

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 mi².

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 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Apr. 15	0100	*5,030	*5.85	June 6	2000	4,040	5.14
May 14	0300	4,430	5.42				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	98	745	e273	1250	358	810	635	868	192	112	61
2	60	93	523	e269	1180	381	690	736	573	183	91	57
3	56	144	394	e255	826	771	744	1390	407	189	80	57
4	52	175	346	e245	657	877	931	763	361	165	73	57
5	50	137	345	e245	514	521	735	552	405	129	73	60
6	50	112	336	e215	479	458	618	476	3470	116	71	58
7	51	100	331	e215	448	453	547	464	2760	107	66	53
8	50	92	320	e169	438	417	516	472	1700	103	62	50
9	50	92	321	e221	420	356	532	547	1170	99	59	48
10	52	94	321	228	398	361	618	732	773	159	57	43
11	51	93	304	255	506	335	565	544	572	168	55	41
12	55	92	284	e278	575	303	481	550	499	120	54	39
13	59	86	291	e281	498	292	827	2970	598	104	56	37
14	63	83	358	e268	416	275	2550	3800	1170	96	88	36
15	74	81	483	e254	400	268	4360	2270	1420	91	80	42
16	84	79	451	e244	399	374	2770	1490	1240	86	82	65
17	86	78	634	e230	408	462	1820	1280	895	80	546	77
18	87	78	2850	e213	383	389	1370	2270	703	77	773	66
19	87	80	2220	e199	352	346	1120	2150	613	78	204	59
20	79	108	1240	e199	314	389	945	1450	472	89	120	54
21	70	140	821	e203	420	709	808	1140	381	96	99	52
22	66	129	594	e206	528	563	697	934	335	86	83	53
23	99	110	521	e206	474	460	603	787	285	83	98	50
24	550	100	615	375	403	436	522	637	255	159	305	47
25	434	384	e491	749	367	473	482	712	233	155	296	43
26	247	732	e435	536	357	1330	470	672	212	143	161	42
27	180	394	e381	418	395	2930	424	557	229	146	108	106
28	178	354	e331	365	384	1920	475	468	326	191	85	345
29	162	393	e309	350	---	1270	761	459	304	161	75	237
30	127	502	e287	709	---	1120	666	588	226	157	68	117
31	110	---	e282	1440	---	1020	---	1350	---	152	63	---
TOTAL	3487	5233	18164	10313	14189	20617	29457	33845	23455	3960	4243	2152
MEAN	112	174	586	333	507	665	982	1092	782	128	137	71.7
MAX	550	732	2850	1440	1250	2930	4360	3800	3470	192	773	345
MIN	50	78	282	169	314	268	424	459	212	77	54	36
CFSM	0.28	0.44	1.47	0.84	1.27	1.67	2.47	2.74	1.96	0.32	0.34	0.18
IN.	0.33	0.49	1.70	0.96	1.33	1.93	2.75	3.16	2.19	0.37	0.40	0.20

e Estimated.

BEAVER RIVER BASIN

03106500 SLIPPERY ROCK CREEK AT WURTEMBERG, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2002, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	263	531	782	678	866	1026	965	634	522	324	256	234
MAX (WY)	1976	1822	1576	1369	1949	1972	1608	1400	2075	1109	1323	992
MIN (WY)	1976	1986	1978	1999	1981	1972	1987	1983	1989	1990	1980	1975
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 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1969 - 2002
ANNUAL TOTAL	119901	169115	
ANNUAL MEAN	328	463	588
HIGHEST ANNUAL MEAN			813
LOWEST ANNUAL MEAN			317
HIGHEST DAILY MEAN	2850	Dec 18	4360
LOWEST DAILY MEAN	38	Aug 16	36
ANNUAL SEVEN-DAY MINIMUM	39	Aug 13	41
MAXIMUM PEAK FLOW			5030
MAXIMUM PEAK STAGE			5.85
INSTANTANEOUS LOW FLOW			36
ANNUAL RUNOFF (CFSM)	0.83	1.16	1.48
ANNUAL RUNOFF (INCHES)	11.21	15.81	20.08
10 PERCENT EXCEEDS	750	975	1340
50 PERCENT EXCEEDS	230	314	358
90 PERCENT EXCEEDS	51	59	91

