

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 (revised).

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 756: Drainage area. WSP 871: 1938(M). WSP 1051: 1926(M), 1933(M), 1936(M). WSP 1302: 1926-30. WSP 1502: 1932-33, 1935(M), 1937(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)
Jan. 24	1215	*16,300	*11.09	No other peak greater than base discharge.			

REVISIONS.--The maximum discharge for water year 1972 has been revised to 47,900 ft³/s, June 23, 1972, gage height, 14.74 ft, from review of historical data.

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	34	51	76	e68	e800	501	1020	437	155	201	33	56
2	32	50	72	e62	1330	494	1280	409	153	159	29	42
3	32	48	69	e90	1670	495	1180	384	149	154	28	35
4	35	47	66	e230	1380	3790	1090	367	142	131	27	31
5	34	46	66	e180	1240	2390	1060	350	125	108	26	29
6	32	45	65	e160	1050	1760	898	331	112	91	25	30
7	33	45	64	e150	940	1370	813	317	111	79	23	868
8	58	45	65	e140	873	e1100	731	384	102	70	25	332
9	205	45	63	e150	748	e900	763	744	103	64	25	213
10	245	47	61	e160	727	e840	1340	619	109	65	22	218
11	279	61	61	e170	682	777	1070	481	96	65	22	169
12	177	112	60	e180	767	714	1210	421	88	60	20	124
13	124	122	58	e190	1100	631	1110	391	82	55	21	100
14	108	97	55	e200	e850	600	959	357	78	50	30	95
15	97	83	54	e270	e700	572	854	328	77	45	28	120
16	105	75	52	e280	767	533	821	303	78	42	26	656
17	89	70	50	e270	781	605	960	283	91	43	26	3530
18	77	65	58	e320	812	1120	899	266	139	41	38	1490
19	70	62	60	e1400	748	1250	788	258	200	39	27	848
20	64	62	57	e1000	666	1030	737	303	145	41	46	588
21	61	64	61	e700	593	999	706	264	109	37	139	553
22	58	69	117	e800	e520	1140	653	231	91	40	164	706
23	55	73	343	e1700	e500	1020	630	233	79	39	106	923
24	53	71	226	11300	e480	1030	871	273	73	36	79	637
25	52	67	e140	4970	e450	1250	767	327	61	38	65	485
26	51	68	e110	2750	410	1130	671	325	60	44	58	398
27	50	69	e110	1890	374	1040	610	272	56	41	56	337
28	49	87	e100	1550	416	1060	553	234	355	36	60	307
29	49	92	e94	1450	---	1110	509	206	430	33	78	297
30	50	82	e90	1140	---	1140	471	184	297	30	64	1910
31	50	---	e72	889	---	1060	---	169	---	31	52	---
TOTAL	2508	2020	2695	34809	22374	33451	26024	10451	3946	2008	1468	16127
MEAN	80.9	67.3	86.9	1123	799	1079	867	337	132	64.8	47.4	538
MAX	279	122	343	11300	1670	3790	1340	744	430	201	164	3530
MIN	32	45	50	62	374	494	471	169	56	30	20	29
CFSM	.19	.15	.20	2.58	1.84	2.48	1.99	.78	.30	.15	.11	1.24
IN.	.21	.17	.23	2.98	1.91	2.86	2.23	.89	.34	.17	.13	1.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1999, BY WATER YEAR (WY)

MEAN	473	857	890	786	824	1480	1569	961	506	279	267	269
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 1998 CALENDAR YEAR			FOR 1999 WATER YEAR			WATER YEARS 1926 - 1999	
ANNUAL TOTAL	256402			157881				
ANNUAL MEAN	702			433			763	
HIGHEST ANNUAL MEAN							1312	1978
LOWEST ANNUAL MEAN							332	1965
HIGHEST DAILY MEAN	10600	Jan	9	11300	Jan	24	45000	Jun 23 1972
LOWEST DAILY MEAN	31	Sep	24	20	Aug	12	11	Sep 25,26 1964
ANNUAL SEVEN-DAY MINIMUM	33	Sep	18	23	Aug	7	12	Sep 20 1964
INSTANTANEOUS PEAK FLOW				a16300	Jan	24	a55800	Jan 19 1996
INSTANTANEOUS PEAK STAGE				11.09	Jan	24	b17.93	Jan 19 1996
INSTANTANEOUS LOW FLOW							11	Sep 25,26 1964 ^c
ANNUAL RUNOFF (CFSM)	1.61			.99			1.75	
ANNUAL RUNOFF (INCHES)	21.93			13.50			23.82	
10 PERCENT EXCEEDS	1700			1060			1700	
50 PERCENT EXCEEDS	225			150			400	
90 PERCENT EXCEEDS	44			38			67	

- 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.

