

WEST BRANCH SUSQUEHANNA RIVER BASIN

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 40°58'03", long 76°52'36", Northumberland County, Hydrologic Unit 02050206, at downstream side of left abutment of Market Street bridge on State Highway 45 at Lewisburg, 0.2 mi downstream from Buffalo Creek, and 7.4 mi upstream from mouth.

DRAINAGE AREA.--6,847 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. September 1913 to August 1923 (gage heights only), are contained in reports of Water Supply Commission of Pennsylvania or Pennsylvania Department of Forests and Waters.

GAGE.--Water-stage recorder. Datum of gage is 428.20 ft above National Geodetic Vertical Datum of 1929. Sept. 21, 1913, to Aug. 31, 1923, Dec. 7, 1939, to July 2, 1940, and Oct. 20, 1987, to Sept. 30, 1988, nonrecording gage at same site and datum. Since Oct. 1, 1942, water-stage recorder for Susquehanna River at Sunbury (station 01553990) used as an auxiliary gage.

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. Satellite and landline telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 19, 1936, reached a stage of 32.1 ft, from floodmarks (backwater from Susquehanna River), discharge, 287,000 ft³/s from slope-area measurement at Watsonstown, 8.0 mi upstream.

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	4210	2920	11700	e4700	14700	6680	24700	20900	11400	5740	2200	1100
2	3570	2810	16600	e4500	19200	6250	21700	19300	9800	4790	1980	1060
3	3160	2700	15400	e4200	21200	6580	19100	20900	8850	4240	1810	1050
4	2850	2610	12800	e4100	19600	7310	16300	21300	8020	3870	1830	976
5	2580	2550	10700	e4100	17000	8490	14000	19600	7260	3580	1710	e900
6	2360	2540	9310	4420	14200	8620	12500	16800	10900	3360	1610	e880
7	2210	2490	7880	4290	12000	8650	11500	14800	27700	3130	1590	e850
8	2100	2420	7030	e4300	10700	8320	10600	13200	41700	2920	1510	e820
9	1970	2390	6890	e4100	9580	7810	9390	13300	33000	2770	1380	e820
10	1850	2250	6550	4010	8680	7760	9010	15200	24100	2710	1280	e800
11	1770	2210	6060	4190	12800	7350	8950	19800	19300	2580	1220	e800
12	1720	2140	5720	4410	16900	7000	8240	20000	15600	2560	1170	e780
13	1700	2080	5490	4620	17600	6550	7650	36800	12400	2600	1130	e720
14	1660	2020	5680	4480	16200	6260	8020	82700	11800	2730	1200	e700
15	2030	1980	6560	4570	13900	6070	11300	75900	14300	2410	1180	e720
16	2350	1950	8060	4390	12700	6470	21100	59300	23200	2160	1070	e780
17	2670	1950	9240	4150	11600	7050	22900	43300	25600	2000	1080	857
18	2990	1890	12000	3960	10800	7650	21200	37800	21200	1890	1100	1080
19	2960	1840	23600	3790	9630	8980	17500	38700	17100	1840	1120	2070
20	2790	1840	27300	e3600	8630	9290	14800	38300	14700	1890	1030	1750
21	2570	1790	21400	3340	8220	12100	13200	32300	12200	2000	985	1480
22	2400	1760	16800	3230	8230	14800	12200	25900	10100	1900	956	1760
23	2320	1760	13600	3570	8300	16700	11100	21200	8880	1870	956	2930
24	2480	1780	11800	3730	7830	15100	9990	17700	7890	1890	1010	2860
25	3130	2010	10600	4200	7390	13800	9170	15300	7390	1930	1080	2110
26	4670	4770	9570	5490	6880	14400	8630	13200	6720	1900	1110	1730
27	4830	7930	8420	8350	6760	44400	8140	11900	6370	2020	1280	2060
28	3930	8590	7530	8890	6810	54200	7980	10600	5990	2090	1410	4620
29	3660	7910	6990	8650	---	45200	11300	10000	6260	2330	1550	5150
30	3400	8170	e6500	9100	---	33200	19700	10100	7470	2440	1420	5380
31	3100	---	e5600	11300	---	28700	---	11400	---	2410	1260	---
TOTAL	85990	92050	333380	154730	338040	441740	401870	807500	437200	82550	41217	49593
MEAN	2774	3068	10750	4991	12070	14250	13400	26050	14570	2663	1330	1653
MAX	4830	8590	27300	11300	21200	54200	24700	82700	41700	5740	2200	5380
MIN	1660	1760	5490	3230	6760	6070	7650	10000	5990	1840	956	700
CFSM	0.41	0.45	1.57	0.73	1.76	2.08	1.96	3.80	2.13	0.39	0.19	0.24
IN.	0.47	0.50	1.81	0.84	1.84	2.40	2.18	4.39	2.38	0.45	0.22	0.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

MEAN	5152	8939	11520	11240	13000	21730	22410	14950	8886	4681	3398	3508
MAX	24900	32000	28230	30740	33010	49200	62990	28750	46900	20120	18700	24080
(WY)	1991	1951	1973	1952	1981	1945	1993	1978	1972	1972	1994	1975
MIN	659	762	1727	1752	2914	6169	5822	3353	1807	1032	983	601
(WY)	1964	1965	1961	1981	1940	1969	1946	1941	1999	1965	1966	1964

