

01553500 WEST BRANCH SUSQUEHANNA RIVER AT LEWISBURG, PA

West Branch Susquehanna Basin
Lower West Branch Susquehanna Subbasin

LOCATION.--Lat 40°58'03", long 76°52'36" referenced to North American Datum of 1927, Northumberland County, PA, 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.

SURFACE-WATER 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 and Pennsylvania Department of Forests and Waters.

GAGE.--Water-stage recorder. Datum of gage is 428.20 ft above National Geodetic Vertical Datum of 1929. Sep 21, 1913, to Aug 31, 1923, Dec 7, 1939, to Jul 2, 1940, and Oct 20, 1987, to Sep 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. Satellite and landline telemetry at station.

COOPERATION.--Station established and maintained by the U.S. Geological Survey. Funding for this station is provided by the Pennsylvania Department of Environmental Protection and the U.S. Geological Survey through the National Streamflow Information Program.

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. Daily discharges determined from slope-adjusted computation using auxiliary gage (01553990) when auxiliary gage exceeds 8.00 ft, gage datum.

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 Watsontown, 8.0 mi upstream.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3,490	34,600	3,120	9,160	73,100	9,800	11,000	9,040	8,130	17,200	3,250	1,390
2	3,610	25,900	3,030	8,620	56,300	9,450	13,600	8,300	6,960	23,600	3,030	1,350
3	3,410	18,900	2,870	8,050	39,300	8,630	14,800	7,640	6,150	32,800	2,890	2,580
4	3,130	14,700	2,850	7,510	30,600	7,850	14,900	7,010	5,490	28,200	2,710	2,520
5	2,960	12,100	2,860	7,040	24,700	6,990	14,100	6,600	4,860	21,800	2,580	1,740
6	2,750	10,200	2,940	6,810	20,700	6,610	13,000	6,190	4,410	16,300	2,490	2,240
7	2,590	8,870	3,050	6,680	17,400	6,440	11,900	5,890	4,390	12,900	2,330	2,490
8	2,460	7,690	3,720	6,580	14,400	5,600	11,000	7,220	4,540	11,500	2,220	1,760
9	2,350	6,900	4,160	6,370	12,700	5,440	10,300	9,460	4,920	11,000	2,340	1,520
10	2,240	6,190	5,010	6,110	11,300	5,580	10,100	11,000	5,070	10,500	2,990	1,400
11	2,160	5,700	7,940	6,020	10,300	5,910	12,100	14,300	6,030	9,530	3,080	1,460
12	2,040	5,380	12,400	7,300	9,880	8,070	23,400	20,300	5,990	10,200	3,240	1,540
13	1,960	5,380	13,400	10,700	9,520	23,800	34,900	19,600	7,250	11,800	3,570	1,630
14	1,880	5,340	12,100	21,100	9,680	28,400	34,200	17,200	11,900	9,340	3,270	2,220
15	1,840	5,230	10,700	36,900	9,600	24,500	28,900	15,000	15,500	7,430	3,060	2,630
16	1,830	4,960	9,530	38,300	9,270	20,300	23,700	13,200	13,700	6,420	2,860	2,350
17	1,750	4,890	8,520	30,800	8,510	18,100	20,100	11,600	11,000	5,590	2,660	2,010
18	1,700	4,620	11,600	24,700	7,720	15,800	17,800	10,100	9,070	5,040	2,480	1,810
19	1,920	4,440	20,900	20,100	7,200	14,200	15,700	8,890	7,800	4,690	2,310	1,640
20	2,270	4,200	23,900	17,200	6,970	13,200	18,900	8,050	6,800	4,240	2,180	1,470
21	2,640	4,010	33,300	15,200	6,800	12,200	17,800	7,450	5,870	3,980	2,010	1,370
22	2,680	3,930	38,900	13,500	6,590	11,300	15,000	6,920	5,200	3,710	1,850	1,370
23	2,620	3,830	31,500	e10,700	6,290	10,800	13,300	7,010	4,750	4,260	1,880	1,530
24	2,510	3,790	23,900	e8,500	6,000	10,300	12,200	7,570	4,250	4,150	1,800	2,010
25	2,480	3,650	19,500	7,410	5,880	9,740	12,000	7,410	3,930	4,190	1,720	1,920
26	2,490	3,540	16,700	6,350	5,710	9,640	12,000	6,520	3,730	3,570	1,650	1,730
27	2,490	3,460	15,100	e6,390	7,440	9,270	10,900	5,820	3,640	3,160	1,640	1,580
28	2,460	3,450	13,400	7,020	10,200	9,100	9,800	5,380	7,150	3,450	1,500	1,410
29	2,740	3,330	11,900	7,660	---	9,030	9,340	5,930	18,000	4,050	1,430	1,310
30	12,400	3,210	11,100	8,890	---	9,060	9,320	8,560	18,500	3,900	1,510	1,240
31	34,300	---	10,100	38,800	---	9,260	---	9,810	---	3,690	1,410	---
Total	118,150	232,390	390,000	416,470	444,060	354,370	476,060	294,970	224,980	302,190	73,940	53,220
Mean	3,811	7,746	12,580	13,430	15,860	11,430	15,870	9,515	7,499	9,748	2,385	1,774
Max	34,300	34,600	38,900	38,800	73,100	28,400	34,900	20,300	18,500	32,800	3,570	2,630
Min	1,700	3,210	2,850	6,020	5,710	5,440	9,320	5,380	3,640	3,160	1,410	1,240
Cfsm	0.56	1.13	1.84	1.96	2.32	1.67	2.32	1.39	1.10	1.42	0.35	0.26
In.	0.64	1.26	2.12	2.26	2.41	1.93	2.59	1.60	1.22	1.64	0.40	0.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	5,613	9,190	12,190	11,960	12,730	21,870	21,590	14,570	8,620	4,731	3,647	4,333
Max	24,900	32,000	28,230	30,740	33,010	49,200	62,990	28,750	46,900	20,120	18,700	34,920
(WY)	(1991)	(1951)	(1973)	(1952)	(1981)	(1945)	(1993)	(1978)	(1972)	(1972)	(1994)	(2004)
Min	659	762	1,727	1,752	2,914	6,169	5,744	3,353	1,807	1,032	983	601
(WY)	(1964)	(1965)	(1961)	(1981)	(1940)	(1969)	(2012)	(1941)	(1999)	(1965)	(1966)	(1964)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1940 - 2013	
Annual total	3,239,420		3,380,800			
Annual mean	8,851		9,262		10,910	
Highest annual mean					17,760	2004
Lowest annual mean					6,158	1965
Highest daily mean	43,800	Jan 29	73,100	Feb 1	285,000	Jun 24, 1972
Lowest daily mean	1,420	Sep 4	1,240	Sep 30	417	Nov 16, 1964
Annual seven-day minimum	1,540	Aug 31	1,460	Aug 27	511	Sep 15, 1964
Maximum peak flow			76,400	Feb 1	^a 300,000 Jun 24, 1972	
Maximum peak stage			14.66	Feb 1	^b 34.23 Jun 24, 1972	
Instantaneous low flow			1,220	Sep 30	390	Nov 16, 1964
Annual runoff (cfs)	1.29		1.35		1.59	
Annual runoff (inches)	17.60		18.37		21.64	
10 percent exceeds	19,600		20,100		24,700	
50 percent exceeds	6,250		6,900		6,530	
90 percent exceeds	1,960		1,920		1,510	

^a About.^b From floodmarks.