

BEAVER RIVER BASIN

03105500 BEAVER RIVER AT WAMPUM, PA

LOCATION.--Lat 40°53'19", long 80°20'14", Lawrence County, Hydrologic Unit 05030104, on right bank at downstream side of bridge on State Highway 288 at Wampum, 2.9 mi upstream from Connoquenessing Creek, at mile 15.4.

DRAINAGE AREA.--2,235 mi².

PERIOD OF RECORD.--July 1914 to September 1918, August 1932 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as "at Newport" 1914-18.

REVISED RECORDS.--WSP 728: Drainage area. WSP 1385: 1933-40, 1946, 1951-52. WSP 1725: 1960 (adjusted runoff). WDR PA 853: 1984 (M).

GAGE.--Water-stage recorder. Datum of gage is 736.24 ft above sea level (Penn Central Railroad bench mark). Prior to Sept. 20, 1914, nonrecording gage at site 500 ft downstream at datum 0.76 ft lower. Oct. 1, 1914 to Sept. 30, 1918, nonrecording gage at site 1 mi upstream at datum 0.84 ft higher. Aug. 26, 1932 to Nov. 16, 1938, nonrecording gage at present site and datum. Since 1932 an auxiliary gage 10 mi downstream at Beaver Falls (station 03107500) is used during periods of backwater from Connoquenessing Creek.

REMARKS.--No estimated daily discharges. Records good. 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, and since January 1967 by Shenango River Lake 40 mi upstream. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1912, 29.9 ft, Mar. 26, 1913, from floodmark, discharge, about 87,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	418	2060	1400	1050	3430	958	1490	4070	2000	975	787
2	786	1000	1970	1490	860	3030	1120	1740	4030	1700	923	775
3	564	4540	1510	1750	769	2350	4400	1580	3820	2040	1080	760
4	506	3110	1160	10600	789	1780	13700	1440	3480	2990	980	775
5	493	2040	1130	8100	789	1600	10800	1410	3250	1950	931	787
6	479	1270	1310	6510	778	1500	6640	1970	4220	1580	1800	778
7	494	886	1430	5410	764	1420	5610	1760	3660	1440	2720	770
8	466	704	1320	4830	740	1180	16000	1600	3090	1330	2190	770
9	630	621	1510	4540	684	1080	23200	1540	2500	1270	1660	767
10	760	581	1830	4070	670	1050	12900	1390	2090	1430	1280	756
11	635	558	2680	4130	1770	1010	8280	1470	1740	2070	1150	924
12	559	521	2240	3550	2500	1390	8070	1390	1990	1500	1130	885
13	531	484	1930	2770	2160	1610	8150	1270	3460	1150	1020	1040
14	993	542	3660	2510	3520	1490	7830	1200	3730	1160	961	826
15	834	711	6230	2350	4060	1420	5410	1070	3590	3200	928	798
16	650	769	4930	2320	3800	1360	4030	986	3430	2670	905	1110
17	546	881	4170	2160	3160	2240	4230	933	3820	2520	881	994
18	542	924	3850	1660	2820	2340	4650	1020	3530	1780	895	819
19	516	919	3550	1560	2900	1680	4150	4250	4530	1450	896	755
20	516	948	3360	1250	2700	1380	3740	5600	4670	1230	878	721
21	497	989	2880	1090	2430	2110	3620	4570	4390	1170	870	1150
22	487	969	2650	1010	2770	2560	3720	3720	4450	1440	867	975
23	482	955	2110	1120	5050	2170	3550	3730	3710	1160	887	894
24	620	958	1540	1140	6190	1710	3200	5530	3250	1090	2170	1850
25	761	958	1410	1080	5830	1440	3450	4300	2860	1050	1110	2010
26	725	1460	1400	1080	5410	1320	3190	3710	2390	1010	921	1480
27	638	2440	1400	1040	4800	1210	2510	3290	5750	983	875	1280
28	554	1820	1370	1020	4190	1270	2030	2950	4990	969	978	1150
29	514	1780	1090	1010	3670	1240	1720	4410	3200	1080	919	1040
30	459	2090	1050	1020	---	1160	1570	4840	2600	1070	874	999
31	432	---	1090	1040	---	1050	---	3580	---	1020	822	---
TOTAL	18839	36846	69820	84610	77623	51580	182428	79739	106290	48502	35476	29425
MEAN	608	1228	2252	2729	2677	1664	6081	2572	3543	1565	1144	981
MAX	1170	4540	6230	10600	6190	3430	23200	5600	5750	3200	2720	2010
MIN	432	418	1050	1010	670	1010	958	933	1740	969	822	721
CFSM	.27	.55	1.01	1.22	1.20	.74	2.72	1.15	1.59	.70	.51	.44
IN.	.31	.61	1.16	1.41	1.29	.86	3.04	1.33	1.77	.81	.59	.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2000, BY WATER YEAR (WY)

