

## 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 512.07 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)
Jan. 25	1245	*112,000	*21.59	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1790	1990	2690	e2800	18800	8970	31700	12000	3690	2250	1080	820
2	1810	1940	2800	e2600	18100	10100	31900	10800	3420	2670	1040	795
3	1740	1890	2840	e2800	21400	11300	33600	9890	3220	2660	1100	780
4	1660	1860	2830	e2900	27900	19600	33100	9170	2950	2390	1150	765
5	1580	1830	2760	e2900	31600	57500	32300	8600	2810	2080	1090	749
6	1540	1830	2730	e2900	28400	44300	33200	8010	2670	2000	1010	750
7	1500	1820	2700	e3200	24100	35600	28500	7480	2550	1840	980	1060
8	1840	1810	2670	e3500	20800	24400	23500	7600	2700	e1700	952	1000
9	2120	1810	2630	e3100	18500	e18000	20800	8730	2490	3030	912	1010
10	2760	1830	2600	e2800	16900	e17000	22300	9160	2340	3210	844	968
11	3110	1920	2590	e2800	16200	e16000	26300	9300	2180	2680	824	994
12	3860	1940	2560	e3100	16300	15300	23700	9200	2040	2480	799	1050
13	3830	1990	2550	e3500	19800	14000	25100	8150	1900	2330	842	1030
14	3380	2020	2540	e4100	23900	12900	24800	7140	1840	2140	1140	947
15	3130	2100	2520	e4500	22100	12400	21700	6400	1890	1960	901	918
16	2810	2210	2470	e4300	19000	11800	18800	5830	1720	1820	875	3930
17	2650	2280	2450	e4100	17200	11800	18100	5370	1790	1670	937	14300
18	2680	2280	2430	e3900	18100	14900	19400	4970	2030	1550	956	13700
19	2640	2220	2380	e7600	19500	25400	19700	4920	2110	1530	892	18200
20	2590	2130	2330	e10000	18600	28400	19100	4950	1930	1520	898	14600
21	2500	2170	2320	e12000	16400	24300	18000	4580	e1700	1340	1120	10800
22	2410	2160	2470	e19000	14200	26400	16400	4370	1670	1310	1210	e9500
23	2310	2160	2660	e21000	e11000	26800	15300	4580	1570	1320	1120	e10000
24	2200	2190	e3000	58800	e10000	27400	18100	4810	1480	1400	1050	e12000
25	2140	2170	5060	110000	e9100	30000	25900	5040	1440	1340	980	12100
26	2100	2270	5770	92300	9160	30600	23300	4800	1400	1270	1020	10200
27	2050	2310	4930	71100	8660	27800	19600	4680	1350	1230	1040	7990
28	2050	2350	4290	53500	8300	26300	17000	4680	1350	1250	989	6550
29	2110	2350	3840	38700	---	26700	15000	4580	1840	1220	904	5510
30	2050	2500	e3500	31400	---	28500	13300	4420	2030	1110	820	5850
31	2020	---	e3000	24500	---	30800	---	4110	---	1050	819	---
TOTAL	72960	62330	92910	609700	504020	715270	689500	208320	64100	57350	30294	168866
MEAN	2354	2078	2997	19670	18000	23070	22980	6720	2137	1850	977	5629
MAX	3860	2500	5770	110000	31600	57500	33600	12000	3690	3210	1210	18200
MIN	1500	1810	2320	2600	8300	8970	13300	4110	1350	1050	799	749
CFSM	.24	.21	.30	1.97	1.81	2.32	2.31	.67	.21	.19	.10	.57
IN.	.27	.23	.35	2.28	1.88	2.67	2.58	.78	.24	.21	.11	.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1899 - 1999, BY WATER YEAR (WY)

MEAN	6909	11220	13950	14080	14790	30310	31140	16390	8906	5386	3963	4256
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

