

BUSH KILL BASIN

01439500 BUSH KILL AT SHOEMAKERS, PA

LOCATION.--Lat 41°05'17", long 75°02'17", Monroe County, Hydrologic Unit 02040104, on right bank 30 ft downstream from bridge on township route 523, 0.1 mi downstream from Saw Creek, 0.7 mi northwest of Shoemakers, and 2.0 mi southwest of Bushkill.

DRAINAGE AREA.--117 mi².

PERIOD OF RECORD.--October 1908 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1928, published as Bushkill Creek near Shoemakers; October 1928 to September 1952, published as Bushkill Creek at Shoemakers.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1202: 1921, 1932(M), 1933, 1935-36, 1938(M), 1939-40, 1942, 1945, 1946(M), 1948(M). WSP 1302: 1909-15, 1920(M), 1922-29. WDR PA-89-1: 1988.

GAGE.--Water-stage recorder. Datum of gage is 421.13 ft above sea level. Sept. 19, 1908, to Aug. 12, 1938, nonrecording gage, and Aug. 13, 1938, to June 20, 1956, water-stage recorder at site 50 ft upstream 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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 24	2000	*1,360	*3.68	Sept. 16	2100	1,190	3.49

**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	7.6	16	30	e20	e280	326	287	147	152	26	8.2	6.1
2	7.6	15	28	e24	e390	314	292	139	139	25	7.6	5.6
3	7.5	14	24	e40	638	281	272	132	132	26	6.6	5.2
4	7.6	14	23	e46	576	576	249	133	127	24	5.7	5.1
5	7.4	13	23	e43	510	586	233	134	118	22	5.2	5.3
6	7.5	13	25	e40	454	e470	213	128	109	19	4.8	5.8
7	7.4	12	25	e37	411	e400	201	126	101	17	4.8	5.5
8	15	12	25	e35	385	e350	189	159	101	15	5.0	5.6
9	36	12	27	e50	345	e330	197	170	90	14	4.9	8.3
10	48	12	27	e58	324	e310	259	150	79	14	4.8	28
11	35	16	25	e76	300	e290	230	135	75	14	4.5	36
12	23	27	25	e80	305	e270	238	129	68	17	4.4	22
13	19	28	24	e80	407	e250	221	126	64	14	4.5	16
14	21	23	23	e70	357	e230	198	122	64	12	10	12
15	41	20	22	e67	313	254	185	116	70	11	21	11
16	31	19	21	e66	299	237	185	108	62	11	15	376
17	24	18	21	e70	293	249	213	102	55	11	12	836
18	20	17	20	e160	337	275	200	101	65	10	9.7	448
19	19	17	20	e500	365	260	183	160	61	10	7.9	319
20	17	17	19	e450	331	236	183	260	53	10	8.0	223
21	16	18	18	e390	e260	246	186	192	47	9.2	11	183
22	16	19	19	e430	e220	670	180	162	43	9.4	9.9	163
23	16	18	e19	e470	e210	614	187	158	38	9.3	8.7	140
24	15	18	e18	e900	e200	534	247	251	35	9.3	8.4	125
25	15	18	e18	1160	e190	478	221	385	32	8.9	7.8	111
26	14	32	e17	861	e190	427	204	329	30	8.0	12	94
27	14	67	e16	676	191	386	188	291	29	7.3	11	80
28	14	48	e17	580	213	386	177	254	27	6.9	11	72
29	16	40	e18	509	---	373	168	224	29	7.6	10	66
30	16	34	e17	e390	---	342	154	196	29	10	8.4	134
31	16	---	e18	e310	---	314	---	172	---	8.2	7.2	---
TOTAL	569.6	647	672	8688	9294	11264	6340	5391	2124	416.1	260.0	3547.5
MEAN	18.4	21.6	21.7	280	332	363	211	174	70.8	13.4	8.39	118
MAX	48	67	30	1160	638	670	292	385	152	26	21	836
MIN	7.4	12	16	20	190	230	154	101	27	6.9	4.4	5.1
CFSM	.16	.18	.19	2.40	2.84	3.11	1.81	1.49	.61	.11	.07	1.01
IN.	.18	.21	.21	2.76	2.96	3.58	2.02	1.71	.68	.13	.08	1.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1999, BY WATER YEAR (WY)

