

**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 Connoqueenessing 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 1929 by Meander Creek Reservoir, since 1933 by Pymatuning Reservoir (station 03100500), since 1942 by Berlin Lake, since 1943 by Mosquito Creek Lake, since 1966 by Michael J. Kirwan Reservoir, since 1967 by Shenango River Lake, all over 50 mi upstream, and since 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 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	881	834	959	1430	7720	7280	1350	2620	1180	1030	1350	852
2	818	802	1020	1120	11800	5840	1500	2500	1220	2520	1230	815
3	853	722	1050	1270	12600	6960	1490	2360	1260	2450	1140	774
4	1040	698	1040	1510	10800	10900	1620	2270	1240	1430	1040	749
5	974	696	1020	1260	9340	8850	2450	2000	1160	1100	984	750
6	807	733	1020	1080	8260	8780	2490	1860	1070	979	961	747
7	1020	739	1020	1060	8090	8710	2010	1810	1040	938	935	745
8	4700	714	1030	1030	10900	6770	1710	1790	1010	951	1050	981
9	3560	726	1010	1220	9720	6100	3320	1840	983	939	1110	796
10	1860	865	988	1410	7930	5540	13300	1770	962	1200	1030	781
11	1310	1390	976	1410	6720	4760	10400	1610	959	1130	936	754
12	1100	1330	965	1360	6400	4510	10900	1490	936	1040	881	691
13	995	1070	939	1840	6600	4100	8680	1360	911	976	879	683
14	933	967	915	2810	5660	3850	7240	1420	937	921	1460	721
15	890	941	898	4000	5280	3750	6330	1360	1120	898	2130	682
16	874	903	893	3890	5350	3840	5510	1230	1070	889	1430	670
17	844	897	921	3250	5180	4540	5250	1190	983	933	1070	684
18	852	881	972	7950	4840	6470	5260	1320	2250	1020	943	631
19	1040	877	998	12900	4270	5550	4910	3110	883	950	882	619
20	1050	929	1030	8750	3660	4030	5420	2650	888	940	859	624
21	953	1030	1180	7810	3350	3250	5140	1760	885	914	832	676
22	965	995	6300	9480	3060	2930	6400	1450	874	1090	896	656
23	956	925	4840	23500	2490	2540	8240	1470	874	1190	882	639
24	906	836	3050	33400	2290	2200	9930	2330	870	985	874	667
25	857	820	2200	22500	2220	2010	7770	4350	908	1020	892	664
26	844	977	1820	13200	1960	1840	6140	3190	932	953	1460	655
27	837	1110	1710	10300	1930	1690	5120	2400	948	933	1850	634
28	888	1130	1710	11100	4790	1600	4130	1890	1230	1250	1370	622
29	1260	1130	1680	11300	---	1540	3520	1610	1180	4160	1070	660
30	1340	1060	1650	9510	---	1450	3030	1440	1080	2630	942	1540
31	1020	---	1500	8170	---	1350	---	1280	---	1460	875	---
TOTAL	37227	27727	47304	220820	173210	143530	160560	60730	31843	39819	34243	22162
MEAN	1201	924	1526	7123	6186	4630	5352	1959	1061	1284	1105	739
MAX	4700	1390	6300	33400	12600	10900	13300	4350	2250	4160	2130	1540
MIN	807	696	893	1030	1930	1350	1350	1190	870	889	832	619
CFSM	.39	.30	.49	2.29	1.99	1.49	1.72	.63	.34	.41	.36	.24
IN.	.45	.33	.57	2.64	2.07	1.72	1.92	.73	.38	.48	.41	.27

