

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 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, and since 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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	705	554	543	1070	6530	5080	867	1800	850	861	1130	711
2	655	512	540	762	8350	4400	972	1710	887	1590	989	705
3	624	435	527	870	9260	5090	965	1650	926	1180	926	683
4	788	426	519	1060	8290	8140	1120	1620	945	901	883	674
5	665	422	501	835	7310	7000	1590	1340	908	754	864	670
6	558	456	499	721	6720	6760	1460	1260	871	717	858	674
7	546	465	503	718	6510	6520	1250	1250	842	788	829	734
8	3220	451	507	680	8080	5410	1070	1260	817	783	946	933
9	2070	454	506	774	7630	4930	2180	1280	809	832	888	748
10	1290	527	486	788	6470	4590	7120	1250	809	1040	856	725
11	897	1000	478	764	5570	3990	6350	1190	831	955	795	672
12	723	883	468	757	5140	3810	7050	1150	808	862	778	641
13	646	704	451	1040	5320	3450	6040	1030	809	816	803	624
14	606	632	427	1280	4630	3220	5620	1060	849	794	1610	674
15	575	638	417	1450	4330	3140	5120	1040	1040	785	1810	627
16	567	610	415	1460	4340	3160	4250	959	896	790	1060	615
17	547	597	437	1430	4270	3720	3680	944	808	798	885	613
18	525	589	486	3860	4000	4600	3780	1000	771	797	817	596
19	707	582	500	6060	3610	3600	3850	1450	760	817	776	575
20	691	612	510	4910	3100	2590	4270	1340	769	834	769	569
21	581	707	605	4910	2840	2060	3900	1010	770	819	758	613
22	608	663	3730	6440	2640	1820	5280	857	787	1150	851	591
23	631	600	2800	15300	2110	1490	6540	884	787	1030	823	571
24	583	518	2050	21600	1840	1280	7370	1740	787	827	801	571
25	550	498	1550	14000	1760	1210	5990	2560	829	906	832	597
26	532	585	1280	8510	1480	1120	4860	1970	825	819	1420	582
27	522	699	1190	7370	1420	1050	4000	1520	841	809	1260	561
28	574	653	1160	8410	3240	999	3100	1270	1010	1460	964	569
29	1020	616	1130	8750	---	---	956	2670	1130	904	3880	584
30	1130	564	1140	7800	---	---	915	2150	1050	877	1910	759
31	775	---	1090	6900	---	---	851	---	928	---	1130	721
TOTAL	25111	17652	27445	141279	136790	106951	114464	40502	25422	32434	29301	20282
MEAN	810	588	885	4557	4885	3450	3815	1307	847	1046	945	676
MAX	3220	1000	3730	21600	9260	8140	7370	2560	1040	3880	1810	1580
MIN	522	422	415	680	1420	851	867	857	760	717	721	561
CFSM	.36	.26	.40	2.04	2.19	1.54	1.71	.58	.38	.47	.42	.30
IN.	.42	.29	.46	2.35	2.28	1.78	1.91	.67	.42	.54	.49	.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1999, BY WATER YEAR (WY)

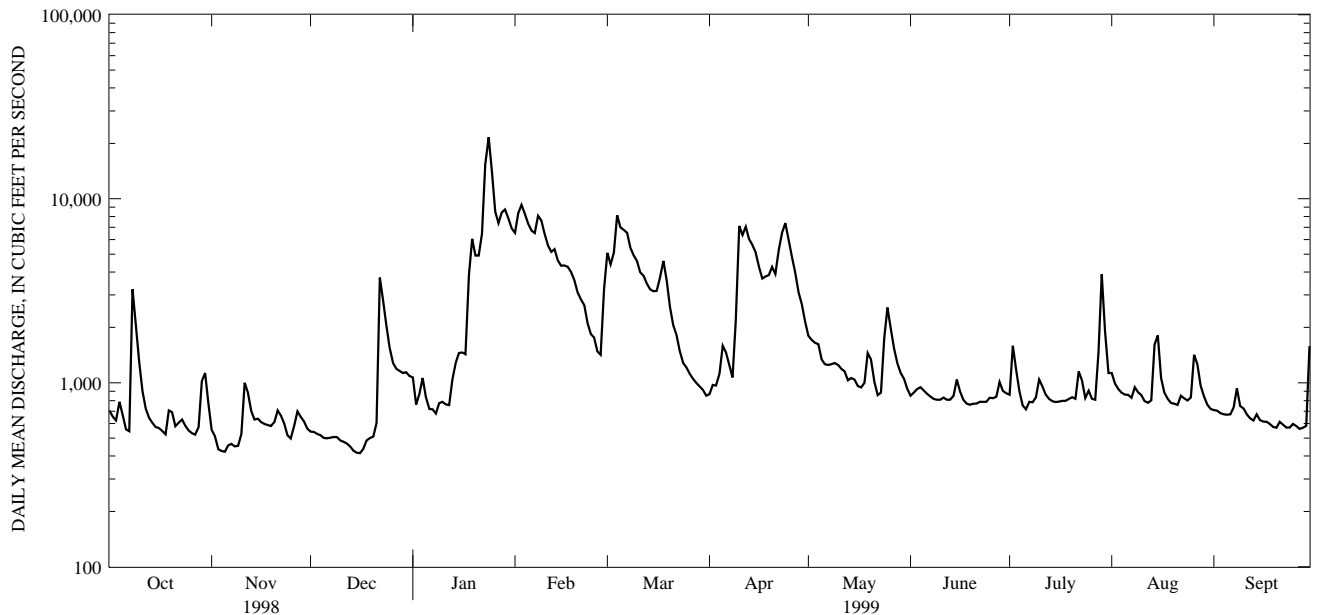
MEAN	1268	1816	2833	3468	3917	4937	3887	2647	1954	1482	1257	1191
MAX	5888	7936	7978	13030	8779	9098	9226	8362	8004	5893	4923	4759
(WY)	1991	1986	1991	1937	1915	1916	1994	1996	1989	1958	1956	1990
MIN	168	278	447	534	304	1074	657	288	222	198	156	153
(WY)	1934	1915	1961	1918	1934	1969	1915	1934	1934	1918	1933	1916

BEAVER RIVER BASIN

03105500 BEAVER RIVER AT WAMPUM, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR			FOR 1999 WATER YEAR		WATER YEARS 1915 - 1999	
ANNUAL TOTAL	870793			717633			
ANNUAL MEAN	2386			1966		2555	
HIGHEST ANNUAL MEAN						3995	
LOWEST ANNUAL MEAN						834	
HIGHEST DAILY MEAN	26700	Jan	9	21600	Jan	24	47500
LOWEST DAILY MEAN	415	Dec	16	415	Dec	16	88
ANNUAL SEVEN-DAY MINIMUM	442	Dec	11	442	Dec	11	94
INSTANTANEOUS PEAK FLOW				22500	Jan	24	a50100
INSTANTANEOUS PEAK STAGE				13.16	Jan	24	b21.53
INSTANTANEOUS LOW FLOW						c74	Jul 30 1933
ANNUAL RUNOFF (CFSM)	1.07			.88		1.14	
ANNUAL RUNOFF (INCHES)	14.49			11.94		15.53	
10 PERCENT EXCEEDS	6650			5300		5850	
50 PERCENT EXCEEDS	1130			901		1420	
90 PERCENT EXCEEDS	549			549		556	

- 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, 1998 TO SEPTEMBER 30, 1999