

## BEAVER RIVER BASIN

## 03107500 BEAVER RIVER AT BEAVER FALLS, PA

**LOCATION.**--Lat 40°45'48", long 80°18'55", Beaver County, Hydrologic Unit 05030104, on left bank at Beaver Falls, 200 ft upstream from pumping plant of Beaver Falls Municipal Authority, 7.0 mi downstream from Connoquenessing Creek, at mile 5.5.

**DRAINAGE AREA.**--3,106 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1935 to current year (fragmentary records only prior to October 1956). Gage-height records collected at same site since 1908 are contained in reports of U.S. Weather Bureau.

**REVISED RECORDS.**--WSP 1725: 1960 (adjusted runoff); Instantaneous low flow for water years 1997, 1998 were published in error.

**GAGE.**--Water-stage recorder and concrete dam control. Datum of gage is 727.48 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Dec. 3, 1941, nonrecording gage at site 200 ft downstream at same datum.

**REMARKS.**--No estimated daily discharges. Records good above 2,000 ft<sup>3</sup>/s, and fair below, except those below 1,200 ft<sup>3</sup>/s, which are poor. Pumpage from gage pool, averaging 3.4 ft<sup>3</sup>/s in 1935 and 6.0 ft<sup>3</sup>/s at present, for local water supply, returns to river 2 mi downstream; information furnished by Beaver Falls Municipal Authority. Flow regulated since 1916 by Milton Reservoir, since November 1929 by Meander Creek Reservoir, since December 1933 by Pymatuning Reservoir (station 03100500), since December 1942 by Berlin Lake, since October 1943 by Mosquito Creek Lake, since December 1966 by Michael J. Kirwan Reservoir, since January 1967 by Shenango River Lake, all over 50 mi upstream, and since May 1969 by Lake Arthur (station 03106280) 29 mi upstream. U.S. Army Corps of Engineers satellite telemetry at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of Mar. 27, 1913 reached a stage of 17.4 ft, discharge, 103,000 ft<sup>3</sup>/s, from rating curve extended above 60,000 ft<sup>3</sup>/s.

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	1100	810	2040	1820	9170	1820	2370	2090	1640	2430	816	2840
2	1040	796	1980	1780	7350	1590	2260	2020	2010	2730	792	1620
3	972	791	1820	1660	6540	1570	2150	1930	2340	1570	813	1100
4	852	1040	1600	1690	6290	1560	2080	1780	2240	1200	1060	935
5	917	1200	1800	1680	5990	1780	2010	1640	1890	1120	990	859
6	2280	1180	1730	1680	5380	1870	2530	1550	1730	1150	925	805
7	2300	1180	1490	1720	4850	1780	10800	1460	1680	1100	872	775
8	1650	1170	1330	1740	4430	1670	10700	1420	1470	1440	854	750
9	1430	1190	1290	1670	5020	1640	7670	1480	1330	1510	872	734
10	1540	1430	1210	1620	6960	1630	8650	1440	1210	1190	854	708
11	1700	1770	1230	1640	6570	1610	6790	1360	1190	1080	836	702
12	1630	1690	2020	1630	5540	1720	5390	1830	1310	1030	826	685
13	1500	1480	2550	1620	4980	3800	4240	2170	1150	997	834	681
14	1410	1380	2890	1640	4680	7090	3400	1680	1100	964	814	898
15	1380	1300	3220	1720	7340	5710	3150	1420	1030	947	789	918
16	1330	1110	3280	2400	7750	4730	8980	1320	1020	939	791	790
17	1320	965	15000	2810	7490	5970	9570	1270	1060	927	814	717
18	1330	934	11800	2910	6040	5390	7830	1250	980	1050	811	690
19	1310	915	8660	2830	5150	4400	6390	1230	958	943	820	682
20	1280	898	7370	2780	4930	3720	5690	1190	924	1100	869	766
21	1250	896	7090	2530	4140	3400	7180	1180	1200	1110	875	815
22	1080	854	6880	2430	3440	7890	6310	2510	1490	983	840	809
23	870	831	5660	2250	2980	6300	5050	4460	1390	904	852	813
24	962	847	4850	2030	2480	4680	4370	3220	1380	912	854	803
25	1220	849	3920	1890	2360	3760	3530	3480	1170	1140	803	1030
26	1070	991	3360	1760	2430	3310	3080	4740	1100	1280	769	966
27	968	1270	3230	1800	2340	2930	2850	3600	1070	1090	855	854
28	916	1710	3080	1750	2180	2650	2570	3000	1050	924	934	841
29	928	1820	2310	1670	---	2520	2210	2570	1070	865	999	961
30	881	1930	1940	2310	---	2480	2120	2260	1110	858	900	889
31	817	---	1880	10500	---	2520	---	1820	---	840	982	---
TOTAL	39233	35227	118510	69960	144800	103490	151920	64370	40292	36323	26715	27436
MEAN	1266	1174	3823	2257	5171	3338	5064	2076	1343	1172	862	915
MAX	2300	1930	15000	10500	9170	7890	10800	4740	2340	2730	1060	2840
MIN	817	791	1210	1620	2180	1560	2010	1180	924	840	769	681
CFSM	.41	.38	1.23	.73	1.66	1.07	1.63	.67	.43	.38	.28	.29
IN.	.47	.42	1.42	.84	1.73	1.24	1.82	.77	.48	.44	.32	.33

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2001, BY WATER YEAR (WY)

MEAN	1828	3053	4757	4865	5548	6745	5859	3942	2903	2278	1695	1759
MAX	6760	11520	11880	11620	12360	13040	13620	10880	11090	7925	6505	5804
(WY)	1991	1986	1991	1993	1990	1993	1957	1996	1989	1958	1980	1975
MIN	531	439	540	714	887	1606	1861	1271	966	916	777	739
(WY)	1992	1992	1961	1961	1963	1969	1971	1962	1992	1965	1991	1999

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SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1957 - 2001	
ANNUAL TOTAL	1111744		858276		3760	
ANNUAL MEAN	3038		2351		5146	
HIGHEST ANNUAL MEAN					1938	
LOWEST ANNUAL MEAN					1963	
HIGHEST DAILY MEAN	31000	Apr 9	15000	Dec 17	65400	Jan 22 1959
LOWEST DAILY MEAN	791	Nov 3	681	Sep 13	320	Nov 5 1991
ANNUAL SEVEN-DAY MINIMUM	848	Oct 28	719	Sep 7	333	Nov 1 1991
MAXIMUM PEAK FLOW			17900	Dec 17	<sup>a</sup> 69900	Jan 22 1959
MAXIMUM PEAK STAGE			8.44	Dec 17	14.42	Jan 22 1959
ANNUAL RUNOFF (CFMS)	.98		.76		1.21	
ANNUAL RUNOFF (INCHES)	13.32		10.28		16.45	
10 PERCENT EXCEEDS	5870		5590		8270	
50 PERCENT EXCEEDS	1960		1590		2320	
90 PERCENT EXCEEDS	982		838		900	

a From rating curve extended above 57,000 ft<sup>3</sup>/s.

