

BROKENSTRAW CREEK BASIN

03015500 BROKENSTRAW CREEK AT YOUNGSVILLE, PA

LOCATION.--Lat 41°51'09", long 79°19'03", Warren County, Hydrologic Unit 05010001, on right bank 150 ft downstream from bridge on Main Street at Youngsville, 500 ft upstream from Matthews Run, and 3.7 mi upstream from mouth. Records include flow of Matthews Run.

DRAINAGE AREA.--321 mi², including that of Matthews Run.

PERIOD OF RECORD.--October 1909 to current year. Monthly discharge only for some periods, published in WSP 1305. Flow of Matthews Run included in records since October 1938.

REVISED RECORDS.--WSP 743: Drainage area. WSP 1083: 1913 (M). WSP 1275: 1920, 1932, 1936. WSP 1305: 1910-15, 1928-29.

GAGE.--Water-stage recorder. Datum of gage is 1,186.92 ft above sea level. Prior to Sept. 30, 1933, nonrecording gage at site 150 ft upstream at datum 2.00 ft higher. Oct. 1, 1933 to June 15, 1939, nonrecording gage at site 150 ft upstream, and June 16, 1939 to Sept. 30, 1961, water-stage recorder at present site, both at datum 1.00 ft higher.

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

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 24	0600	*6,280	*8.62	No other peak greater than base discharge.			

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	42	52	65	e86	499	803	929	279	196	74	57	58
2	41	51	68	e82	909	594	1090	252	218	85	59	53
3	41	50	69	e88	1950	966	874	231	242	77	50	50
4	43	49	70	e84	1670	1780	815	214	208	69	45	47
5	43	49	73	e80	1240	1210	1070	198	175	63	47	45
6	43	54	78	e80	923	954	873	187	150	98	53	45
7	43	58	84	e78	749	617	630	185	135	347	48	47
8	123	57	84	e78	617	510	507	215	127	133	46	45
9	128	58	78	e76	525	488	971	342	113	85	46	45
10	89	68	72	e74	605	444	1820	345	106	100	45	47
11	68	131	68	e74	608	384	1490	277	128	98	44	46
12	58	114	66	e72	1150	363	1150	235	187	82	44	44
13	52	101	63	e72	1420	329	846	210	119	70	43	43
14	54	86	63	e78	923	319	643	191	103	64	64	44
15	72	74	59	e70	703	304	521	169	109	60	57	45
16	76	69	65	e74	631	304	494	151	103	58	47	44
17	67	66	67	e82	788	425	898	139	93	56	43	43
18	60	63	64	e155	968	1400	1110	129	89	54	42	42
19	61	61	70	e370	730	1470	865	251	86	52	43	40
20	63	61	75	e520	530	947	682	324	81	52	63	41
21	64	63	144	e500	420	801	551	221	77	51	83	44
22	64	66	1020	e640	354	889	496	170	74	52	72	46
23	65	67	839	e1500	313	776	595	214	71	50	56	45
24	66	67	402	5600	307	744	1050	453	68	49	49	43
25	62	64	e280	4710	270	832	813	1140	68	47	48	43
26	60	64	e215	2840	252	718	575	1130	68	45	370	41
27	58	66	e160	1460	236	640	458	858	66	44	244	41
28	56	66	e130	1170	412	702	393	526	69	43	231	40
29	55	65	e110	1120	---	798	344	364	84	48	138	46
30	53	62	e100	834	---	842	302	281	88	55	86	204
31	53	---	e90	574	---	814	---	226	---	48	67	---
TOTAL	1923	2022	4891	23321	20702	23167	23855	10107	3501	2309	2430	1507
MEAN	62.0	67.4	158	752	739	747	795	326	117	74.5	78.4	50.2
MAX	128	131	1020	5600	1950	1780	1820	1140	242	347	370	204
MIN	41	49	59	70	236	304	302	129	66	43	42	40
CFSM	.19	.21	.49	2.34	2.30	2.33	2.48	1.02	.36	.23	.24	.16
IN.	.22	.23	.57	2.70	2.40	2.68	2.76	1.17	.41	.27	.28	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1999, BY WATER YEAR (WY)

MEAN	317	625	751	798	768	1252	1022	599	377	227	178	227
MAX	1413	1817	1724	2459	2248	2851	2715	1528	1535	1039	994	1428
(WY)	1991	1986	1978	1913	1976	1936	1947	1943	1928	1986	1956	1977
MIN	31.7	57.3	85.9	124	161	297	251	135	62.0	37.8	32.3	31.6
(WY)	1932	1931	1961	1918	1987	1915	1946	1934	1934	1934	1934	1936

