

PENNS CREEK BASIN

01555000 PENNS CREEK AT PENNS CREEK, PA

LOCATION.--Lat 40°52'00", long 77°02'55", Union County, Hydrologic Unit 02050301, on left bank 200 ft downstream from bridge on State Highway 104, 2.9 mi upstream from Sweitzers Run, and 0.8 mi northeast of Penns Creek, Pa.

DRAINAGE AREA.--301 mi².

PERIOD OF RECORD.--October 1929 to current year. Prior to October 1965, published as Penn Creek at Penns Creek.

REVISED RECORDS.--WSP 891: 1934(M). WSP 1502: 1933(M), 1934, 1936(M). WDR PA-72-1: 1933-34(M), 1936(M), 1940(M), 1951(M). WDR PA-79-2: 1978.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 506.72 ft above sea level. Prior to Feb. 1, 1930, 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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 3,100 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Feb. 28	1245	*2,360	*5.21	(No peaks above base discharge.)			

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	921	142	486	e305	e170	1400	470	661	286	269	122	267
2	588	151	434	295	e160	1260	441	622	269	251	126	221
3	469	369	402	296	e150	1030	432	558	260	241	147	129
4	491	306	382	327	e140	887	1000	506	242	246	127	110
5	444	231	360	353	e130	787	862	472	252	231	118	104
6	359	210	353	294	e130	695	723	438	432	212	118	88
7	302	196	338	264	e120	622	670	406	342	201	146	83
8	281	185	300	250	e120	575	692	379	267	190	156	79
9	266	180	278	241	e120	536	1020	358	236	183	139	79
10	368	177	275	295	e110	502	829	336	218	190	117	77
11	360	172	269	363	e110	538	748	320	209	183	110	78
12	292	164	253	307	e110	871	731	300	234	167	105	81
13	260	160	253	280	e100	663	673	297	252	159	103	117
14	302	159	565	e230	e560	580	624	279	475	159	102	87
15	284	154	1210	e190	e880	556	585	255	429	178	98	80
16	256	147	857	e225	e640	541	551	242	561	242	e98	74
17	244	144	721	e175	e540	775	655	234	507	210	e97	72
18	233	140	628	e150	e490	645	1080	225	394	172	97	71
19	218	138	557	e200	e475	577	1340	248	370	154	96	70
20	214	138	570	e230	e425	565	1160	275	331	148	92	70
21	208	143	687	e200	e370	835	1320	254	407	141	86	67
22	201	140	554	e190	e330	1260	1660	263	848	134	84	64
23	198	135	493	e170	e420	1020	1880	370	561	128	88	62
24	189	133	e410	e170	e600	946	1750	693	466	124	104	65
25	178	161	e385	e180	812	879	1480	709	421	124	114	69
26	171	690	e400	e170	1170	821	1250	502	388	121	92	73
27	166	1520	e375	e170	1140	735	1080	424	367	119	86	72
28	161	923	e340	e160	2120	715	950	401	349	118	98	72
29	156	685	e325	e170	1700	644	837	370	317	122	104	68
30	152	566	e300	e180	---	575	740	336	293	142	102	64
31	146	---	e310	e170	---	516	---	307	---	139	92	---
TOTAL	9078	8759	14070	7200	14342	23551	28233	12040	10983	5398	3364	2713
MEAN	293	292	454	232	495	760	941	388	366	174	109	90.4
MAX	921	1520	1210	363	2120	1400	1880	709	848	269	156	267
MIN	146	133	253	150	100	502	432	225	209	118	84	62
CFSM	.97	.97	1.51	.77	1.64	2.52	3.13	1.29	1.22	.58	.36	.30
IN.	1.12	1.08	1.74	.89	1.77	2.91	3.49	1.49	1.36	.67	.42	.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

MEAN	223	362	450	455	538	902	886	615	390	193	153	164
MAX	1355	1567	1359	1627	1697	3093	2855	1793	2845	759	684	1295
(WY)	1991	1978	1997	1996	1984	1936	1993	1978	1972	1989	1984	1979
MIN	35.9	34.1	46.3	76.0	108	195	278	179	107	57.2	37.0	36.4
(WY)	1931	1931	1999	1981	1940	1931	1995	1941	1962	1962	1966	1964

