

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)
Dec. 18	1245	*3,730	9.40	(No peaks above base discharge.)			
Jan. 31	1000	Ice Jam	*12.16				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	184	456	e220	1430	367	525	344	225	252	62	116
2	134	176	392	e200	972	361	499	322	357	337	60	96
3	125	169	310	e190	717	347	467	300	709	210	59	70
4	115	163	285	e170	641	333	459	280	588	155	76	61
5	133	156	338	e170	544	338	418	263	419	155	89	56
6	970	148	281	e190	518	e290	539	244	343	191	73	53
7	578	144	260	e180	503	309	752	e230	317	155	62	51
8	348	141	270	e170	467	286	720	215	275	168	57	49
9	284	141	255	e160	783	289	740	231	239	183	54	46
10	361	279	217	e170	2590	275	1560	213	212	138	119	45
11	465	622	261	e160	1840	253	1070	200	200	121	117	45
12	325	409	640	e150	1180	252	934	229	187	114	76	44
13	269	329	525	e160	947	854	770	224	178	102	69	42
14	236	307	503	e160	981	2330	649	192	160	95	64	74
15	212	282	489	e180	2590	1570	593	179	147	92	57	74
16	196	251	428	e170	2010	1240	2340	170	144	87	54	51
17	201	236	1160	e170	1910	1630	2150	162	154	85	79	47
18	2440	220	1200	e160	1290	1410	1590	161	140	84	92	44
19	1240	203	882	e160	979	1100	1200	159	123	80	74	44
20	740	193	675	e180	868	924	987	148	114	76	104	51
21	549	188	568	e170	797	946	1120	175	124	72	92	74
22	435	e170	503	e150	594	1660	936	504	186	69	74	59
23	357	e150	328	e150	e530	1250	797	1250	358	68	65	48
24	316	e180	406	e170	494	1020	711	520	360	67	63	56
25	294	e180	360	e180	490	861	628	366	208	67	62	197
26	266	254	305	e160	578	737	548	452	161	71	58	141
27	244	425	e280	e140	461	624	497	370	140	71	75	86
28	265	461	e270	e140	412	559	450	385	127	65	68	80
29	242	393	e260	e130	---	520	400	337	117	62	73	73
30	214	465	e240	e240	---	588	367	285	113	63	71	61
31	198	---	e230	e1400	---	601	---	250	---	64	62	---
TOTAL	12899	7619	13577	6500	28116	24124	25416	9360	7125	3619	2260	2034
MEAN	416	254	438	210	1004	778	847	302	238	117	72.9	67.8
MAX	2440	622	1200	1400	2590	2330	2340	1250	709	337	119	197
MIN	115	141	217	130	412	252	367	148	113	62	54	42
CFM	1.32	.81	1.39	.67	3.19	2.47	2.69	.96	.75	.37	.23	.22
IN.	1.52	.90	1.60	.77	3.32	2.85	3.00	1.11	.84	.43	.27	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2001, BY WATER YEAR (WY)

MEAN	253	444	622	707	816	1206	939	644	393	273	201	191
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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SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1914 - 2001	
ANNUAL TOTAL	151335		142649			
ANNUAL MEAN	413		391		556	
HIGHEST ANNUAL MEAN					955	1928
LOWEST ANNUAL MEAN					294	1931
HIGHEST DAILY MEAN	2460	Mar 22	2590	Feb 10,15	23200	Jun 23 1972
LOWEST DAILY MEAN	72	Sep 10	42	Sep 13	16	Aug 29 1939 ^a
ANNUAL SEVEN-DAY MINIMUM	83	Jul 21	46	Sep 7	17	Aug 28 1939
MAXIMUM PEAK FLOW			3730	Dec 18	^b 31500	Mar 18 1936
MAXIMUM PEAK STAGE			^c 12.16	Jan 31	^d 19.74	Mar 18 1936
INSTANTANEOUS LOW FLOW					14	Aug 29 1939
ANNUAL RUNOFF (CFSM)	1.31		1.24		1.77	
ANNUAL RUNOFF (INCHES)	17.87		16.85		23.98	
10 PERCENT EXCEEDS	907		946		1300	
50 PERCENT EXCEEDS	270		231		282	
90 PERCENT EXCEEDS	109		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 Ice jam.

^d From floodmark in gage.

