

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)
Feb. 25	1400	4,520	7.33	Apr. 8	1900	*4,550	*7.35

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	202	97	414	e220	e160	922	339	267	193	214	320	72
2	131	476	362	e250	e148	1000	318	380	611	186	362	73
3	86	2540	357	1170	e145	821	476	366	621	193	716	82
4	77	2480	567	3530	e144	671	1960	297	340	345	666	70
5	71	1960	708	2970	e145	570	1880	277	272	254	379	67
6	67	1330	948	1880	e148	480	1280	268	542	192	342	64
7	61	1060	928	982	e150	421	856	245	480	162	573	61
8	56	656	686	718	e150	388	2960	228	349	141	455	59
9	63	450	521	603	e150	367	3490	216	270	146	328	58
10	69	366	641	629	e150	344	2550	244	208	380	297	58
11	67	329	979	972	e170	316	1350	276	184	362	368	73
12	61	302	762	973	e270	406	977	236	488	237	267	109
13	63	271	581	768	e450	414	793	214	706	178	218	104
14	214	244	1010	561	551	403	638	198	518	163	184	86
15	264	211	1860	501	674	419	537	176	477	172	157	121
16	182	192	1650	478	597	438	470	155	437	213	163	358
17	123	184	1050	351	469	693	420	144	470	232	136	273
18	122	163	737	340	416	604	418	365	599	202	123	184
19	111	150	556	353	383	521	440	3110	997	155	111	135
20	99	159	549	e310	343	474	431	2050	657	131	100	108
21	88	182	682	e320	311	413	1040	1200	595	123	92	135
22	81	185	e500	e350	316	367	1360	687	531	123	87	184
23	90	170	e340	e330	711	335	950	510	378	113	113	173
24	433	163	e300	e290	2040	307	681	521	317	101	146	189
25	549	166	e280	e270	4350	293	535	487	365	94	132	192
26	330	492	e260	e240	4050	286	443	365	353	88	103	166
27	218	1390	e245	e220	2780	278	383	297	476	83	90	131
28	160	1190	e230	e210	1970	291	353	262	367	81	84	110
29	130	708	e230	e190	1220	320	319	232	288	94	81	98
30	115	512	e220	e180	---	414	286	203	255	100	77	90
31	102	---	e220	e170	---	397	---	178	---	263	73	---
TOTAL	4485	18778	19373	21329	23561	14373	28933	14654	13344	5521	7343	3683
MEAN	145	626	625	688	812	464	964	473	445	178	237	123
MAX	549	2540	1860	3530	4350	1000	3490	3110	997	380	716	358
MIN	56	97	220	170	144	278	286	144	184	81	73	58
CFSM	.45	1.95	1.95	2.14	2.53	1.44	3.00	1.47	1.39	.55	.74	.38
IN.	.52	2.18	2.25	2.47	2.73	1.67	3.35	1.70	1.55	.64	.85	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2000, BY WATER YEAR (WY)

MEAN	315	625	750	796	769	1243	1022	598	377	227	179	226
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

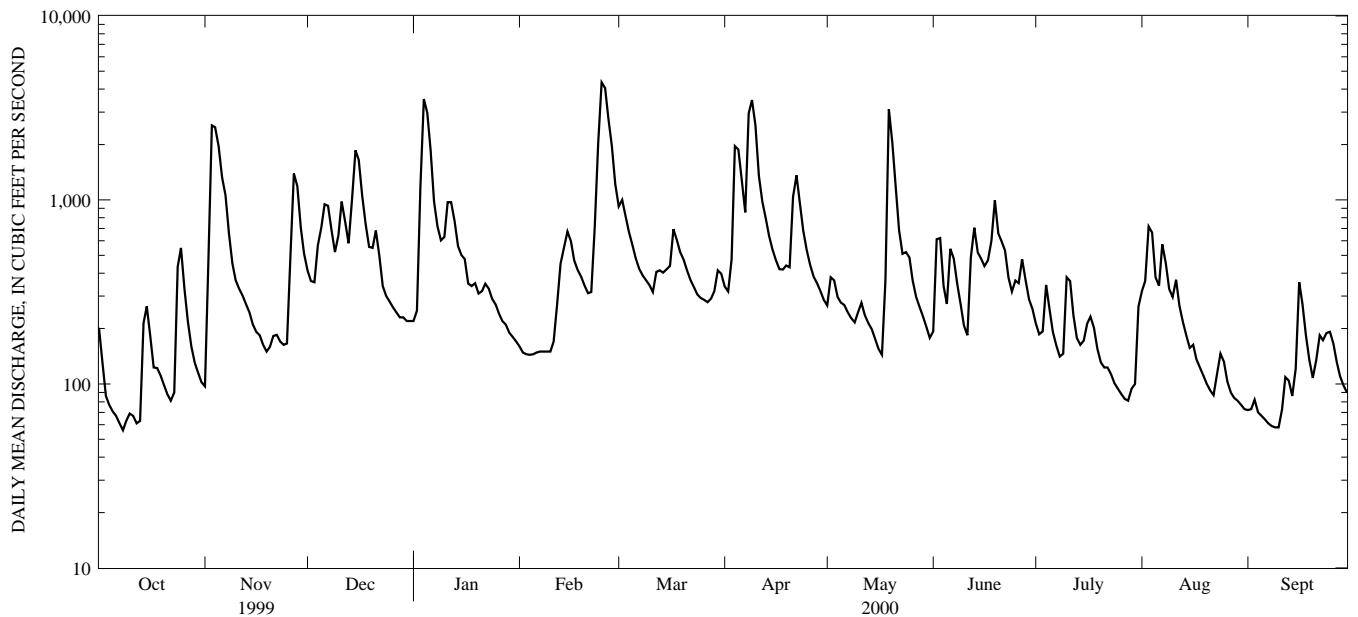
e Estimated.

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03015500 BROKENSTRAW CREEK AT YOUNGSVILLE, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1910 - 2000	
ANNUAL TOTAL	153535		175377			
ANNUAL MEAN	421		479		593	
HIGHEST ANNUAL MEAN					864	1956
LOWEST ANNUAL MEAN					307	1931
HIGHEST DAILY MEAN	5600	Jan 24	4350	Feb 25	14000	Mar 25 1913
LOWEST DAILY MEAN	40	Sep 19,28	56	Oct 8	19	Oct 14 1934
ANNUAL SEVEN-DAY MINIMUM	43	Sep 14	62	Sep 4	24	Oct 11 1934
INSTANTANEOUS PEAK FLOW			4550	Apr 8	ab 18000	Mar 25 1913
INSTANTANEOUS PEAK STAGE			7.35	Apr 8	c 14.20	Mar 25 1913
INSTANTANEOUS LOW FLOW			55	Oct 8	19	Oct 14 1934
ANNUAL RUNOFF (CFSM)	1.31		1.49		1.85	
ANNUAL RUNOFF (INCHES)	17.79		20.32		25.10	
10 PERCENT EXCEEDS	991		980		1430	
50 PERCENT EXCEEDS	214		304		303	
90 PERCENT EXCEEDS	47		91		67	

- a** From rating curve extended above 6,300 ft³/s.
- b** About.
- c** Minimum observed.



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