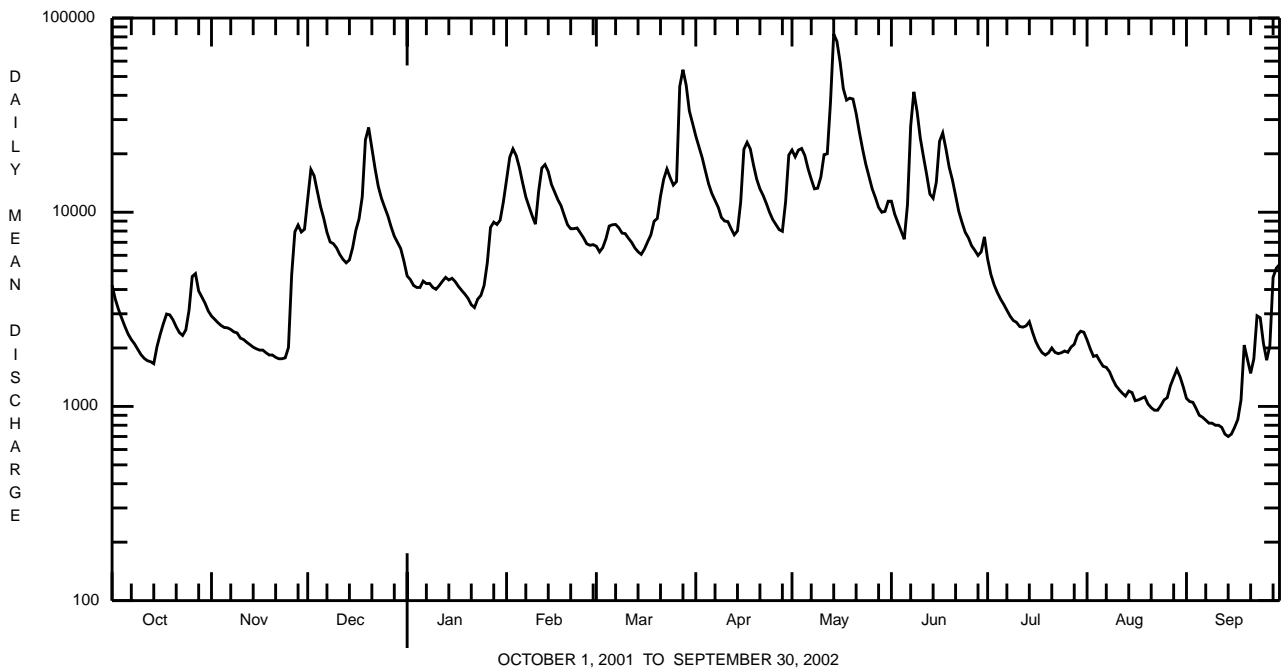
e Estimated.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR			FOR 2002 WATER YEAR			WATER YEARS 1940 - 2002	
ANNUAL TOTAL	2466020			3265860				
ANNUAL MEAN	6756			8948			10770	
HIGHEST ANNUAL MEAN							16710	
LOWEST ANNUAL MEAN							6158	
HIGHEST DAILY MEAN	33000	Mar 23		82700	May 14		285000	Jun 24 1972
LOWEST DAILY MEAN	1050	Aug 11		e700	Sep 14		417	Nov 16 1964
ANNUAL SEVEN-DAY MINIMUM	1100	Aug 7		a757	Sep 10		511	Sep 15 1964
MAXIMUM PEAK FLOW				85800	May 14		b300000	Jun 24 1972
MAXIMUM PEAK STAGE				15.69	May 14		c34.23	Jun 24 1972
INSTANTANEOUS LOW FLOW							390	Nov 16 1964
ANNUAL RUNOFF (CFSM)	0.99			1.31			1.57	
ANNUAL RUNOFF (INCHES)	13.40			17.74			21.36	
10 PERCENT EXCEEDS	17100			19900			24400	
50 PERCENT EXCEEDS	3820			6250			6350	
90 PERCENT EXCEEDS	1590			1280			1460	

- a Computed using estimated daily discharges.
- b About.
- c From floodmarks (backwater from Susquehanna River).
- e Estimated.



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01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA--Continued
(Pennsylvania Water-Quality Network Station)

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													
24...	1100	9813	10000	40	10.8	7.1	146	11.3	57	14.8	5.0	19	42.2
JUN 20...	1115	9813	14800	40	8.8	6.9	149	18.4	62	15.5	5.7	17	42.1
AUG 20...	1150	9813	1030	40	7.3	8.0	376	27.5	150	39.2	13.2	56	98.7

Date	RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L) (00515)	RESIDUE TOTAL 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													
24...	108	<2	.040	.49	<.040	.64	<.01	.010	1.3	<10	270	<1.0	210
JUN 20...	102	28	<.020	.46	<.040	.56	.02	.030	1.9	<10	1270	1.2	400
AUG 20...	260	6	.030	.89	<.040	1.2	.02	.030	2.2	<10	70	<1.0	40

Date	NICKEL, TOTAL RECOV-ERABLE (µG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)
APR 2002		
24...	<50	<10
JUN 20...	<50	30
AUG 20...	<50	<10