

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 mi².

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 North American Vertical Datum of 1988. 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 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 82,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Mar. 28	0815	*78,900	*17.02	(No peaks above base discharge.)			

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	4570	1870	5200	5000	26300	11000	39900	33500	17500	12100	1760	1340
2	3850	1830	7910	3950	36400	11000	34900	29600	17800	9680	1900	1320
3	3280	1830	10000	4120	41700	10600	30100	30600	15500	8100	2040	1240
4	2850	1790	9390	3990	35500	10400	26600	28100	13200	7000	1820	1170
5	2510	1810	8080	4270	27000	10700	23800	23500	11100	6310	1790	1140
6	2290	1830	7030	4390	20800	11200	21100	20000	14200	5630	1810	1080
7	2100	1820	6270	4060	16700	10800	18700	17400	56400	5150	1610	1040
8	1810	1840	5700	3800	14800	9750	16700	15700	65900	4680	1510	1010
9	1790	1890	5500	3820	13200	9410	15400	e16000	50000	4380	1450	988
10	1740	1880	5260	3860	12200	9620	14700	e16000	32900	4010	1410	978
11	1730	1840	5140	4330	18100	9700	14200	17200	23700	3780	1370	1000
12	1650	1810	5060	4340	36900	10300	14200	17700	18800	3630	1340	987
13	1580	1770	4860	4270	40300	10600	13200	27400	15800	3490	1310	954
14	1520	1740	4920	4220	32300	10500	12400	66100	14600	3340	1250	924
15	1650	1730	5600	4280	22900	9790	15700	76300	16600	3260	1220	1020
16	1610	1700	7390	4150	18600	9480	29700	64000	31400	3200	1250	1250
17	1790	1640	8980	4060	17300	9970	32800	49500	47800	2990	1240	997
18	1780	1610	12200	3990	16500	9730	26500	43800	42000	2950	1140	974
19	1840	1590	25100	3710	14900	9450	22500	57500	32700	3170	1120	955
20	1890	1650	27500	3560	13000	9460	19500	56400	24400	3010	1190	1210
21	1870	1610	21100	3140	12000	11100	17000	44000	18700	2530	1080	1620
22	1880	1590	17000	3260	12100	13900	15300	35300	15200	2280	1060	1740
23	1900	1570	14600	3410	13000	15500	14100	29300	12800	2570	1090	3230
24	1970	1550	12800	3600	14100	14100	13200	25000	11500	2980	1100	3740
25	2090	1670	11600	4620	13300	13200	12100	21500	10800	2950	1290	2700
26	2180	2270	10800	7670	11700	13000	11600	18900	11000	2600	1300	3630
27	2120	3500	9890	11200	10900	53100	12200	16600	10200	2370	1280	5200
28	2040	3700	8540	11800	10800	76900	13600	16200	11700	2140	1270	6610
29	2030	3970	7190	11600	---	63600	26100	17500	20100	2180	1330	6140
30	1980	4390	6830	13100	---	51800	37900	17200	15500	2000	1340	8200
31	1920	---	5690	18000	---	43900	---	15900	---	1970	1330	---
TOTAL	65810	61290	303130	173570	573300	573560	615700	963700	699800	126430	43000	64387
MEAN	2123	2043	9778	5599	20480	18500	20520	31090	23330	4078	1387	2146
MAX	4570	4390	27500	18000	41700	76900	39900	76300	65900	12100	2040	8200
MIN	1520	1550	4860	3140	10800	9410	11600	15700	10200	1970	1060	924
CFSM	0.21	0.21	0.98	0.56	2.06	1.86	2.06	3.12	2.34	0.41	0.14	0.22
IN.	0.25	0.23	1.13	0.65	2.14	2.14	2.30	3.60	2.61	0.47	0.16	0.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1899 - 2002, BY WATER YEAR (WY)

MEAN	6837	11030	13900	13920	14910	30150	31260	16580	9147	5365	3928	4215
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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1899 - 2002	
ANNUAL TOTAL	3611470		4263677		13440	
ANNUAL MEAN	9894		11680		21990	
HIGHEST ANNUAL MEAN					1978	
LOWEST ANNUAL MEAN					1965	
HIGHEST DAILY MEAN	94700	Apr 11	76900	Mar 28	329000	Jun 24 1972
LOWEST DAILY MEAN	1100	Sep 12,13	924	Sep 14	532	Sep 27 1964
ANNUAL SEVEN-DAY MINIMUM	1200	Sep 9	977	Sep 8	546	Sep 21 1964
MAXIMUM PEAK FLOW			78900	Mar 28	a 345000	Jun 24 1972
MAXIMUM PEAK STAGE			17.02	Mar 28	b 40.91	Jun 24 1972
INSTANTANEOUS LOW FLOW					528	Sep 27 1964
ANNUAL RUNOFF (CFSM)	0.99		1.17		1.35	
ANNUAL RUNOFF (INCHES)	13.49		15.92		18.33	
10 PERCENT EXCEEDS	24700		29600		32300	
50 PERCENT EXCEEDS	5160		6310		7120	
90 PERCENT EXCEEDS	1470		1330		1660	

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

