



2005 Water Year  
BEAVER RIVER BASIN  
03106500 Slippery Rock Creek at Wurtemberg, PA

Latitude: 40° 53 ' 02"

Longitude: 080° 14 ' 02"

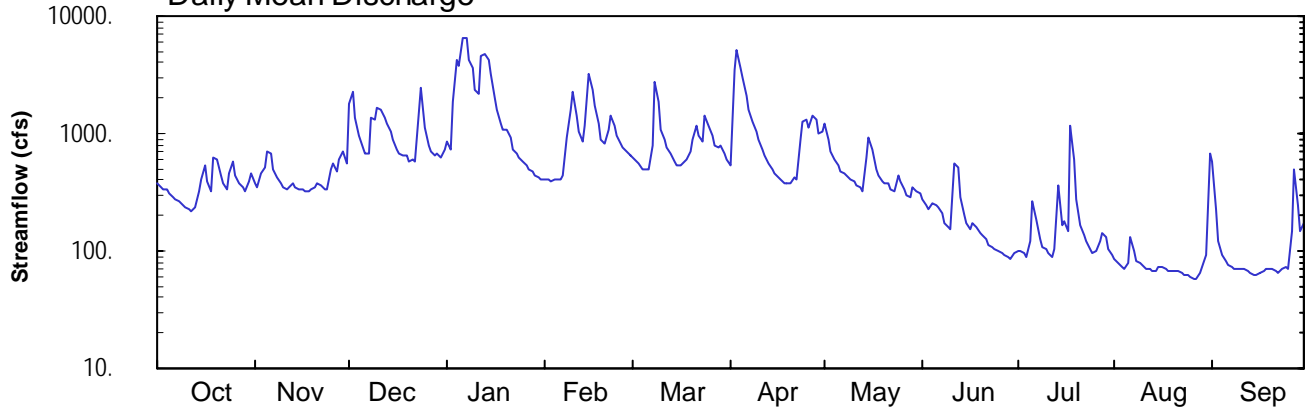
Hydrologic Unit Code: 05030105

Lawrence County

Datum: 832.06 feet

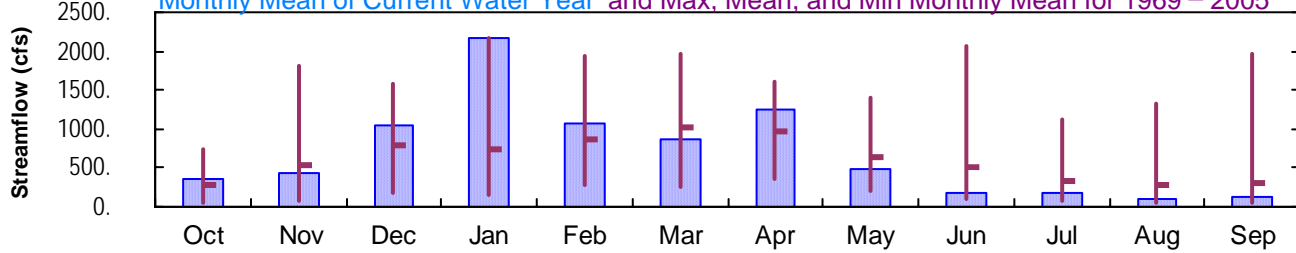
Drainage Area: 398. mi<sup>2</sup>

### Daily Mean Discharge

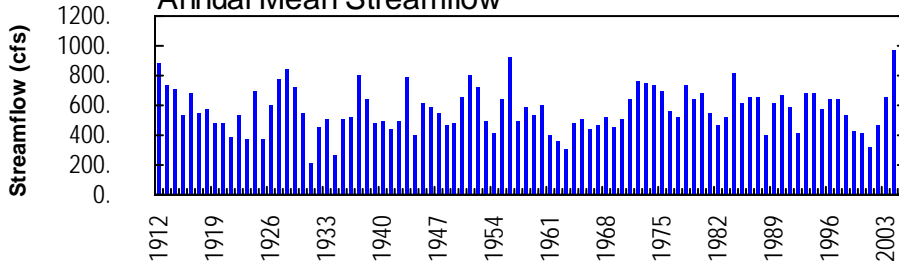


### Monthly Statistics

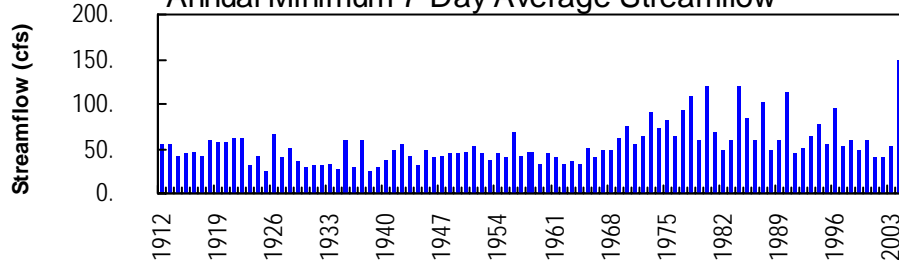
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1969 – 2005



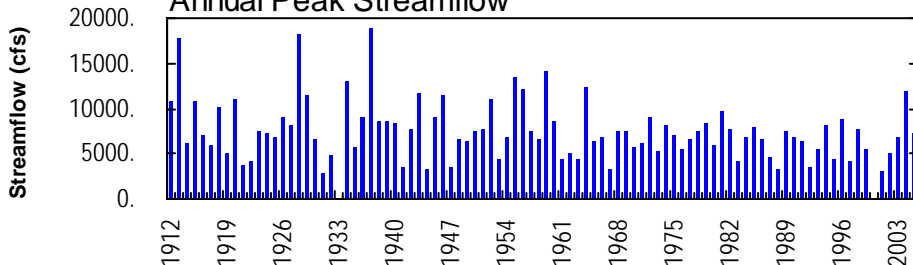
### Annual Mean Streamflow



### Annual Minimum 7-Day Average Streamflow



### Annual Peak Streamflow



NO PHOTOS AVAILABLE FOR THIS SITE

## BEAVER RIVER BASIN

03106500 SLIPPERY ROCK CREEK AT WURTEMBERG, PA  
(Pennsylvania Water-Quality Network Station)

**LOCATION.**--Lat 40°53'02", long 80°14'02", Lawrence County, Hydrologic Unit 05030105, on left bank at downstream side of highway bridge at Camp Allegheny, 2 mi north of Wurtemburg, and 2.8 mi upstream from mouth.

**DRAINAGE AREA.**--398 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1911 to current year. Monthly discharge only for some periods, published in WSP 1305.

**REVISED RECORDS.**--WSP 743: Drainage area. WSP 1305: 1914-18, 1920-22, 1923-24 (M), 1925-28, 1930. WSP 1385: 1932, 1935, 1936 (M), 1937-39. WSP 1625: 1955.

**GAGE.**--Water-stage recorder. Datum of gage is 832.06 ft above National Geodetic Vertical Datum of 1929. Jan. 1, 1912 to Sept. 30, 1922, nonrecording gage at site 1.5 mi downstream at datum 13.77 ft lower and Oct. 1, 1922 to Sept. 30, 1940, nonrecording gage at site 2 mi downstream at datum 18.92 ft lower.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Some regulation since May 1969 by Lake Arthur (station 03106280) 13 mi upstream. 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 3,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Jan. 6	2000	*7,310	*7.41	Apr. 3	0800	5,530	6.21
Jan. 12	1800	5,620	6.27				

