

BEAVER RIVER BASIN

03106300 MUDDY CREEK NEAR PORTERSVILLE, PA

LOCATION.--Lat 40°57'47", long 80°07'31", Butler County, Hydrologic Unit 05030105, on left bank 1,000 ft downstream of Lake Arthur Dam, 0.2 mi north of U.S. Highway 422, and 3 mi north of Portersville.

DRAINAGE AREA.--51.2 mi².

PERIOD OF RECORD.--March 1963 to September 1993, July 1994 to current year.

REVISED RECORDS.--WDR PA-79-3: 1978.

GAGE.--Water-stage recorder. Datum of gage is 1,160.91 ft above sea level (Pennsylvania Department of Environmental Protection bench mark). Prior to Apr. 8, 1963 nonrecording gage at site 2,000 ft downstream at different datum. Apr. 8 to May 1, 1963, nonrecording gage and May 2, 1963 to Sept. 30, 1980, water-stage recorder at site 1,000 ft downstream at datum 5.71 ft lower.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some regulation from October 1966 to May 1969 and completely regulated thereafter by Lake Arthur (station 03106280) 1,000 ft upstream. Several measurements of water temperature were made during the year. Satellite telemetry at station.

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	11	14	115	88	186	7.2	3.3	59	31	5.0	12	2.3
2	13	13	149	81	220	6.7	2.9	56	29	24	9.3	2.2
3	16	8.7	180	80	220	6.4	e2.7	52	25	26	7.5	2.1
4	14	7.5	181	80	219	e6.9	e2.8	47	24	26	6.0	2.2
5	10	7.2	181	79	218	7.1	2.9	43	21	23	5.1	2.8
6	8.3	6.7	181	74	215	6.8	2.9	41	19	20	4.4	3.3
7	6.2	7.8	181	68	214	e7.0	2.6	37	18	16	3.8	3.3
8	17	12	178	64	214	7.1	2.3	37	16	13	4.3	e3.3
9	11	17	177	73	214	5.4	e2.3	34	15	10	3.9	3.3
10	9.0	23	176	76	213	4.3	e2.4	33	15	12	3.6	e3.0
11	8.3	27	175	76	210	3.3	e2.4	31	13	11	3.1	3.1
12	8.4	23	175	73	209	2.6	e2.4	28	11	9.5	e3.1	3.7
13	10	25	175	81	209	2.2	e2.7	27	9.0	7.4	3.2	3.8
14	11	27	174	92	209	2.1	e2.8	25	7.3	6.3	3.7	3.9
15	13	29	172	133	209	2.0	e2.8	22	6.3	5.4	3.5	4.0
16	16	30	170	125	209	2.4	e3.0	19	5.7	4.7	2.9	3.9
17	18	30	167	119	208	4.1	e3.1	17	4.6	4.5	2.5	4.0
18	18	31	167	154	207	e4.3	e3.3	20	3.9	4.2	2.3	3.8
19	23	32	166	148	183	e4.4	e3.5	39	4.0	3.7	2.2	e4.8
20	14	34	166	132	115	4.7	e5.8	39	4.1	3.5	2.6	4.8
21	14	35	168	159	95	4.2	8.1	37	3.8	3.4	2.9	4.8
22	14	35	193	171	76	3.7	15	36	3.6	3.5	2.9	4.4
23	15	34	171	190	44	3.3	29	35	3.6	3.4	2.9	e3.8
24	18	34	167	194	24	3.2	41	43	3.6	3.5	2.9	3.6
25	28	39	166	176	13	3.1	48	51	3.6	3.6	3.8	3.1
26	27	54	165	169	6.0	3.0	51	48	3.6	3.7	3.8	e3.6
27	e27	74	164	168	e6.4	3.0	55	45	4.0	3.8	3.9	4.1
28	e27	180	164	170	e6.5	3.2	90	42	5.5	5.4	3.7	4.4
29	27	247	163	169	---	3.2	69	38	5.1	14	3.2	6.5
30	27	206	154	168	---	3.3	63	35	5.2	13	3.3	7.1
31	16	---	117	167	---	3.4	---	33	---	12	3.0	---
TOTAL	495.2	1342.9	5198	3797	4371.9	133.6	528.0	1149	323.5	304.5	125.3	113.0
MEAN	16.0	44.8	168	122	156	4.31	17.6	37.1	10.8	9.82	4.04	3.77
MAX	28	247	193	194	220	7.2	90	59	31	26	12	7.1
MIN	6.2	6.7	115	64	6.0	2.0	2.3	17	3.6	3.4	2.2	2.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1999, BY WATER YEAR (WY)

