



2005 Water Year  
BEAVER RIVER BASIN  
03106300 Muddy Creek near Portersville, PA

Latitude: 40° 57' 47"

Longitude: 080° 07' 31"

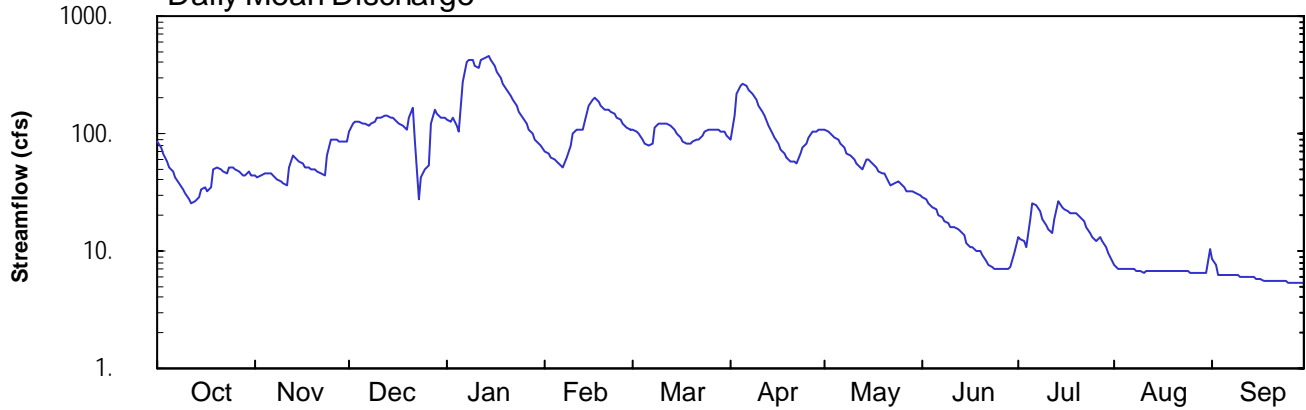
Hydrologic Unit Code: 05030105

Butler County

Datum: 1160.91 feet

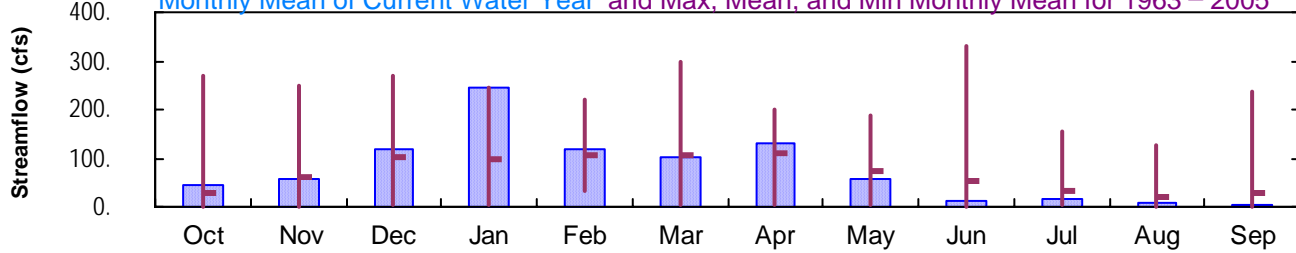
Drainage Area: 51.2 mi<sup>2</sup>

### Daily Mean Discharge

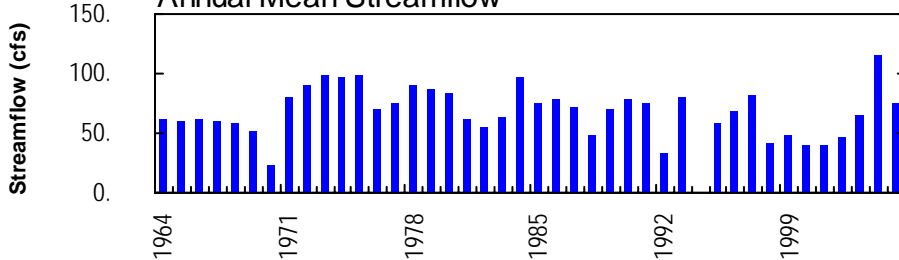


### Monthly Statistics

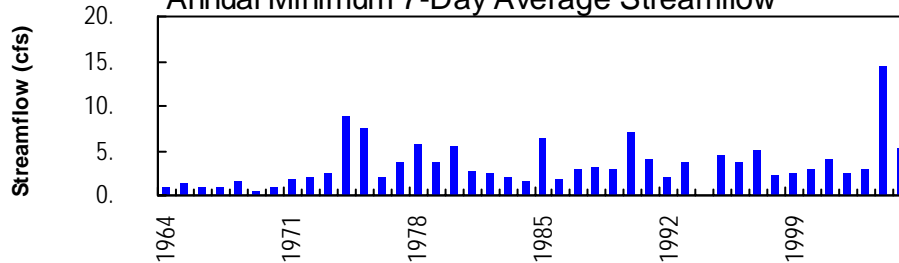
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1963 – 2005