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	377	384	1800	862	e404	e621	528	1210	273	100	84	577
2	350	350	2240	726	e404	e588	3430	891	243	101	79	225
3	340	461	1360	1840	e398	e556	5180	715	225	96	74	121
4	335	506	954	4260	e400	e503	3580	605	251	89	71	94
5	306	691	760	3720	e400	e493	2980	532	248	122	78	84
6	289	669	669	6580	e400	e489	2140	482	238	268	129	78
7	275	497	676	6540	e437	e795	1600	452	214	185	100	74
8	261	424	1350	4230	e918	2750	1270	439	174	128	83	71
9	248	377	1330	3580	e1610	1880	1030	409	157	110	78	71
10	233	349	1690	2330	2240	1070	875	385	152	106	73	70
11	224	336	1600	2220	1410	895	740	362	559	97	71	70
12	218	342	1350	4640	1060	768	640	342	512	89	70	67
13	236	380	1200	4760	872	687	560	325	284	102	69	65
14	326	353	1030	4210	1160	578	499	630	203	356	69	63
15	410	335	872	3160	3210	529	452	931	174	167	72	63
16	543	331	726	2060	2340	537	423	740	156	182	72	64
17	386	323	687	1600	1760	556	404	501	175	150	69	68
18	327	318	640	1230	1230	606	384	439	159	1150	67	71
19	626	329	647	1100	884	700	372	391	143	591	67	71
20	602	345	575	1080	827	884	373	376	134	276	67	71
21	439	377	611	914	1060	1180	424	374	127	165	68	68
22	373	357	573	e737	1410	952	404	329	111	134	66	66
23	340	334	1510	e666	1160	849	905	319	108	120	64	71
24	455	338	2450	e620	956	1410	1240	442	103	106	62	74
25	570	504	1110	e576	824	1150	1300	399	98	97	59	71
26	439	563	802	e540	e760	944	1140	341	94	100	59	145
27	375	482	716	e505	e690	793	1420	297	92	122	59	503
28	343	609	640	e476	e653	754	1310	292	89	140	65	245
29	328	713	667	e446	---	778	1010	350	87	129	84	148
30	395	560	628	e424	---	679	1030	328	97	104	94	173
31	450	---	726	e414	---	591	---	304	---	93	665	---
TOTAL	11419	12937	32589	67046	29877	26565	37643	14932	5680	5775	2887	3702
MEAN	368	431	1051	2163	1067	857	1255	482	189	186	93.1	123
MAX	626	713	2450	6580	3210	2750	5180	1210	559	1150	665	577
MIN	218	318	573	414	398	489	372	292	87	89	59	63
CFSM	0.93	1.08	2.64	5.43	2.68	2.15	3.15	1.21	0.48	0.47	0.23	0.31
IN.	1.07	1.21	3.05	6.27	2.79	2.48	3.52	1.40	0.53	0.54	0.27	0.35

e Estimated.

BEAVER RIVER BASIN

03106500 SLIPPERY ROCK CREEK AT WURTEMBERG, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2005, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	269	535	790	731	865	1024	964	640	519	343	276	304
MAX (WY)	1976	1822	1576	2163	1949	1972	1608	1400	2075	1120	1323	1956
MIN (WY)	1976	1986	1978	2005	1981	1972	1987	1983	1989	2003	1980	2004
MIN (WY)	56.5	82.2	178	153	289	243	345	215	112	84.8	51.1	53.0
(WY)	1992	1992	1990	1977	1987	1969	1971	1976	1992	1998	2001	1999

SUMMARY STATISTICS FOR 2004 CALENDAR YEAR FOR 2005 WATER YEAR WATER YEARS 1969 - 2005

ANNUAL TOTAL		329381		251052								
ANNUAL MEAN		900		688						603		
HIGHEST ANNUAL MEAN										978		2004
LOWEST ANNUAL MEAN										317		2001
HIGHEST DAILY MEAN				10700	Sep 9		6580	Jan 6		10700	Sep 9	2004
LOWEST DAILY MEAN				123	Aug 18		59	Aug 25-27		36	Sep 14	2002
ANNUAL SEVEN-DAY MINIMUM				150	Aug 12		62	Aug 22		39	Aug 13	2001
MAXIMUM PEAK FLOW							7310	Jan 6		11800	Sep 9	2004
MAXIMUM PEAK STAGE							7.41	Jan 6		9.48	Sep 9	2004
INSTANTANEOUS LOW FLOW							59	Aug 25-27		36	Sep 13	2002
ANNUAL RUNOFF (CFSM)				2.26			1.73			1.52		
ANNUAL RUNOFF (INCHES)				30.79			23.47			20.59		
10 PERCENT EXCEEDS				1710			1410			1360		
50 PERCENT EXCEEDS				576			409			371		
90 PERCENT EXCEEDS				247			73			92		