MEAN	29.7	62.9	103	97.3	108	114	108	75.5	54.5	32.7	21.4	22.4
MAX	268	248	268	212	220	298	200	187	332	155	127	227
(WY)	1976	1973	1973	1965	1990	1964	1972	1983	1989	1990	1980	1975
MIN	1.11	1.50	2.41	2.40	31.0	4.31	2.78	2.97	1.53	3.01	1.98	.61
(WY)	1964	1970	1970	1970	1980	1999	1986	1986	1969	1965	1966	1969

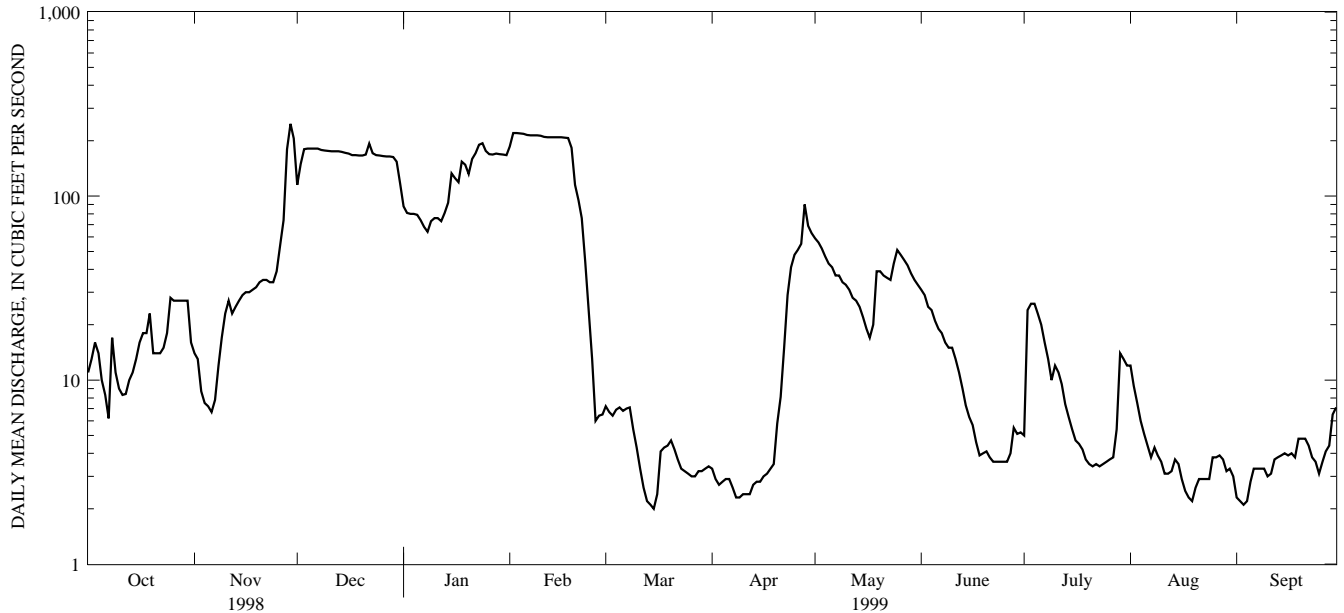
e Estimated.

BEAVER RIVER BASIN

03106300 MUDDY CREEK NEAR PORTERSVILLE, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR			FOR 1999 WATER YEAR			WATER YEARS 1963 - 1999		
ANNUAL TOTAL	21701.3			17881.9					
ANNUAL MEAN	59.5			49.0			69.4		
HIGHEST ANNUAL MEAN							98.9		
LOWEST ANNUAL MEAN							24.1		
HIGHEST DAILY MEAN	278	Jan 10		247	Nov 29		1450	Mar 10	1964
LOWEST DAILY MEAN	3.8	Mar 6	7	2.0	Mar 15		.50	Sep 1	1969
ANNUAL SEVEN-DAY MINIMUM	4.0	Mar 1		a2.4	Apr 7		.54	Aug 29	1969
INSTANTANEOUS PEAK FLOW				252	Nov 29		b1640	Mar 10	1964
INSTANTANEOUS PEAK STAGE				4.54	Nov 29		8.18	Mar 10	1964
INSTANTANEOUS LOW FLOW							.40	Sep 17	1966
10 PERCENT EXCEEDS	172			175			180		
50 PERCENT EXCEEDS	19			14			37		
90 PERCENT EXCEEDS	6.5			3.0			3.8		

a Computed using estimated daily discharges.
 b From rating curve extended above 820 ft³/s on basis of slope-area measurement of peak flow.



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