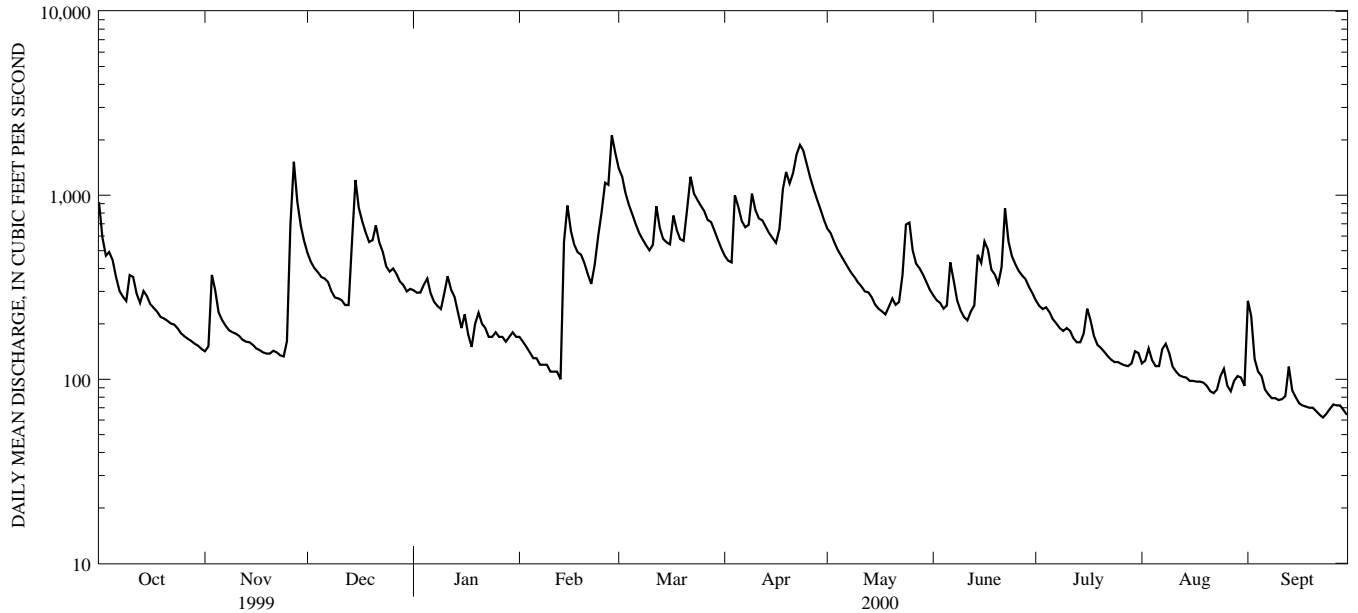
e Estimated.

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01555000 PENNS CREEK AT PENNS CREEK, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1930 - 2000	
ANNUAL TOTAL	127462		139731			
ANNUAL MEAN	349		382		443	
HIGHEST ANNUAL MEAN					878	1978
LOWEST ANNUAL MEAN					205	1965
HIGHEST DAILY MEAN	5110	Jan 24	2120	Feb 28	24600	Jun 23 1972
LOWEST DAILY MEAN	e37	Jan 1,2	62	Sep 23	21	Aug 30 1966
ANNUAL SEVEN-DAY MINIMUM	50	Aug 1	67	Sep 19	24	Aug 28 1966
INSTANTANEOUS PEAK FLOW			2360	Feb 28	a34600	Jun 23 1972
INSTANTANEOUS PEAK STAGE			5.21	Feb 28	b14.85	Jun 23 1972
INSTANTANEOUS LOW FLOW			61	Sep 23	7.0	Sep 27 1932
ANNUAL RUNOFF (CFSM)	1.16		1.27		1.47	
ANNUAL RUNOFF (INCHES)	15.75		17.27		20.02	
10 PERCENT EXCEEDS	713		831		977	
50 PERCENT EXCEEDS	251		267		261	
90 PERCENT EXCEEDS	68		98		68	

- a From rating curve extended above 6,800 ft³/s on basis of contracted-opening measurement of peak flow.
- b From floodmark in gage.
- e Estimated.



1-YEAR HYDROGRAPH
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000