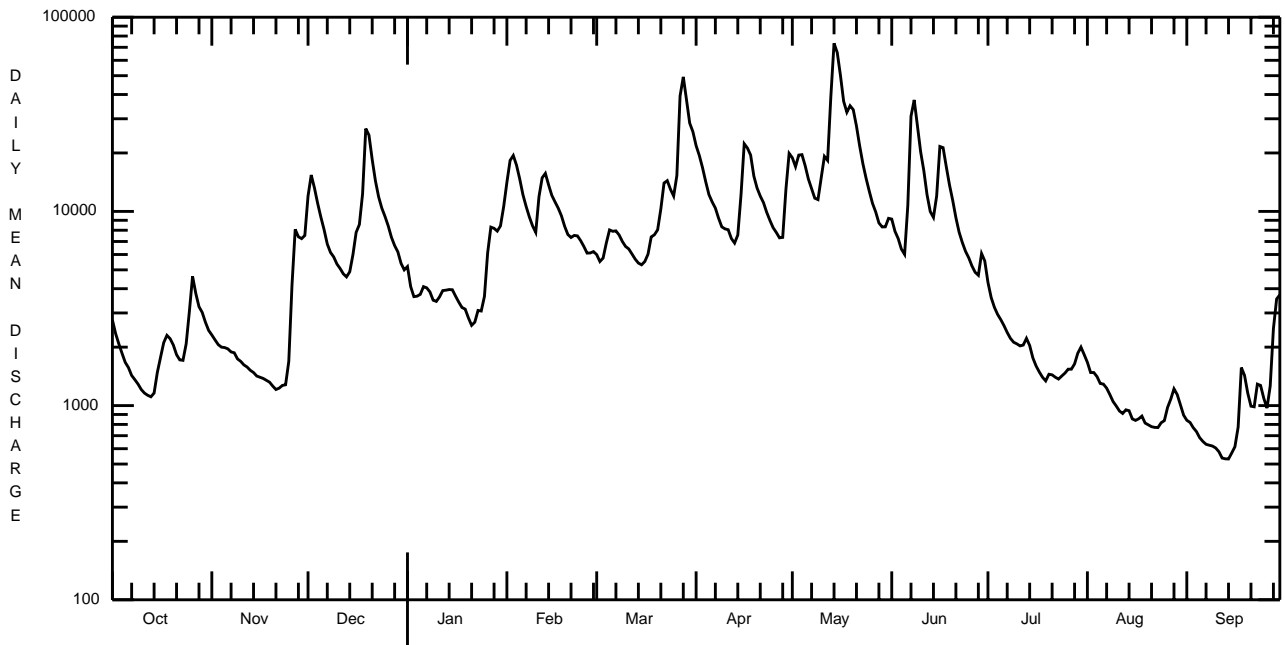
e Estimated.

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SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1895 - 2002	
ANNUAL TOTAL	2120277		2855924			
ANNUAL MEAN	5809		7824		8953	
HIGHEST ANNUAL MEAN					14010	1928
LOWEST ANNUAL MEAN					5357	1934
HIGHEST DAILY MEAN	32000	Mar 23	73400	May 14	240000	Jun 23 1972
LOWEST DAILY MEAN	704	Aug 10	531	Sep 14	251	Sep 13 1932
ANNUAL SEVEN-DAY MINIMUM	737	Aug 6	567	Sep 10	328	Nov 25 1930
MAXIMUM PEAK FLOW			75800	May 14	<sup>a</sup> 279000	Jun 23 1972
MAXIMUM PEAK STAGE			15.84	May 14	34.75	Jun 23 1972
INSTANTANEOUS LOW FLOW					162	Sep 17 1943
ANNUAL RUNOFF (CFSM)	1.02		1.38		1.58	
ANNUAL RUNOFF (INCHES)	13.88		18.70		21.41	
10 PERCENT EXCEEDS	15300		18300		20900	
50 PERCENT EXCEEDS	3360		5310		5010	
90 PERCENT EXCEEDS	1090		990		1050	

a From rating curve extended above 210,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 33.57 ft.



OCTOBER 1, 2001 TO SEPTEMBER 30, 2002

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WATER-QUALITY RECORDS

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

REMARKS.--Other data for the Water-Quality Network can be found on pages 306-334.

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 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM-PLING METHOD, CODES (82398)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
APR 2002 10...	1400	9813	8130	40	12.0	7.3	185	10.4	74	17.9	7.2	12	58.8
JUN 03...	1215	9813	7260	40	9.5	7.5	225	20.7	87	21.3	8.2	16	71.1
AUG 12...	1300	9813	909	40	8.2	7.7	384	25.9	170	40.4	16.6	38	118

Date	RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L) (00515)	RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COPPER, TOTAL RECOV-ERABLE (µG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (µG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (µG/L AS MN) (01055)
APR 2002 10...	126	12	<.020	.51	<.040	.69	<.01	.010	.9	<10	380	<1.0	560
JUN 03...	58	6	<.020	.41	<.040	.49	.01	<.010	1.2	<10	200	<1.0	490
AUG 12...	340	6	<.020	.63	<.040	.77	<.01	.010	1.4	<10	50	<1.0	70

Date	NICKEL, TOTAL RECOV-ERABLE (µG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)
APR 2002 10...	<50	<10
JUN 03...	<50	50
AUG 12...	<50	<10