

## 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 mi<sup>2</sup>.

**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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	6.2	150	36	68	75	50	76	e56	8.5	e5.0	e4.0
2	3.1	6.4	148	29	68	36	49	69	e56	10	e4.9	e4.2
3	3.5	6.5	147	19	68	36	49	62	e56	8.9	e4.8	e4.4
4	4.7	6.3	146	19	67	37	47	56	e55	8.7	e4.7	4.9
5	4.8	6.5	144	e19	67	37	45	50	e55	8.4	e4.7	5.3
6	7.3	6.7	144	e19	67	37	52	47	e55	7.5	e4.6	5.1
7	5.0	6.6	106	e18	67	21	78	39	e55	7.3	e4.6	4.9
8	7.2	6.3	53	e18	67	4.9	94	33	e55	8.5	e4.6	4.9
9	8.2	6.8	53	e18	68	4.9	103	31	e55	8.4	e4.5	4.9
10	8.6	8.6	53	e18	68	5.0	116	29	e55	8.0	e4.4	5.1
11	11	9.6	53	e18	68	5.0	126	30	e54	7.5	e4.4	5.2
12	10	10	54	e18	106	5.2	116	33	e54	7.4	e4.4	6.1
13	10	9.7	48	e18	143	6.7	107	32	e54	7.1	e4.3	6.2
14	10	9.4	47	e17	143	6.7	100	30	e54	7.0	e4.3	6.4
15	10	7.8	46	e17	143	7.3	100	29	e54	7.0	e4.2	6.3
16	12	6.9	46	e17	136	9.6	138	29	36	6.8	e4.2	5.9
17	12	6.1	48	e17	136	15	157	27	28	6.4	e4.1	5.9
18	12	6.2	75	17	135	15	159	25	19	e6.2	e4.1	6.2
19	10	6.1	129	17	135	17	159	24	11	e6.0	e4.1	6.9
20	8.7	5.0	128	17	135	20	165	26	6.5	e6.0	e4.1	7.5
21	9.3	4.7	127	17	134	26	177	34	6.5	e5.9	e4.0	7.0
22	8.7	4.4	127	17	134	37	170	49	8.7	e5.9	e4.0	7.4
23	8.3	4.5	127	17	133	53	163	57	7.6	e5.8	e4.0	6.4
24	9.9	4.3	126	17	133	55	148	e56	7.0	e5.7	e4.0	5.5
25	10	5.1	126	17	133	49	140	e56	6.2	e5.6	e4.0	5.0
26	9.5	4.0	99	26	133	52	126	e56	5.4	e5.5	e4.0	4.2
27	8.7	35	56	42	132	54	114	e56	5.0	e5.4	e4.0	4.2
28	9.3	75	47	42	132	54	102	e56	4.8	e5.4	e4.0	4.9
29	7.9	105	36	51	---	52	92	e56	4.7	e5.3	e4.0	3.9
30	6.9	152	36	69	---	51	83	e56	5.3	e5.2	e4.0	4.0
31	6.4	---	36	70	---	51	---	e56	---	e5.1	e4.0	---
TOTAL	256.4	537.7	2761	771	3019	935.3	3325	1365	984.7	212.4	133.0	162.8
MEAN	8.27	17.9	89.1	24.9	108	30.2	111	44.0	32.8	6.85	4.29	5.43
MAX	12	152	150	70	143	75	177	76	56	10	5.0	7.5
MIN	3.1	4.0	36	17	67	4.9	45	24	4.7	5.1	4.0	3.9

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2001, BY WATER YEAR (WY)

MEAN	28.4	60.1	102	94.7	106	110	109	73.8	53.5	31.6	20.6	21.5
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.

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03106300 MUDDY CREEK NEAR PORTERSVILLE, PA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1963 - 2001	
ANNUAL TOTAL	15079.2		14463.3			
ANNUAL MEAN	41.2		39.6		67.8	
HIGHEST ANNUAL MEAN					98.9	1973
LOWEST ANNUAL MEAN					24.1	1970
HIGHEST DAILY MEAN	290	Apr 10	177	Apr 21	1450	Mar 10 1964
LOWEST DAILY MEAN	3.1	Oct 2	3.1	Oct 2	.50	Sep 1 1969
ANNUAL SEVEN-DAY MINIMUM	a4.2	Sep 29	a4.0	Aug 21	.54	Aug 29 1969
MAXIMUM PEAK FLOW			182	Apr 21	b1640	Mar 10 1964
MAXIMUM PEAK STAGE			c4.03	Apr 21	8.18	Mar 10 1964
INSTANTANEOUS LOW FLOW					.40	Sep 17 1966
10 PERCENT EXCEEDS	111		127		176	
50 PERCENT EXCEEDS	18		17		36	
90 PERCENT EXCEEDS	5.3		4.5		3.8	

- a Computed using estimated daily discharges.
- b From rating curve extended above 820 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.
- c Maximum gage height, 4.25 ft., Nov. 29 (backwater from beaver dam).

