

## SUSQUEHANNA RIVER BASIN

## 01536500 SUSQUEHANNA RIVER AT WILKES-BARRE, PA

**LOCATION.**--Lat 41°15'03", long 75°52'52", Luzerne County, Hydrologic Unit 02050107, on left bank at downstream side of North Street bridge in Wilkes-Barre, and 1.8 mi upstream from Toby Creek.

**DRAINAGE AREA.**--9,960 mi<sup>2</sup>.

**PERIOD OF RECORD.**--April 1899 to current year. Gage-height records collected at same site since November 1890 are contained in reports of U.S. Weather Bureau.

**REVISED RECORDS.**--WSP 109: 1900-1905. WSP 351: Drainage area. WSP 781: 1902(M). WSP 1302: 1916. WSP 1432: 1901-5, 1907, 1909, 1913, 1937(M). WDR PA-86-2: 1960(M), 1964(M), 1975(M), 1979(M). WDR PA-89-2: 1964(P). WDR PA-90-2: 1988(M) 1989(P).

**GAGE.**--Water-stage recorder. Datum of gage is 510.86 ft above sea level, using NAVD 1988 datum. See WSP 1722 for history of changes prior to Mar. 23, 1949. May 23, 1949 to Sept. 30, 1996, at site 800 ft downstream.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Flow slightly regulated by 8 flood-control reservoirs, which have a combined capacity of 368,800 acre-ft. Satellite and landline telemetry at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Maximum stage known prior to 1899, 33.1 ft, Mar. 18, 1865, from floodmarks, discharge, about 232,000 ft<sup>3</sup>/s.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 82,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Apr. 11	0515	*96,800	*19.49	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2700	4260	8560	e8100	6190	13600	65500	9520	4710	7020	1850	1940
2	2520	4240	8250	e7700	7910	12100	43100	8770	5040	7030	1770	1670
3	2420	4000	7810	e7500	e9500	11000	34100	8110	5990	6760	1670	1540
4	2320	3780	7330	e7400	e9500	10400	30000	7520	5710	5950	1730	1450
5	2280	3640	6530	e7100	9550	10200	31600	7020	5420	5480	1580	1380
6	2440	3510	5770	e6900	8580	9610	40700	6470	5490	5250	1520	1430
7	3680	3460	e5100	e6800	8280	9010	52200	6020	5670	4650	1470	1440
8	8310	3400	e5000	e7000	7970	9070	67100	5510	5460	4450	1700	1370
9	9150	3380	e4800	e7100	8130	9520	77200	5140	4830	4500	1680	1280
10	7010	3660	e4600	e6800	11100	9350	92000	4880	4240	4400	1630	1210
11	5670	5250	e4600	e6200	19900	8760	94700	4610	3820	4140	1550	1150
12	4870	8030	e4700	e5700	e21900	8360	81700	4390	3550	3730	1460	1100
13	4440	8590	e4500	5880	21600	9060	73000	4250	3580	3330	1400	1100
14	4130	8200	e5000	5700	18600	12100	61400	4000	3510	3210	1360	1300
15	3860	7450	e5900	5860	e20600	15900	53000	3790	3510	3080	1270	1250
16	3610	6700	e6300	6030	24100	18000	49800	3660	3720	2900	1200	1380
17	3410	6330	23500	5990	25700	18900	44700	3570	6350	2780	1220	1420
18	3960	6120	58600	5940	20800	21100	38900	3510	7720	2570	1660	1310
19	7670	5810	58300	6020	16700	20700	32400	3360	10500	2380	2060	1230
20	12000	5500	45600	6090	15100	19400	27500	3160	8180	2250	1720	1220
21	12300	5200	33000	6040	14000	20400	24400	3140	7690	2160	1620	1200
22	10000	4990	26100	5550	14200	33200	25600	3410	6090	2110	1550	1170
23	7990	4690	21400	4910	13500	49200	25700	3460	7920	2030	1430	1200
24	6850	4320	e13000	4880	11900	45500	21500	3610	31700	1950	1400	1260
25	6100	4080	e11800	5130	11700	41900	18200	3770	38100	1860	1380	4800
26	5720	4080	e10800	5150	11900	33100	15800	4610	28700	1850	1300	16200
27	5290	4640	e10200	4950	12900	26200	13800	6030	21900	1860	1240	16000
28	4970	5050	e10100	4790	13900	21400	12300	6090	15700	1860	1250	11000
29	4740	7780	e9300	4610	---	---	18900	5410	11200	1850	1250	7390
30	4630	9140	e8700	4720	---	---	26200	5410	8360	1790	1210	5620
31	4540	---	e8400	5220	---	---	68200	5160	---	1810	1280	---
TOTAL	169580	159280	443550	187760	395710	640340	1269300	157360	284360	106990	46410	93010
MEAN	5470	5309	14310	6057	14130	20660	42310	5076	9479	3451	1497	3100
MAX	12300	9140	58600	8100	25700	68200	94700	9520	38100	7030	2060	16200
MIN	2280	3380	4500	4610	6190	8360	10300	3140	3510	1790	1200	1100
CFSM	.55	.53	1.44	.61	1.42	2.07	4.25	.51	.95	.35	.15	.31
IN.	.63	.59	1.66	.70	1.48	2.39	4.74	.59	1.06	.40	.17	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1899 - 2001, BY WATER YEAR (WY)

MEAN	6883	11120	13940	14000	14860	30270	31360	16440	9009	5377	3952	4235
MAX	39860	32130	44610	40740	43030	80560	100000	39590	54330	29010	19560	28680
(WY)	1978	1928	1997	1996	1976	1936	1993	1943	1972	1902	1994	1975
MIN	705	724	1357	1386	2710	10250	6918	3388	2137	1086	853	637
(WY)	1965	1965	1909	1931	1920	1965	1946	1903	1999	1962	1964	1964

e Estimated.

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SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1899 - 2001	
ANNUAL TOTAL	6262240		3953650			
ANNUAL MEAN	17110		10830		13460	
HIGHEST ANNUAL MEAN					21990	1978
LOWEST ANNUAL MEAN					6186	1965
HIGHEST DAILY MEAN	127000	Feb 29	94700	Apr 11	329000	Jun 24 1972
LOWEST DAILY MEAN	2280	Sep 11, Oct 5	1100	Sep 12, 13	532	Sep 27 1964
ANNUAL SEVEN-DAY MINIMUM	2460	Sep 6	1200	Sep 9	546	Sep 21 1964
MAXIMUM PEAK FLOW			96800	Apr 11	<b>a</b> 345000	Jun 24 1972
MAXIMUM PEAK STAGE			19.49	Apr 11	<b>b</b> 40.91	Jun 24 1972
INSTANTANEOUS LOW FLOW					528	Sep 27 1964
ANNUAL RUNOFF (CFSM)	1.72		1.09		1.35	
ANNUAL RUNOFF (INCHES)	23.39		14.77		18.36	
10 PERCENT EXCEEDS	41500		25900		32300	
50 PERCENT EXCEEDS	9180		5770		7100	
90 PERCENT EXCEEDS	3480		1470		1660	

**a** From slope-area measurement of peak flow near West Pittston and adjusted for flow from intervening area.  
**b** From floodmark.

