

Water-Data Report 2013

01576000 SUSQUEHANNA RIVER AT MARIETTA, PA

Lower Susquehanna Basin
Lower Susquehanna Subbasin

LOCATION.--Lat 40°03'16", long 76°31'52" referenced to North American Datum of 1927, Lancaster County, PA, Hydrologic Unit 02050306, on left bank 420 ft upstream from Chickies Creek, and 1.0 mi downstream from Marietta.

DRAINAGE AREA.--25,990 mi², approximately, includes Chickies Creek.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1931 to current year.

REVISED RECORDS.--WSP 781: 1933(M). WSP 1502: 1937.

GAGE.--Water-stage recorder. Datum of gage is 200.56 ft above National Geodetic Vertical Datum of 1929. Satellite and landline telemetry at station.

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

REMARKS.--Records include flow of Chickies Creek. Records good, except those for estimated daily discharges, which are fair. Flow slightly regulated by 16 flood-control reservoirs which have a combined capacity of 1,599,000 acre-ft. Some noticeable diurnal fluctuation below 8,000 ft³/s caused by hydroelectric plant 9.7 mi upstream. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jun 2, 1889, reached a stage of 58.2 ft, from floodmark, discharge, about 630,000 ft³/s.

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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	14,600	121,000	14,000	41,600	149,000	38,400	34,300	34,600	29,100	65,300	15,400	8,230
2	14,200	109,000	13,400	38,600	202,000	38,000	35,800	32,100	30,300	68,100	15,600	10,900
3	18,500	83,800	13,100	36,100	160,000	39,400	39,300	29,700	34,300	79,300	15,200	10,800
4	15,700	62,800	12,900	34,200	116,000	38,300	44,400	27,900	30,700	103,000	13,900	10,500
5	14,500	49,300	12,700	31,600	93,200	34,700	47,800	26,200	25,500	87,600	13,000	11,000
6	14,100	41,900	12,400	30,300	75,900	31,800	44,400	24,000	21,900	72,400	11,800	13,700
7	12,700	37,000	12,400	29,000	63,400	29,900	40,500	22,600	20,700	58,500	11,400	21,100
8	12,300	32,600	13,000	28,000	54,600	28,400	37,400	21,900	20,400	47,800	13,100	20,600
9	11,500	28,500	14,200	27,900	47,800	26,500	35,400	25,900	19,300	40,600	14,100	16,600
10	10,700	25,900	17,200	27,200	42,900	25,200	33,900	32,600	19,300	37,000	11,900	13,300
11	9,830	23,900	20,600	26,600	39,600	24,200	33,300	36,500	24,300	35,800	11,400	11,200
12	9,290	22,100	25,700	27,700	36,600	26,500	36,400	40,200	34,600	35,400	17,900	9,890
13	8,660	22,100	32,700	31,000	35,900	34,600	60,500	47,200	31,800	34,800	41,600	10,600
14	8,410	23,300	40,800	38,900	35,000	63,900	93,600	48,000	34,000	34,300	36,000	10,000
15	8,440	22,600	40,700	65,200	33,600	104,000	97,900	43,600	46,100	30,100	24,900	10,500
16	8,120	22,100	36,300	113,000	33,800	98,200	86,900	38,900	53,500	25,800	22,100	14,400
17	7,770	22,300	32,300	114,000	33,200	83,200	74,700	34,900	56,500	22,500	18,900	16,300
18	7,740	23,000	30,000	95,300	31,300	68,500	65,000	31,500	53,200	20,000	18,300	15,000
19	10,800	22,400	32,100	78,500	29,700	60,100	60,300	28,300	45,200	17,800	17,700	13,300