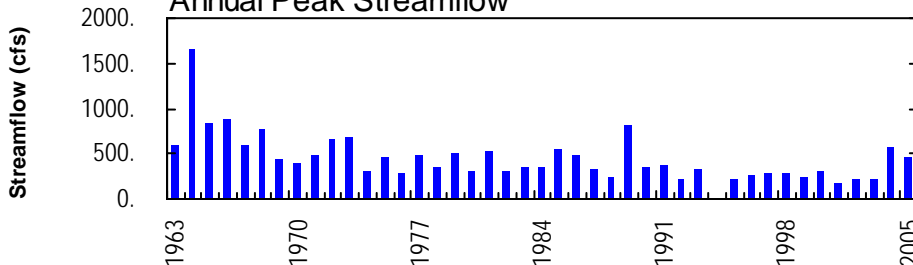
### Annual Mean Streamflow



### Annual Minimum 7-Day Average Streamflow



### Annual Peak Streamflow



## 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 National Geodetic Vertical Datum of 1929 (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 good 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 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	44	104	129	72	108	90	109	29	13	7.7	e8.6
2	76	42	122	126	67	104	144	105	28	13	7.1	e7.6
3	68	45	126	136	63	98	215	100	26	12	7.0	e6.3
4	59	46	126	117	60	90	255	94	23	11	7.0	e6.3
5	52	45	122	104	57	83	267	88	23	19	7.0	e6.3
6	47	46	120	281	53	79	257	82	21	26	7.1	e6.3
7	43	44	117	408	52	83	240	76	19	25	7.1	e6.3
8	38	40	121	429	62	114	219	69	18	22	e6.9	e6.2
9	34	40	124	416	78	124	197	65	17	19	e6.8	e6.2
10	31	38	135	378	99	124	174	60	16	17	e6.6	e6.1
11	28	36	138	364	107	124	154	55	16	15	e6.8	e6.0
12	26	51	142	416	109	123	139	51	15	14	e6.8	e6.0
13	26	66	140	443	108	116	118	50	14	19	e6.7	e6.0
14	29	62	138	450	124	108	101	60	13	26	e6.7	e6.0
15	33	58	134	424	175	100	93	60	12	24	e6.7	e5.9
16	35	55	128	382	196	93	82	56	11	23	e6.7	e5.8
17	33	52	120	337	199	87	73	53	11	22	e6.7	e5.7
18	35	51	116	303	190	84	67	48	10	21	e6.8	e5.6
19	50	50	110	270	174	82	62	46	9.8	21	e6.8	e5.6
20	52	49	136	238	161	85	58	46	9.1	21	e6.7	e5.5
21	49	48	164	209	159	90	57	39	8.3	20	e6.7	e5.5
22	48	46	85	191	155	90	56	36	7.7	18	e6.7	e5.5
23	46	45	27	171	146	95	66	37	7.4	16	e6.7	e5.5
24	51	64	42	152	138	104	75	39	7.1	14	e6.7	e5.5
25	51	89	50	135	131	107	84	37	7.1	13	e6.6	e5.4
26	49	89	54	122	121	108	92	34	7.0	12	e6.6	e5.4
27	47	87	120	110	113	106	103	32	7.1	13	e6.5	e5.4
28	44	87	159	100	108	106	105	33	7.1	12	e6.5	e5.4
29	44	87	147	90	---	104	107	33	7.4	11	e6.5	e5.4
30	48	86	139	83	---	103	110	31	9.5	9.7	e6.5	e5.3
31	44	---	134	78	---	95	---	30	---	8.4	e10	---
TOTAL	1402	1688	3640	7592	3277	3117	3860	1754	416.6	530.1	213.7	178.6
MEAN	45.2	56.3	117	245	117	101	129	56.6	13.9	17.1	6.89	5.95
MAX	86	89	164	450	199	124	267	109	29	26	10	8.6
MIN	26	36	27	78	52	79	56	30	7.0	8.4	6.5	5.3

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2005, BY WATER YEAR (WY)

MEAN	28.8	59.4	103	99.0	105	107	109	74.1	54.0	31.8	21.8	27.9
MAX	268	248	268	245	220	298	200	187	332	155	127	238
(WY)	1976	1973	1973	2005	1990	1964	1972	1983	1989	1990	1980	2004
MIN	1.11	1.50	2.41	2.40	31.0	4.31	2.78	2.97	1.53	3.01	1.98	0.61
(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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1963 - 2005	
ANNUAL TOTAL	37960		27669.0		68.5	
ANNUAL MEAN	104		75.8		116	
HIGHEST ANNUAL MEAN					2004	
LOWEST ANNUAL MEAN					1970	
HIGHEST DAILY MEAN	565	Sep 19	450	Jan 14	1450	Mar 10 1964
LOWEST DAILY MEAN	12	Jul 25 <sup>a</sup>	<sup>e</sup> 5.3	Sep 30	0.50	Sep 1 1969
ANNUAL SEVEN-DAY MINIMUM	15	Jul 19	<sup>b</sup> 5.4	Sep 24	0.54	Aug 29 1969
MAXIMUM PEAK FLOW			458	Jan 14	<sup>c</sup> 1640	Mar 10 1964
MAXIMUM PEAK STAGE			5.85	Jan 14	8.18	Mar 10 1964
INSTANTANEOUS LOW FLOW					0.40	Sep 17 1966
10 PERCENT EXCEEDS	173		154		175	
50 PERCENT EXCEEDS	89		51		40	
90 PERCENT EXCEEDS	28		6.7		4.0	

<sup>a</sup> Also Aug. 18.

<sup>b</sup> Computed using estimated daily discharges.

<sup>c</sup> From rating curve extended above 820 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.

<sup>e</sup> Estimated.

