

Water-Data Report 2009

01554000 SUSQUEHANNA RIVER AT SUNBURY, PA

Lower Susquehanna Basin
Lower Susquehanna-Penns Subbasin

LOCATION.--Lat 40°50'04", long 76°49'37" referenced to North American Datum of 1927, Snyder County, PA, Hydrologic Unit 02050301, on right bank in borough of Shamokin Dam, on grounds of PPL Electric Utilities, 1.0 mi downstream from Shamokin Creek, 1.5 mi downstream from Sunbury Fabridam, and 1.8 mi south of Sunbury.

DRAINAGE AREA.--18,300 mi², approximately (excluding that of Shamokin Creek).

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1937 to current year. June 1918 to September 1918 (gage heights only), in reports of Pennsylvania Department of Forests and Waters.

REVISED RECORDS.--WSP 891: 1936(M). WDR PA-79-2: 1978(M).

GAGE.--Water-stage recorder. Datum of gage is 408.61 ft above National Geodetic Vertical Datum of 1929. See WSP 1903 for history of changes prior to Dec 13, 1937. Dec 13, 1937, to Mar 23, 1967, water-stage recorder at site 1.7 mi upstream at datum 11.05 ft higher. Satellite and landline telemetry at station.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the U.S. Army Corps of Engineers, Baltimore District, Pennsylvania Department of Environmental Protection, and the City of Sunbury Municipal Authority.

REMARKS.--Records good, except those for estimated daily discharges, which are poor. Flow slightly regulated by 14 flood-control reservoirs which have a capacity of about 809,000 acre-ft, and during low flow by Fabridam.