MEAN	123	211	263	261	276	434	433	305	192	129	96.6	92.9
MAX	773	643	841	807	706	1119	1002	773	919	747	864	569
(WY)	1956	1933	1997	1979	1909	1936	1993	1989	1972	1945	1955	1933
MIN	7.74	13.6	21.7	44.2	39.7	156	141	90.7	32.8	13.4	8.33	4.39
(WY)	1965	1965	1999	1981	1934	1981	1985	1941	1962	1999	1964	1964

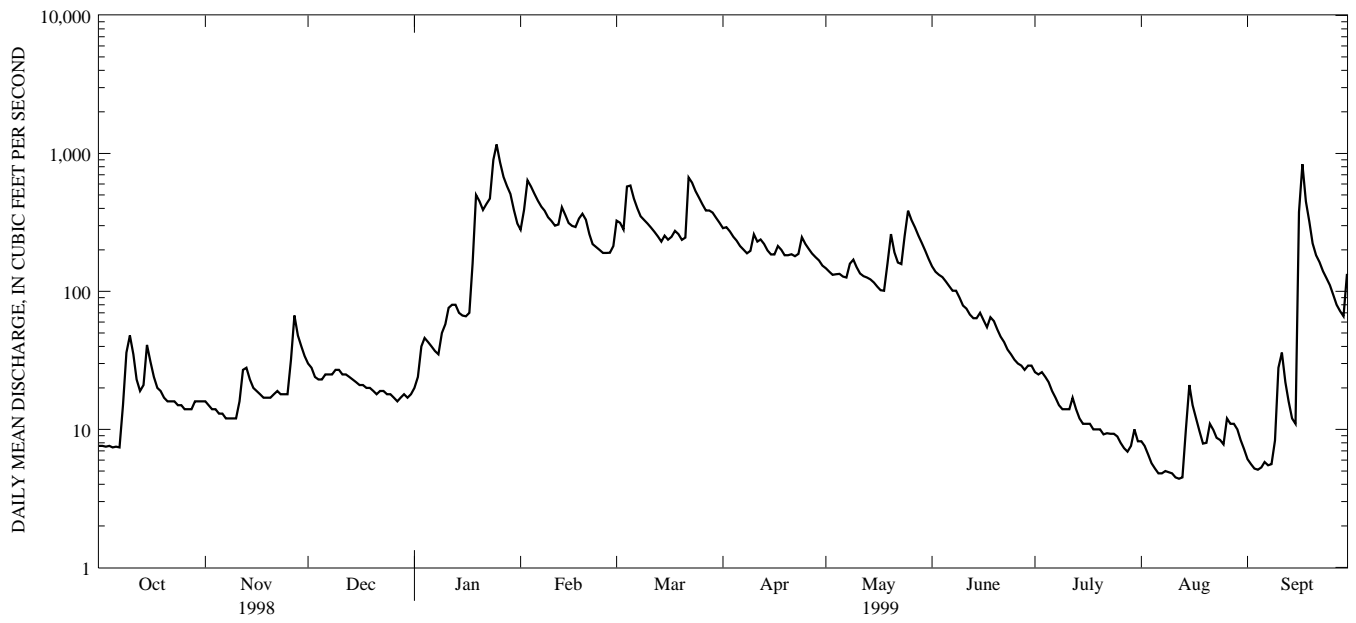
e Estimated.

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01439500 BUSH KILL AT SHOEMAKERS, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1909 - 1999	
ANNUAL TOTAL	76911.1		49213.2		234	
ANNUAL MEAN	211		135		419	
HIGHEST ANNUAL MEAN					1928	
LOWEST ANNUAL MEAN					95.4	
HIGHEST DAILY MEAN	1360	May 12	1160	Jan 25	11800	Aug 19 1955
LOWEST DAILY MEAN	7.4	Oct 5,7	4.4	Aug 12	2.6	Sep 25 1964
ANNUAL SEVEN-DAY MINIMUM	7.5	Oct 1	4.7	Aug 7	2.7	Sep 21 1964
INSTANTANEOUS PEAK FLOW			1360	Jan 24	a 23400	Aug 19 1955
INSTANTANEOUS PEAK STAGE			3.68	Jan 24	b 13.95	Aug 19 1955
INSTANTANEOUS LOW FLOW					2.6	Sep 25 1964
ANNUAL RUNOFF (CFSM)	1.80		1.15		2.00	
ANNUAL RUNOFF (INCHES)	24.45		15.65		27.22	
10 PERCENT EXCEEDS	544		368		522	
50 PERCENT EXCEEDS	97		46		160	
90 PERCENT EXCEEDS	12		8.2		26	

a From rating curve extended above 2,600 ft³/s on basis of slope-area measurement of peak flow.
b From floodmark.



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