

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 and landline 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)
Dec. 17	1145	*14,100	*9.60	Sept. 25	0700	12,000	9.02

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	114	232	e410	e380	e420	434	2400	440	177	323	72	241
2	118	224	e360	e370	e350	448	1840	415	189	509	68	254
3	114	216	e300	e350	e300	424	1490	391	302	380	66	178
4	109	210	e270	e350	e250	418	1390	362	329	301	65	145
5	117	203	e280	e340	e270	414	1520	338	267	283	61	176
6	342	197	e260	e330	e260	400	1910	317	221	275	56	185
7	426	188	e250	e320	e260	397	2860	294	194	246	53	143
8	303	182	e260	e310	e250	387	2970	277	170	224	49	120
9	248	186	e240	e310	e260	390	2750	269	154	211	46	104
10	218	345	e220	e300	e670	366	3830	258	141	201	48	103
11	204	1100	e240	e290	e1000	349	2460	240	134	229	60	122
12	194	877	e250	e290	e1200	337	1880	228	128	287	48	112
13	179	637	e240	e280	703	592	1550	227	145	220	52	96
14	168	561	e260	e270	595	976	1270	219	149	182	48	256
15	159	522	e270	e270	945	893	1100	204	134	162	44	317
16	153	477	e280	e280	950	813	1190	193	121	146	42	226
17	159	442	e8600	289	873	906	1170	179	287	149	647	175
18	724	411	5050	274	e730	1200	1070	170	281	179	435	149
19	1070	386	2470	269	e700	1120	964	184	201	150	261	131
20	666	360	1740	263	620	1150	862	176	159	136	509	146
21	533	342	e1200	242	626	1400	858	165	150	119	288	268
22	459	326	e1000	e170	e570	1990	1030	197	171	107	194	239
23	401	296	e900	e180	e550	1670	926	231	3150	97	149	189
24	364	e250	e820	e200	e520	1810	820	218	3090	91	136	449
25	340	e240	e750	e200	490	1500	713	185	1360	89	121	8710
26	322	347	e660	e180	557	1240	637	290	874	111	106	3360
27	308	609	e580	e190	536	1010	592	282	609	123	97	1710
28	294	574	e520	e170	492	946	549	259	483	107	115	1220
29	271	490	e470	e160	---	872	505	272	394	90	184	1010
30	252	460	e420	e180	---	3720	466	232	334	81	185	799
31	241	---	e400	e280	---	3780	---	201	---	76	153	---
TOTAL	9570	11890	29970	8287	15947	32352	43572	7913	14498	5884	4458	21333
MEAN	309	396	967	267	570	1044	1452	255	483	190	144	711
MAX	1070	1100	8600	380	1200	3780	3830	440	3150	509	647	8710
MIN	109	182	220	160	250	337	466	165	121	76	42	96
CFSM	.71	.91	2.22	.61	1.31	2.40	3.34	.59	1.11	.44	.33	1.63
IN.	.82	1.02	2.56	.71	1.36	2.77	3.73	.68	1.24	.50	.38	1.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2001, BY WATER YEAR (WY)

MEAN	475	847	891	778	823	1475	1572	951	510	278	267	274
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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01552000 LOYALSOCK CREEK AT LOYALSOCKVILLE, PA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1926 - 2001	
ANNUAL TOTAL	286010		205674		761	
ANNUAL MEAN	781		563		1312	
HIGHEST ANNUAL MEAN					1978	
LOWEST ANNUAL MEAN					332	
HIGHEST DAILY MEAN	e8600	Dec 17	8710	Sep 25	45000	Jun 23 1972
LOWEST DAILY MEAN	80	Sep 11	42	Aug 16	11	Sep 25,26 1964
ANNUAL SEVEN-DAY MINIMUM	97	Sep 6	49	Aug 10	12	Sep 20 1964
MAXIMUM PEAK FLOW			a14100	Dec 17	a55800	Jan 19 1996
MAXIMUM PEAK STAGE			9.60	Dec 17	b17.93	Jan 19 1996
INSTANTANEOUS LOW FLOW					11	Sep 25,26 1964c
ANNUAL RUNOFF (CFSM)	1.80		1.30		1.75	
ANNUAL RUNOFF (INCHES)	24.46		17.59		23.76	
10 PERCENT EXCEEDS	1700		1190		1690	
50 PERCENT EXCEEDS	470		287		400	
90 PERCENT EXCEEDS	152		118		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.
- e Estimated.