01554000 SUSQUEHANNA RIVER AT SUNBURY, PA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	5,820	15,700	11,700	69,600	12,000	33,000	23,900	15,200	30,800	21,600	44,000	20,600
2	6,140	13,400	14,600	55,000	13,000	43,100	26,500	15,300	25,500	22,500	44,700	20,300
3	5,410	11,600	16,700	43,500	11,500	40,500	26,200	15,900	21,900	23,700	41,000	16,200
4	4,650	10,500	20,800	37,900	10,600	33,000	35,200	16,600	20,600	25,300	34,700	13,100
5	4,160	9,940	21,500	33,700	e9,500	28,100	46,100	17,700	18,400	23,800	26,900	10,800
6	4,280	9,980	19,000	31,000	e9,000	24,700	55,200	18,000	16,600	21,700	24,100	9,300
7	4,060	9,480	16,700	29,700	e9,500	24,000	55,200	18,700	14,900	19,500	19,600	8,350
8	3,790	8,770	15,200	31,600	9,650	24,200	51,300	20,300	13,400	16,800	15,800	7,730
9	4,050	8,500	13,100	31,100	12,700	35,900	47,100	21,600	12,400	14,900	15,400	7,240
10	5,610	8,170	13,000	31,000	14,800	106,000	41,800	23,900	12,200	13,400	17,900	6,820
11	3,100	7,680	19,900	28,700	24,300	133,000	36,800	24,600	11,900	13,000	19,900	6,840
12	3,520	7,280	44,600	24,600	35,100	115,000	33,400	22,300	13,900	18,900	24,500	7,380
13	3,180	7,210	67,200	20,300	84,800	99,800	31,100	20,600	14,600	14,500	41,000	8,270
14	2,750	7,290	61,300	19,900	103,000	77,900	28,200	19,100	16,500	12,300	33,400	8,030
15	2,670	7,390	48,800	18,900	84,800	62,900	28,900	21,100	19,900	10,700	28,600	7,210
16	2,600	9,090	40,700	15,000	65,100	52,300	29,400	21,000	17,400	9,980	22,700	6,460
17	2,530	11,000	43,800	13,100	51,600	45,400	27,600	25,500	15,600	9,280	18,300	6,020
18	2,460	16,500	53,000	12,500	41,700	40,800	25,400	42,000	15,000	8,700	14,900	5,980
19	2,380	20,200	51,100	11,000	36,500	37,400	23,600	44,200	20,100	8,260	13,400	5,770
20	2,320	17,800	45,300	11,000	33,500	35,400	22,300	38,800	24,100	7,810	14,800	5,520
21	2,410	15,000	41,200	12,800	30,500	39,900	22,900	31,400	29,200	7,540	14,500	5,310
22	2,420	12,800	40,400	13,600	27,700	40,700	24,300	25,600	49,200	7,460	16,600	5,100
23	2,370	11,200	34,600	14,700	25,400	36,200	24,900	22,000	56,900	7,610	16,500	4,940
24	2,440	10,000	30,200	14,400	22,300	31,300	24,900	19,400	44,400	11,800	15,200	4,740
25	2,900	9,480	40,400	12,900	20,500	27,500	23,300	17,400	34,700	13,300	14,300	4,550
26	5,390	9,280	60,300	12,900	18,600	24,500	21,800	15,900	27,300	10,800	12,800	4,400
27	7,460	8,980	62,800	12,000	18,300	23,600	20,400	16,100	23,700	9,540	11,300	4,830
28	8,000	9,100	60,700	10,900	21,300	22,800	18,800	15,900	25,600	9,000	10,700	5,620
29	12,700	9,900	72,400	10,000	---	23,200	17,300	26,400	24,800	8,340	12,300	6,740
30	16,900	10,300	91,800	11,700	---	23,200	15,900	31,000	23,700	9,330	15,300	8,650
31	17,400	---	84,600	10,700	---	22,900	---	33,400	---	24,600	15,300	---
Total	155,870	323,520	1,257,400	705,700	857,250	1,408,200	909,700	716,900	695,200	435,950	670,400	242,800
Mean	5,028	10,780	40,560	22,760	30,620	45,430	30,320	23,130	23,170	14,060	21,630	8,093
Max	17,400	20,200	91,800	69,600	103,000	133,000	55,200	44,200	56,900	25,300	44,700	20,600
Min	2,320	7,210	11,700	10,000	9,000	22,800	15,900	15,200	11,900	7,460	10,700	4,400
Cfsm	0.27	0.59	2.22	1.24	1.67	2.48	1.66	1.26	1.27	0.77	1.18	0.44
In.	0.32	0.66	2.56	1.43	1.74	2.86	1.85	1.46	1.41	0.89	1.36	0.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	13,770	23,110	30,570	29,280	31,990	54,770	57,780	34,530	20,670	11,220	8,559	9,948
Max	62,760	57,880	79,050	77,850	78,120	115,800	170,900	69,950	111,600	38,930	40,040	78,700
(WY)	(1978)	(2007)	(1997)	(1996)	(1981)	(1945)	(1993)	(1989)	(1972)	(1972)	(1994)	(2004)
Min	1,607	1,673	4,608	4,510	7,500	21,370	14,560	9,826	4,386	2,390	2,533	1,372
(WY)	(1965)	(1965)	(1999)	(1981)	(1980)	(1969)	(1946)	(1941)	(1999)	(1965)	(1939)	(1964)

01554000 SUSQUEHANNA RIVER AT SUNBURY, PA—Continued

SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1938 - 2009	
Annual total	10,607,640		8,378,890			
Annual mean	28,980		22,960		27,140	
Highest annual mean					43,380	2004
Lowest annual mean					13,420	1965
Highest daily mean	214,000	Mar 6	133,000	Mar 11	609,000	Jun 24, 1972
Lowest daily mean	2,320	Oct 20	2,320	Oct 20	1,110	Sep 24, 1964
Annual seven-day minimum	2,400	Oct 18	2,400	Oct 18	1,140	Sep 22, 1964
Maximum peak flow			138,000	Mar 11	620,000	Jun 24, 1972
Maximum peak stage			18.01	Mar 11	35.80	Jun 24, 1972
Instantaneous low flow			1,770	Oct 23	^a 964	Oct 16, 1971
Annual runoff (cfsm)	1.58		1.25		1.48	
Annual runoff (inches)	21.56		17.03		20.15	
10 percent exceeds	73,200		44,500		61,100	
50 percent exceeds	15,800		17,900		16,300	
90 percent exceeds	3,690		6,000		3,820	

^a Result of shutoff at Fabridam.