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1999, BY WATER YEAR (WY)**

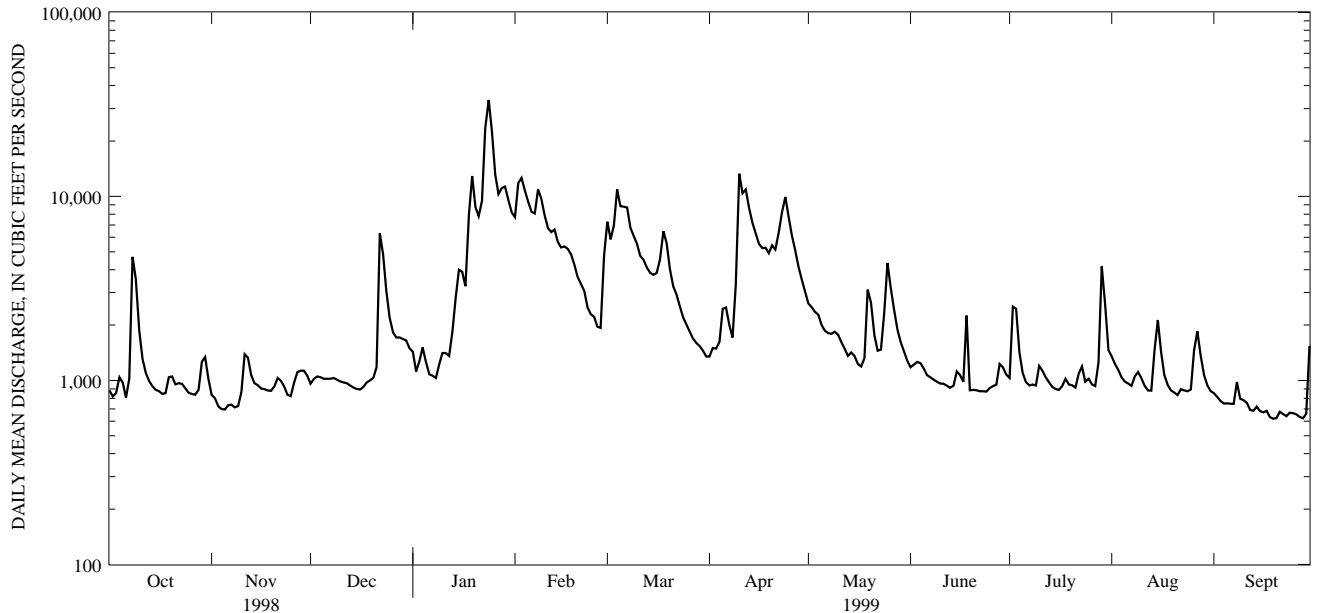
MEAN	1867	3132	4822	4956	5591	6918	5816	4006	2916	2313	1720	1792
MAX	6760	11520	11880	11620	12360	13040	13620	10880	11090	7925	6505	5804
(WY)	1991	1986	1991	1993	1990	1993	1957	1996	1989	1958	1980	1975
MIN	531	439	540	714	887	1606	1861	1271	966	916	777	739
(WY)	1992	1992	1961	1961	1963	1969	1971	1962	1992	1965	1991	1999

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03107500 BEAVER RIVER AT BEAVER FALLS, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1957 - 1999	
ANNUAL TOTAL	1218447		999175		3812	
ANNUAL MEAN	3338		2737		5146	
HIGHEST ANNUAL MEAN					1938	
LOWEST ANNUAL MEAN					1963	
HIGHEST DAILY MEAN	40800	Jan 9	33400	Jan 24	65400	Jan 22 1959
LOWEST DAILY MEAN	696	Nov 5	619	Sep 19	320	Nov 5 1991
ANNUAL SEVEN-DAY MINIMUM	718	Nov 3	645	Sep 18	333	Nov 1 1991
INSTANTANEOUS PEAK FLOW			34900	Jan 24	<sup>a</sup> 69900	Jan 22 1959
INSTANTANEOUS PEAK STAGE			10.26	Jan 24	14.42	Jan 22 1959
ANNUAL RUNOFF (CFSM)	1.07		.88		1.23	
ANNUAL RUNOFF (INCHES)	14.59		11.97		16.67	
10 PERCENT EXCEEDS	8610		7260		8390	
50 PERCENT EXCEEDS	1500		1230		2370	
90 PERCENT EXCEEDS	849		817		909	

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



1-YEAR HYDROGRAPH  
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999