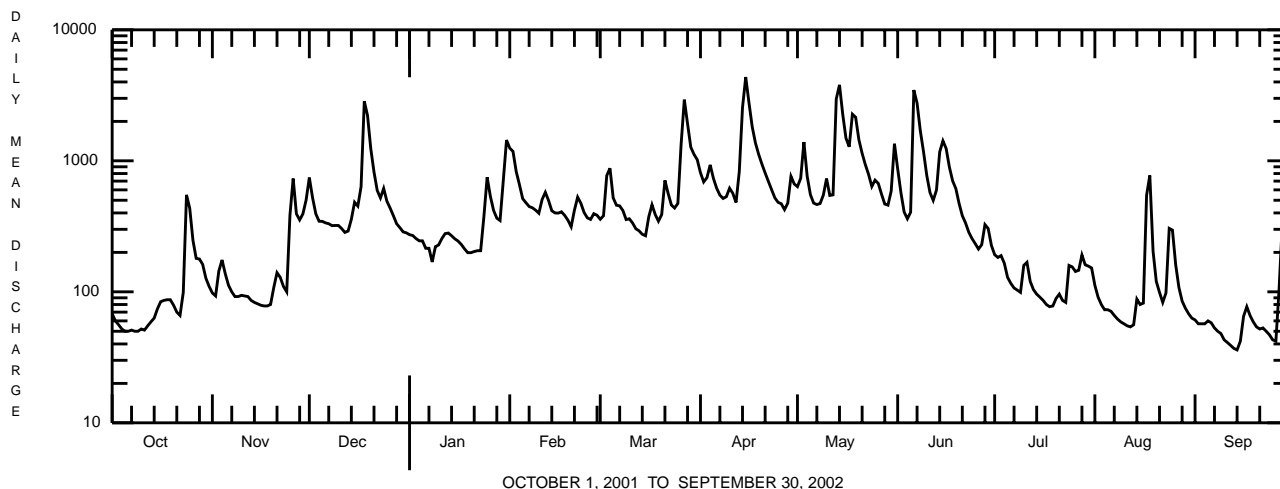
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1968, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	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
MIN (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 ft³/s.
b From floodmark, site and datum then in use.
c Minimum observed.



OCTOBER 1, 2001 TO SEPTEMBER 30, 2002

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.

REMARKS.--Other data for the Water-Quality Network can be found on pages 210-233.

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 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM-PLING METHOD, CODES (82398)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (µS/CM) (90095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)
APR 2002	17...	9813	1750	40	6.3	7.8	278	259	17.2	110	33.2	7.2	34
JUN	18...	9813	712	40	10.3	7.8	391	307	18.4	130	35.5	9.7	56
AUG	06...	9813	71.6	40	7.7	7.6	499	495	22.0	210	59.3	15.6	94

Date	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L) (00515)	RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA (MG/L AS N) (00610)	NITRO-GEN, NITRATE (MG/L AS N) (00620)	NITRO-GEN, NITRITE (MG/L AS N) (00615)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COPPER, TOTAL RECOV-ERABLE (µG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (µG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	
APR 2002	17...	63.1	244	12	<.020	.40	<.040	.88	.03	.040	4.2	<10	960	1.1
JUN	18...	76.9	262	22	<.020	.54	<.040	.89	.04	.050	4.7	<10	1510	1.1
AUG	06...	114	342	10	<.020	.67	<.040	.95	.03	.050	3.4	<10	340	<1.0

Date	MANGA-NESE, TOTAL RECOV-ERABLE (µG/L AS MN) (01055)	NICKEL, TOTAL RECOV-ERABLE (µG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)	
APR 2002	17...	290	<50	<10
JUN	18...	340	<50	10
AUG	06...	150	<50	<10