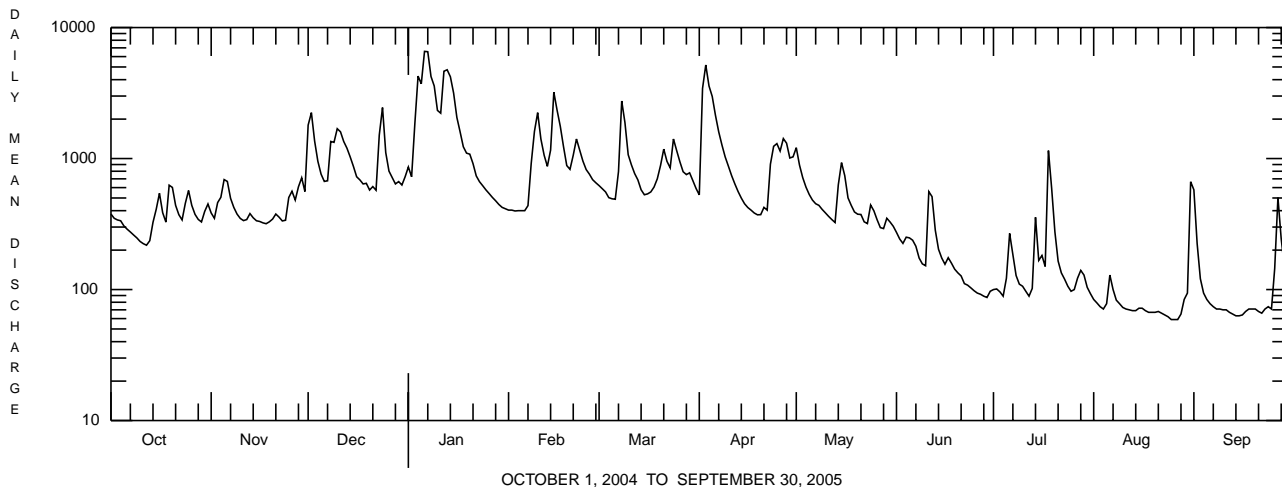
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1968, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	237	379	589	839	856	1203	911	653	386	237	191	160
MAX (WY)	1391	1329	2088	3161	2089	2728	1974	1472	1559	1307	905	1675
(WY)	1912	1922	1928	1937	1956	1913	1940	1924	1956	1958	1956	1926
MIN (WY)	37.7	43.0	58.5	56.3	94.7	291	238	94.3	79.3	54.8	35.3	38.2
(WY)	1964	1931	1931	1931	1934	1931	1925	1934	1936	1944	1930	1944

SUMMARY STATISTICS WATER YEARS 1912 - 1968

ANNUAL MEAN	552		
HIGHEST ANNUAL MEAN	917	1956	
LOWEST ANNUAL MEAN	216	1931	
HIGHEST DAILY MEAN	16700	Mar 26	1913
LOWEST DAILY MEAN	20	Sep 11	1938
ANNUAL SEVEN-DAY MINIMUM	24	Sep 6	1938
MAXIMUM PEAK FLOW	a19000	Jan 25	1937
MAXIMUM PEAK STAGE	b12.05	Jan 25	1937
INSTANTANEOUS LOW FLOW	c16	Sep 13	1932
ANNUAL RUNOFF (CFSM)	1.39		
ANNUAL RUNOFF (INCHES)	18.85		
10 PERCENT EXCEEDS	1390		
50 PERCENT EXCEEDS	248		
90 PERCENT EXCEEDS	58		

- a From rating curve extended above 14,000 ft<sup>3</sup>/s.
- b From floodmark, site and datum then in use.
- c Minimum observed.



