

WEST BRANCH SUSQUEHANNA RIVER BASIN

01541000 WEST BRANCH SUSQUEHANNA RIVER AT BOWER, PA

LOCATION.--Lat 40°53'49", long 78°40'38", Clearfield County, Hydrologic Unit 02050201, on right bank at downstream side of highway bridge on Township Route 418 at Bower, and 4.6 mi downstream from Chest Creek and Mahaffey.

DRAINAGE AREA.--315 mi².

PERIOD OF RECORD.--October 1913 to current year.

REVISED RECORDS.--WSP 726: Drainage area: WSP 1302: 1914-17, 1918(M), 1922-23, 1924(M), 1925-29, 1930-31(M), 1933(M).

GAGE.--Water-stage recorder. Datum of gage is 1,207.14 ft above sea level. Prior to Oct. 17, 1929, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1913, about 18.5 ft, May 13, 1889, discharge, about 27,000 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 4,400 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 23	1430	Ice jam	*13.38	Apr. 10	0500	4,650	10.07
Jan. 24	1945	*8,960	12.50				

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	90	74	67	e110	751	485	588	403	122	147	63	71
2	80	72	68	e110	1110	369	602	368	122	234	92	66
3	77	72	66	e140	1370	388	529	338	149	182	63	63
4	107	71	64	e140	1210	964	539	320	152	139	53	60
5	121	70	67	e130	1240	714	1260	302	127	108	51	59
6	98	70	66	e130	989	e640	949	285	115	92	52	60
7	87	70	65	e110	922	e600	804	273	108	83	45	141
8	239	72	67	e110	1630	e480	658	275	106	75	50	137
9	419	69	82	e120	1230	e480	1370	285	99	73	75	92
10	239	80	86	e130	1120	466	3920	258	93	112	53	78
11	198	150	77	e110	947	409	2380	230	91	115	46	68
12	159	129	74	e110	921	388	2000	212	87	83	44	61
13	137	102	e68	e120	877	356	1480	200	82	72	46	59
14	124	90	e66	e130	697	356	1150	211	82	66	595	79
15	114	85	e64	e140	593	352	939	196	91	61	240	105
16	106	81	e72	e130	560	373	907	178	88	58	127	88
17	100	79	e72	e130	554	541	925	168	81	55	98	185
18	95	77	72	e160	543	1840	848	163	83	54	88	128
19	96	74	70	e190	468	1710	755	160	82	52	79	94
20	105	72	72	e170	411	1210	789	159	79	51	74	82
21	95	74	99	e160	353	1240	800	144	75	51	80	91
22	89	73	1450	e180	e280	2020	893	139	72	195	90	93
23	87	71	727	e1100	e250	1400	1050	162	71	184	72	79
24	85	69	368	8010	e270	1170	1080	279	68	95	65	72
25	81	67	244	5090	e250	1070	871	382	65	81	62	68
26	80	69	e180	2230	246	878	761	243	65	71	134	64
27	e80	71	e190	1450	235	786	666	195	67	64	269	61
28	80	70	e170	1560	331	746	578	167	252	57	184	59
29	79	67	e160	1700	---	731	506	150	397	57	121	64
30	78	66	e130	1220	---	680	447	138	305	65	92	528
31	76	---	e120	940	---	607	---	128	---	56	78	---
TOTAL	3701	2356	5243	26260	20358	24449	31044	7111	3476	2888	3281	2955
MEAN	119	78.5	169	847	727	789	1035	229	116	93.2	106	98.5
MAX	419	150	1450	8010	1630	2020	3920	403	397	234	595	528
MIN	76	66	64	110	235	352	447	128	65	51	44	59
CFM	.38	.25	.54	2.69	2.31	2.50	3.29	.73	.37	.30	.34	.31
IN.	.44	.28	.62	3.10	2.40	2.89	3.67	.84	.41	.34	.39	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1999, BY WATER YEAR (WY)

MEAN	253	447	627	718	814	1216	940	651	396	276	203	193
MAX	915	1707	1958	2136	1924	3369	2080	1480	2446	1522	850	1349
(WY)	1928	1998	1924	1937	1918	1936	1940	1919	1972	1977	1956	1926
MIN	22.5	27.2	51.0	32.9	120	271	202	116	82.0	49.7	25.7	24.1
(WY)	1931	1931	1931	1931	1934	1969	1925	1926	1949	1965	1930	1939

