

WEST BRANCH SUSQUEHANNA RIVER BASIN

01552000 LOYALSOCK CREEK AT LOYALSOCKVILLE, PA

LOCATION.--Lat 41°19'30", long 76°54'46", Lycoming County, Hydrologic Unit 02050206, on right bank 30 ft downstream from bridge on State Highway 973 at Loyalsockville, 2.5 mi downstream from Wallis Run, and 7.3 mi upstream from mouth.

DRAINAGE AREA.--435 mi².

PERIOD OF RECORD.--August 1925 to September 1974, October 1975 to current year. Prior to October 1925, monthly discharge only, published in WSP 1302. Prior to October 1969, published as "at Loyalsock".

REVISED RECORDS.--WSP 871: 1938(M). WSP 1051: 1926(M), 1933(M), 1936(M). WSP 1302: 1926-30. WSP 1502: 1932-33, 1935(M), 1937(M). WDR PA-99-2: Drainage area, 1972(M).

GAGE.--Water-stage recorder. Datum of gage is 586.33 ft above sea level (revised). August 1925 to Sept. 16, 1926, nonrecording gage, and Sept. 17, 1926, to June 13, 1988, water-stage recorder at site 500 feet downstream on left bank at same datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 26, 1975, reached a stage of 14.50 ft, from floodmark, discharge, 46,000 ft³/s (revised), from rating curve extended above 16,000 ft³/s on basis of slope-area measurement of peak flow.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 6,400 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Feb. 28	0745	*7,710	*8.34	Apr. 4	1130	6,680	7.90

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1890	276	882	457	e330	2540	981	687	632	541	1520	133
2	1210	285	764	438	e310	2160	887	667	558	460	1310	153
3	890	573	698	462	e290	1710	836	626	523	402	905	174
4	1370	626	662	675	e280	1420	4170	551	466	377	690	166
5	1590	489	626	1150	e270	1230	3400	503	469	345	515	151
6	1170	434	627	827	e280	1080	2260	472	738	301	431	124
7	928	401	622	715	e280	943	1730	438	877	267	609	109
8	769	374	537	653	e270	875	1560	411	685	242	547	99
9	699	356	489	607	e260	829	3370	386	521	229	436	94
10	771	345	464	732	e250	807	2550	385	437	213	367	89
11	920	333	459	1910	e260	833	2190	637	389	207	374	80
12	749	313	433	1430	e270	1930	1870	508	964	187	399	85
13	649	298	409	1180	e280	1700	1590	424	1400	169	346	717
14	847	293	678	e1000	e500	1390	1360	497	1280	158	310	543
15	835	281	2120	e900	e1800	1210	1190	474	1080	178	279	376
16	712	270	1950	e750	e1400	1100	1050	393	1150	305	252	361
17	651	258	1540	e780	e1000	2170	1050	357	1270	294	220	291
18	595	245	1250	e680	e800	1700	3220	334	1360	219	200	244
19	533	233	1060	e600	e640	1470	3440	659	1590	182	189	212
20	490	230	984	e580	e580	1300	2320	978	1210	158	176	195
21	466	232	1440	e550	e560	1350	2080	818	1010	141	162	184
22	436	235	1190	e520	e640	3260	2860	776	1250	142	152	163
23	459	225	1010	e490	713	2240	2180	1230	981	143	153	152
24	477	220	891	e450	803	1780	1780	3930	772	132	183	152
25	426	231	e800	e420	1300	1500	1480	3590	654	125	195	145
26	385	903	e740	e440	2530	1340	1270	2240	778	118	159	151
27	357	2890	e680	e420	2970	1140	1120	1590	970	113	140	152
28	332	1800	e600	e390	6120	1650	997	1260	1020	110	133	150
29	315	1310	553	e360	3640	1630	880	1030	754	109	125	137
30	301	1060	519	e340	---	1310	774	859	679	149	120	126
31	290	---	502	e350	---	1120	---	728	---	1290	120	---
TOTAL	22512	16019	26179	21256	29626	46717	56445	28438	26467	8006	11717	5908
MEAN	726	534	844	686	1022	1507	1882	917	882	258	378	197
MAX	1890	2890	2120	1910	6120	3260	4170	3930	1590	1290	1520	717
MIN	290	220	409	340	250	807	774	334	389	109	120	80
CFSM	1.67	1.23	1.94	1.58	2.35	3.46	4.33	2.11	2.03	.59	.87	.45
IN.	1.93	1.37	2.24	1.82	2.53	4.00	4.83	2.43	2.26	.68	1.00	.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2000, BY WATER YEAR (WY)

MEAN	477	853	890	785	826	1481	1574	961	511	279	269	268
MAX	2512	2856	3033	3070	2961	4490	4236	2694	4327	1206	1797	1503
(WY)	1991	1951	1974	1996	1981	1936	1993	1946	1972	1928	1994	1933
MIN	20.2	28.4	80.5	34.1	108	449	363	220	92.4	41.6	31.5	13.8
(WY)	1965	1965	1931	1931	1931	1969	1946	1941	1991	1962	1964	1964

e Estimated.

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SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1926 - 2000	
ANNUAL TOTAL	215368		299290		763	
ANNUAL MEAN	590		818		1312	
HIGHEST ANNUAL MEAN					1978	
LOWEST ANNUAL MEAN					332	
HIGHEST DAILY MEAN	11300	Jan 24	6120	Feb 28	45000	Jun 23 1972
LOWEST DAILY MEAN	20	Aug 12	80	Sep 11	11	Sep 25,26 1964
ANNUAL SEVEN-DAY MINIMUM	23	Aug 7	97	Sep 6	12	Sep 20 1964
INSTANTANEOUS PEAK FLOW			7710	Feb 28	a55800	Jan 19 1996
INSTANTANEOUS PEAK STAGE			8.34	Feb 28	b17.93	Jan 19 1996
INSTANTANEOUS LOW FLOW					11	Sep 25,26 1964c
ANNUAL RUNOFF (CFSM)	1.36		1.88		1.75	
ANNUAL RUNOFF (INCHES)	18.42		25.59		23.84	
10 PERCENT EXCEEDS	1200		1720		1700	
50 PERCENT EXCEEDS	410		588		401	
90 PERCENT EXCEEDS	42		158		68	

- a From rating curve extended above 11,000 ft³/s on basis of slope-area measurement of peak flow.
- b From floodmark in gage.
- c Also Nov. 24, 1964.