20	13,500	20,800	49,200	66,100	28,100	54,500	61,800	25,900	36,600	16,300	15,000	11,800
21	11,800	19,600	93,600	57,900	e25,000	50,600	65,500	23,800	30,700	14,900	13,200	10,500
22	14,300	18,500	129,000	51,300	e24,500	47,500	67,400	22,000	26,700	13,700	12,300	10,800
23	15,300	17,400	141,000	43,600	e23,500	44,400	64,300	20,900	23,700	19,900	12,000	9,750
24	14,800	16,900	122,000	e37,000	22,600	41,100	57,700	20,700	21,300	16,300	9,640	9,190
25	15,900	16,000	95,400	e30,000	21,800	38,900	51,100	21,700	19,100	14,100	9,630	9,140
26	15,900	15,600	76,900	e26,500	21,200	37,600	47,100	20,700	17,600	13,200	9,330	9,320
27	15,200	15,500	69,100	e27,000	24,100	36,900	44,100	21,900	17,800	19,500	8,510	9,940
28	16,000	15,500	62,200	e26,500	30,900	35,500	41,300	24,100	20,600	25,400	8,180	10,500
29	20,300	15,000	54,400	e29,000	---	34,700	38,800	23,300	30,000	20,900	8,520	9,250
30	85,100	14,300	48,700	e35,000	---	33,800	36,300	23,000	52,600	18,200	7,850	8,280
31	123,000	---	44,600	e69,000	---	33,600	---	27,500	---	16,100	7,660	---
Total	578,960	980,700	1,412,600	1,413,600	1,535,200	1,382,900	1,577,200	902,100	927,400	1,124,600	466,020	356,390
Mean	18,680	32,690	45,570	45,600	54,830	44,610	52,570	29,100	30,910	36,280	15,030	11,880
Max	123,000	121,000	141,000	114,000	202,000	104,000	97,900	48,000	56,500	103,000	41,600	21,100
Min	7,740	14,300	12,400	26,500	21,200	24,200	33,300	20,700	17,600	13,200	7,660	8,230
Cfsm	0.72	1.26	1.75	1.75	2.11	1.72	2.02	1.12	1.19	1.40	0.58	0.46
In.	0.83	1.40	2.02	2.02	2.20	1.98	2.26	1.29	1.33	1.61	0.67	0.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	19,500	30,750	42,050	42,030	44,610	76,500	77,650	48,320	28,910	16,360	12,720	15,660
Max	81,330	74,050	114,300	116,900	109,300	229,100	235,100	108,900	190,700	61,480	47,180	137,900
(WY)	(1977)	(2007)	(1997)	(1996)	(1984)	(1936)	(1993)	(2011)	(1972)	(1972)	(1994)	(2011)
Min	2,699	3,041	6,216	6,635	10,730	28,120	22,450	14,240	6,974	3,957	3,627	2,296
(WY)	(1964)	(1965)	(1999)	(1981)	(1934)	(1960)	(1946)	(1941)	(1999)	(1965)	(1966)	(1964)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1932 - 2013	
Annual total	11,380,580		12,657,670			
Annual mean	31,090		34,680		37,870	
Highest annual mean					67,410	2011
Lowest annual mean					19,060	1965
Highest daily mean	141,000	Dec 23	202,000	Feb 2	1,040,000	Jun 24, 1972
Lowest daily mean	6,060	Sep 2	7,660	Aug 31	1,380	Sep 26, 1932
Annual seven-day minimum	6,910	Jul 13	8,330	Aug 26	1,720	Sep 26, 1932
Maximum peak flow			206,000	Feb 2	^a 1,080,000 Jun 23, 1972	
Maximum peak stage			45.91	Feb 2	^b 64.54 Jun 23, 1972	
Instantaneous low flow			5,850	Oct 16	618	Sep 26, 1932
Annual runoff (cfsm)	1.20		1.33		1.46	
Annual runoff (inches)	16.29		18.12		19.80	
10 percent exceeds	62,700		67,700		84,800	
50 percent exceeds	24,400		27,200		23,100	
90 percent exceeds	8,420		11,000		6,190	

^a From rating curve extended above 961,000 ft³/s based on straight-line extension.

^b From floodmarks.