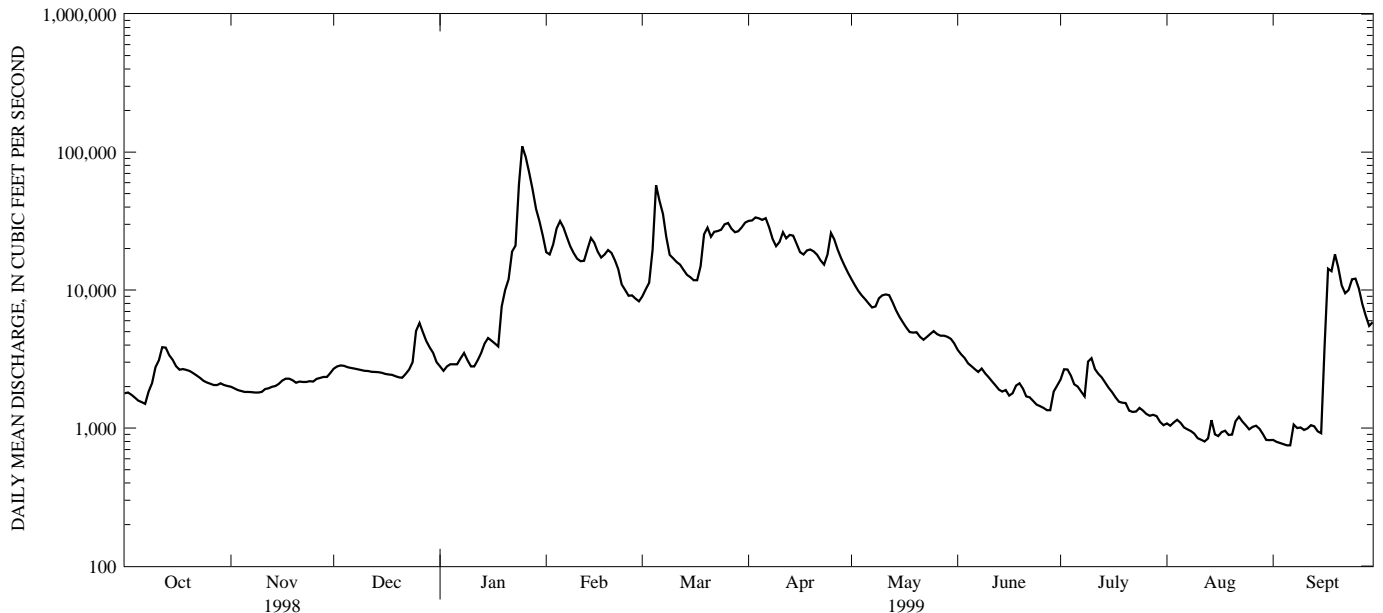
e Estimated.

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SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1899 - 1999	
ANNUAL TOTAL	5828760		3275620		13450	
ANNUAL MEAN	15970		8974		21990	
HIGHEST ANNUAL MEAN					1978	
LOWEST ANNUAL MEAN					1965	
HIGHEST DAILY MEAN	126000	Jan 10	110000	Jan 25	329000	Jun 24 1972
LOWEST DAILY MEAN	1500	Oct 7	749	Sep 5	532	Sep 27 1964
ANNUAL SEVEN-DAY MINIMUM	1630	Sep 24	783	Aug 31	546	Sep 21 1964
INSTANTANEOUS PEAK FLOW			112000	Jan 25	a345000	Jun 24 1972
INSTANTANEOUS PEAK STAGE			21.59	Jan 25	b40.91	Jun 24 1972
INSTANTANEOUS LOW FLOW					528	Sep 27 1964
ANNUAL RUNOFF (CFSM)	1.60		.90		1.35	
ANNUAL RUNOFF (INCHES)	21.77		12.23		18.34	
10 PERCENT EXCEEDS	42800		24600		32300	
50 PERCENT EXCEEDS	8090		2810		7100	
90 PERCENT EXCEEDS	1860		1050		1660	

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



1-YEAR HYDROGRAPH  
 OCTOBER 1, 1998 TO SEPTEMBER 30, 1999