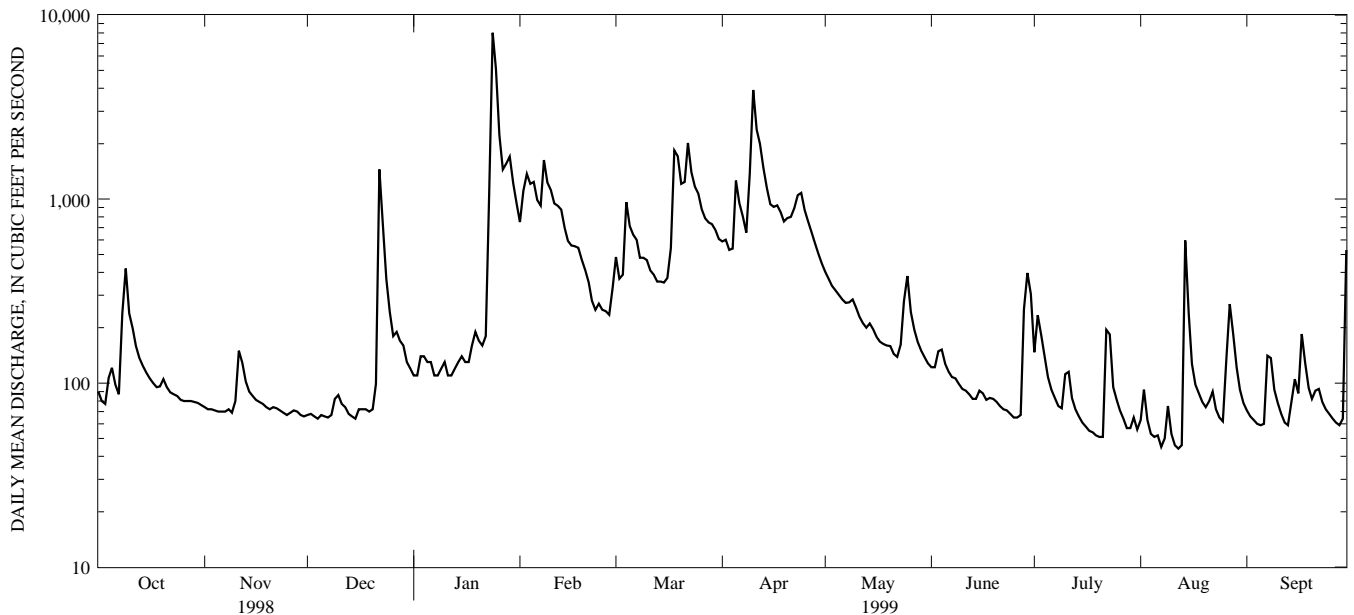
e Estimated.

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01541000 WEST BRANCH SUSQUEHANNA RIVER AT BOWER, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1914 - 1999	
ANNUAL TOTAL	179572		133122			
ANNUAL MEAN	492		365		560	
HIGHEST ANNUAL MEAN					955	1928
LOWEST ANNUAL MEAN					294	1931
HIGHEST DAILY MEAN	5030	Apr 27	8010	Jan 24	23200	Jun 23 1972
LOWEST DAILY MEAN	59	Sep 6	44	Aug 12	16	Aug 29 1939 ^a
ANNUAL SEVEN-DAY MINIMUM	65	Sep 1	51	Aug 7	17	Aug 28 1939
INSTANTANEOUS PEAK FLOW			^b 8960	Jan 24	^b 31500	Mar 18 1936
INSTANTANEOUS PEAK STAGE			^d 13.38	Jan 23	^f 19.74	Mar 18 1936
INSTANTANEOUS LOW FLOW					14	Aug 29 1939
ANNUAL RUNOFF (CFSM)	1.56		1.16		1.78	
ANNUAL RUNOFF (INCHES)	21.21		15.72		24.15	
10 PERCENT EXCEEDS	1310		948		1300	
50 PERCENT EXCEEDS	194		127		285	
90 PERCENT EXCEEDS	71		65		62	

- ^a Also Aug. 31 to Sept. 2, 1939.
- ^b From rating curve extended above 7,200 ft³/s on basis of slope-area measurement of peak flow.
- ^c Corresponding gage height 12.50 ft.
- ^d Backwater from ice jam.
- ^f From floodmark in gage.



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