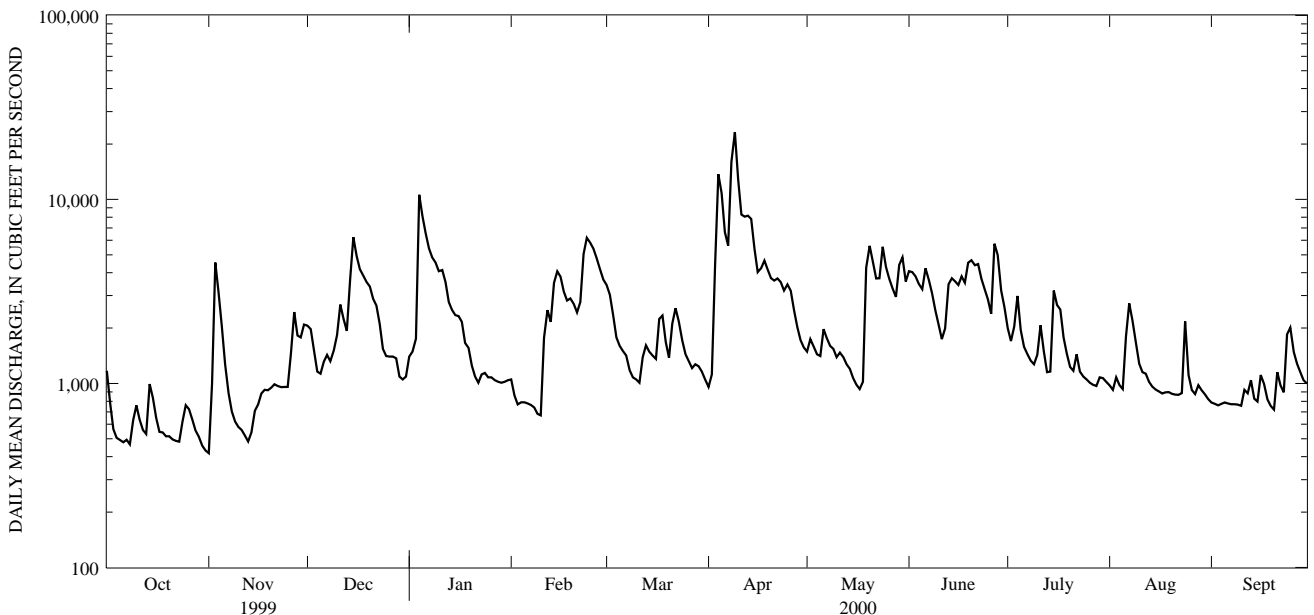
MEAN	1259	1808	2825	3458	3899	4891	3917	2646	1977	1483	1255	1189
MAX	5888	7936	7978	13030	8779	9098	9226	8362	8004	5893	4923	4759
(WY)	1991	1986	1991	1937	1915	1916	1994	1996	1989	1958	1956	1990
MIN	168	278	447	534	304	1074	657	288	222	198	156	153
(WY)	1934	1915	1961	1918	1934	1969	1915	1934	1934	1918	1933	1916

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SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1915 - 2000	
ANNUAL TOTAL	772930		821178			
ANNUAL MEAN	2118		2244		2551	
HIGHEST ANNUAL MEAN					3995	1956
LOWEST ANNUAL MEAN					834	1934
HIGHEST DAILY MEAN	21600	Jan 24	23200	Apr 9	47500	Jan 22 1959
LOWEST DAILY MEAN	418	Nov 1	418	Nov 1	88	Oct 5 1914
ANNUAL SEVEN-DAY MINIMUM	512	Oct 17	512	Oct 17	94	Oct 3 1914
INSTANTANEOUS PEAK FLOW			25400	Apr 9	a50100	May 28 1946
INSTANTANEOUS PEAK STAGE			14.25	Apr 9	b21.53	May 28 1946
INSTANTANEOUS LOW FLOW					c74	Jul 30 1933
ANNUAL RUNOFF (CFSM)	.95		1.00		1.14	
ANNUAL RUNOFF (INCHES)	12.86		13.67		15.51	
10 PERCENT EXCEEDS	5360		4420		5830	
50 PERCENT EXCEEDS	1040		1440		1420	
90 PERCENT EXCEEDS	607		724		560	

- a From slope-rating curve extended above 28,000 ft³/s on basis of contracted-opening measurement at gage height 21.44 ft.
- b Maximum gage height, 24.86 ft, Jan. 22, 1959 (backwater from Connoquenessing Creek).
- c Minimum discharge observed.



1-YEAR HYDROGRAPH
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000