

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)
Jan. 23	2315	4,550	7.15	Mar. 4	0930	3,300	6.09
Jan. 24	0530	*7,490	*9.18				

**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	56	54	52	e37	368	e210	560	416	164	102	52	85
2	54	52	50	e37	606	e185	579	393	171	103	52	81
3	54	52	49	e45	657	e170	541	370	191	93	51	76
4	66	52	50	e100	530	2220	526	357	171	86	48	71
5	68	52	50	e82	e450	1350	535	342	155	82	47	71
6	65	52	50	e76	e410	1050	494	324	145	77	50	89
7	62	54	50	e66	e385	878	469	317	139	71	51	988
8	94	57	49	e62	e360	714	433	464	133	67	52	361
9	168	55	49	e66	e350	653	521	563	126	67	58	218
10	167	58	48	e78	e330	610	1010	427	123	78	54	236
11	124	74	47	e70	e320	552	886	381	125	80	50	202
12	98	78	47	e66	e400	514	991	364	122	77	46	162
13	85	72	46	e80	e370	489	873	351	117	70	48	138
14	94	63	46	e84	e320	494	805	339	116	66	101	128
15	81	64	45	e90	e280	499	749	318	120	64	129	127
16	73	63	46	e112	e295	508	718	302	114	62	93	618
17	68	60	46	e140	e315	572	674	288	165	60	74	784
18	65	58	46	e300	e320	810	609	275	247	70	65	446
19	63	55	46	395	e285	900	555	265	164	86	60	313
20	61	55	46	534	e260	822	570	253	130	68	863	267
21	59	54	45	469	e240	865	586	241	118	73	605	308
22	58	53	48	483	e220	1190	576	230	111	90	251	275
23	57	52	51	1380	e210	933	603	286	106	73	154	215
24	55	51	48	5110	e205	843	631	304	102	67	120	198
25	54	50	e45	1970	e200	789	572	280	97	60	126	178
26	54	54	e43	1000	e190	729	554	245	96	58	206	168
27	54	59	e42	713	e180	685	535	221	92	58	373	157
28	55	57	e40	653	e180	657	508	205	93	55	174	158
29	57	55	e39	723	---	627	475	191	108	54	128	166
30	57	53	e39	532	---	592	442	180	108	53	105	1560
31	55	---	e38	435	---	559	---	171	---	57	93	---
TOTAL	2281	1718	1436	15988	9236	22669	18580	9663	3969	2227	4379	8844
MEAN	73.6	57.3	46.3	516	330	731	619	312	132	71.8	141	295
MAX	168	78	52	5110	657	2220	1010	563	247	103	863	1560
MIN	54	50	38	37	180	170	433	171	92	53	46	71
CFSM	.24	.19	.15	1.71	1.10	2.43	2.06	1.04	.44	.24	.47	.98
IN.	.28	.21	.18	1.98	1.14	2.80	2.30	1.19	.49	.28	.54	1.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1999, BY WATER YEAR (WY)

MEAN	222	363	450	458	538	904	885	619	390	193	153	165
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

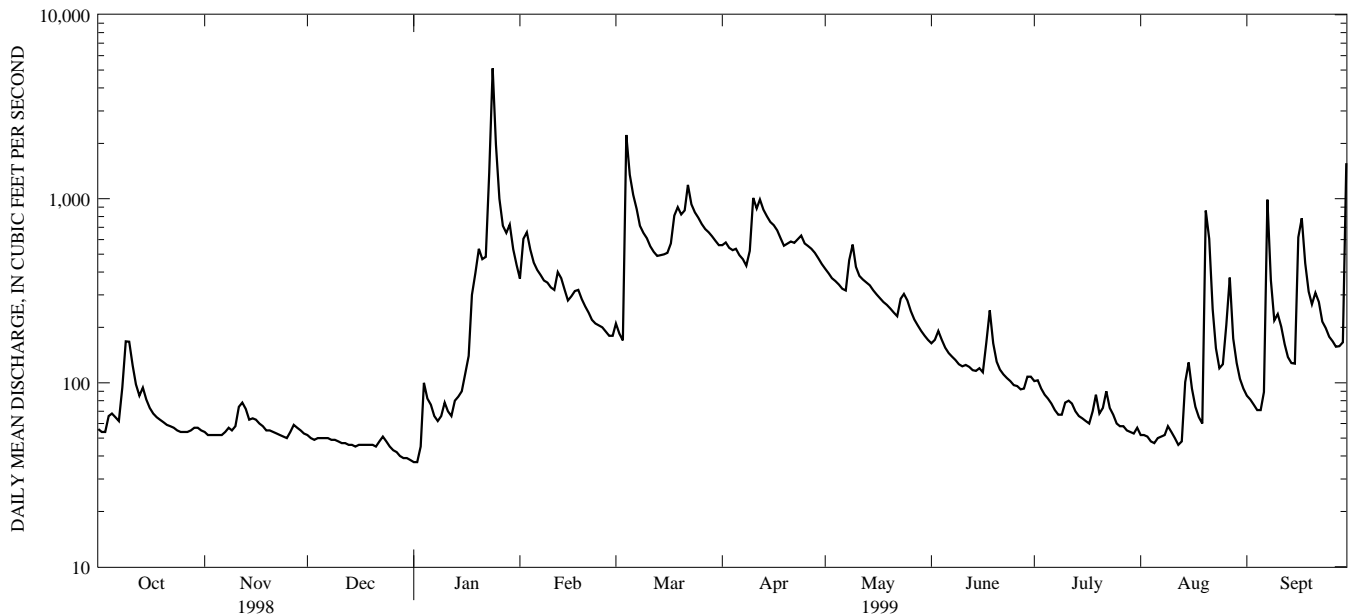
e Estimated.

PENNS CREEK BASIN

01555000 PENNS CREEK AT PENNS CREEK, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR			FOR 1999 WATER YEAR			WATER YEARS 1930 - 1999		
ANNUAL TOTAL	209313			100990					
ANNUAL MEAN	573			277			444		
HIGHEST ANNUAL MEAN							878		
LOWEST ANNUAL MEAN							205		
HIGHEST DAILY MEAN	5110	Jan 9		5110	Jan 24		24600	Jun 23	1972
LOWEST DAILY MEAN	e38	Dec 31		e37	Jan 1,2		21	Aug 30	1966
ANNUAL SEVEN-DAY MINIMUM	a41	Dec 25		a39	Dec 27		24	Aug 28	1966
INSTANTANEOUS PEAK FLOW				b7490	Jan 24		b34600	Jun 23	1972
INSTANTANEOUS PEAK STAGE				9.18	Jan 24		c14.85	Jun 23	1972
INSTANTANEOUS LOW FLOW				d28	Dec 25		7.0	Sep 27	1932
ANNUAL RUNOFF (CFSM)	1.91			.92			1.48		
ANNUAL RUNOFF (INCHES)	25.87			12.48			20.06		
10 PERCENT EXCEEDS	1630			653			980		
50 PERCENT EXCEEDS	175			126			261		
90 PERCENT EXCEEDS	52			50			68		

- a Computed using estimated daily discharges.
- b From rating curve extended above 6,800 ft³/s on basis of contracted-opening measurement of peak flow.
- c From floodmark in gage.
- d Result of freeze-up.
- e Estimated.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999