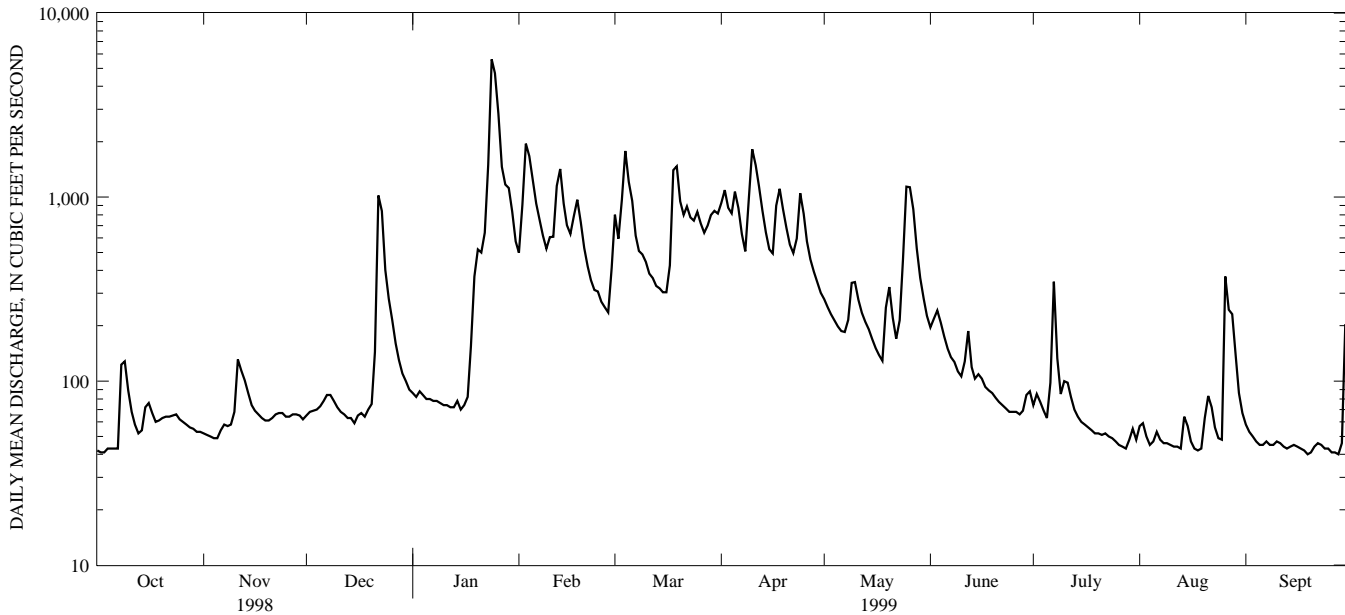
e Estimated.

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03015500 BROKENSTRAW CREEK AT YOUNGSVILLE, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1910 - 1999	
ANNUAL TOTAL	169373		119735			
ANNUAL MEAN	464		328		594	
HIGHEST ANNUAL MEAN					864	1956
LOWEST ANNUAL MEAN					307	1931
HIGHEST DAILY MEAN	9380	Jan 9	5600	Jan 24	14000	Mar 25 1913
LOWEST DAILY MEAN	41	Sep 21, Oct 2, 3	40	Sep 19, 28	19	Oct 14 1934
ANNUAL SEVEN-DAY MINIMUM	42	Sep 20	42	Oct 1	24	Oct 11 1934
INSTANTANEOUS PEAK FLOW			6280	Jan 24	ab18000	Mar 25 1913
INSTANTANEOUS PEAK STAGE			8.62	Jan 24	14.20	Mar 25 1913
INSTANTANEOUS LOW FLOW			40	Sep 19c	d19	Oct 14 1934
ANNUAL RUNOFF (CFSM)	1.45		1.02		1.85	
ANNUAL RUNOFF (INCHES)	19.63		13.88		25.15	
10 PERCENT EXCEEDS	1010		893		1440	
50 PERCENT EXCEEDS	110		86		303	
90 PERCENT EXCEEDS	48		45		67	

- a From rating curve extended above 6,300 ft³/s.
- b About.
- c Also Sept. 20, 28, 29.
- d Minimum observed.



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