## BEAVER RIVER BASIN

03106500 SLIPPERY ROCK CREEK AT WURTEMBERG, PA--Continued  
(Pennsylvania Water-Quality Network Station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

COOPERATION.--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, $\mu$ S/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, $\mu$ S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water unfltrd recover -able, mg/L (00916)	Magnesium, water, unfltrd recover -able, mg/L (00927)
NOV 2004 01...	1215	1028	9813	381	12.1	8.4	8.4	402	390	11.0	180	49.8	12.8
JAN 2005 05...	1315	1028	9813	3510	11.9	7.3	7.7	219	228	6.0	85	23.6	6.3
MAR 01...	1245	1028	9813	E620	14.4	7.6	8.1	363	371	1.4	150	41.0	11.2
MAY 02...	1400	1028	9813	863	11.5	7.7	8.0	301	305	10.3	120	33.9	9.2
JUL 05...	1300	1028	9813	94	9.2	8.3	8.4	517	531	24.5	220	62.2	15.9
SEP 01...	1255	1028	9813	504	8.9	8.0	8.1	461	478	20.5	200	59.4	13.7
Date	ANC, wat unfltrd end pt, lab, mg/L as CaCO3 (00417)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 105degC wat fltrd, mg/L (00515)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water, unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Aluminum, water, unfltrd recover -able, $\mu$ g/L (01105)	Copper, water, unfltrd recover -able, $\mu$ g/L (01042)
NOV 2004 01...	79	89.6	270	<2	<.020	.23	<.040	.01	.027	.56	4.0	<200	<10
JAN 2005 05...	37	48.3	140	58	.030	.56	<.040	.01	.060	1.1	3.9	1200	<10
MAR 01...	58	84.8	242	<2	.020	.74	<.040	.01	.027	.86	2.3	<200	<10
MAY 02...	55	71.3	222	18	.030	.36	<.040	.01	.024	.62	--	210	<10
JUL 05...	109	124	382	2	<.020	.47	<.040	.01	.026	.69	--	<200	<10
SEP 01...	71	123	344	78	.040	.58	<.040	.03	.140	1.1	--	1300	<10
Date	Iron, water, unfltrd recover -able, $\mu$ g/L (01045)	Lead, water, unfltrd recover -able, $\mu$ g/L (01051)	Manganese, water, unfltrd recover -able, $\mu$ g/L (01055)	Nickel, water, unfltrd recover -able, $\mu$ g/L (01067)	Zinc, water, unfltrd recover -able, $\mu$ g/L (01092)								
NOV 2004 01...	190	<1.0	50	<50	10								
JAN 2005 05...	2660	1.9	510	<50	20								
MAR 01...	260	<1.0	370	<50	10								
MAY 02...	450	<1.0	240	<50	<10								
JUL 05...	250	<1.0	110	<50	20								
SEP 01...	3010	2.8	660	<50	20								

## BEAVER RIVER BASIN

## 03106500 SLIPPERY ROCK CREEK AT WURTEMBERG, PA--Continued

BIOLOGICAL DATA  
BENTHIC MACROINVERTEBRATES

REMARKS.--Samples were collected using a D-Frame net with a mesh size of 500 µm. Samples represent counts per 100 animal (approximate) subsamples.

Date	10/07/04
Benthic macroinvertebrate	Count
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Branchiobdellida	
Branchiobdellidae	2
Tubificida	
Naididae	1
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	2
Crustacea	
Amphipoda (SCUDS)	
Gammaridae	
<i>Gammarus</i>	1
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	3
<i>Heterocloeon</i>	1
Heptageniidae	
<i>Stenonema</i>	3
Plecoptera (STONEFLIES)	
Leuctridae	
<i>Leuctra</i>	2
Perlidae	
<i>Paragnetina</i>	1
Taeniopterygidae	
<i>Taeniopteryx</i>	25
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<i>Cheumatopsyche</i>	1
<i>Diplectrona</i>	1
<i>Hydropsyche</i>	34
Philopotamidae	
<i>Chimarra</i>	1
Coleoptera (BEETLES)	
Elmidae (RIFFLER BEETLES)	
<i>Macronychus</i>	1
<i>Optioservus</i>	3
<i>Stenelmis</i>	2
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	36
Empididae (DANCE FLIES)	
<i>Hemerodromia</i>	2
Simuliidae (BLACK FLIES)	
<i>Simulium</i>	8
Tipulidae (CRANE FLIES)	
<i>Antocha</i>	1
Total Organisms	
	131
Total Taxa	
	21