

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.--Records good except those for estimated daily discharges, which are poor. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	955	609	1600	1260	5210	1120	1520	1190	1260	2040	835	2550
2	894	602	1600	1240	4920	1010	1470	1170	1620	1690	825	1250
3	834	599	1490	1170	4900	990	1420	1150	1800	1090	864	930
4	706	956	1350	1200	5010	979	1420	1030	1620	944	1090	816
5	752	1100	1550	1190	4910	1080	1390	960	1400	920	989	764
6	1740	1090	1520	1170	4300	1140	1960	939	1250	929	898	713
7	1560	1080	1150	1190	3810	1110	8300	895	1250	938	833	703
8	1230	1080	1090	1200	3400	1060	7490	881	1150	1230	807	693
9	1110	1080	1070	1170	3570	1040	5460	931	1080	1170	794	687
10	1320	1230	1020	1150	4460	1020	4840	902	1020	987	797	669
11	1540	1410	947	1160	4500	1010	3850	852	1030	939	794	665
12	1470	1320	1560	1150	4170	1140	2940	1280	1160	921	779	648
13	1370	1200	1750	1130	3840	3010	2390	1390	1000	905	790	637
14	1300	1150	2330	1140	3620	4760	1940	1150	977	887	784	902
15	1260	1100	2430	1230	5620	3770	1830	937	921	878	767	805
16	1230	852	2780	1840	5930	3150	5490	857	898	875	763	689
17	1220	740	10300	2050	5770	3380	5930	830	928	868	790	652
18	1220	713	7790	2270	4750	3230	5140	826	866	1020	790	631
19	1210	699	6570	2190	4180	2730	4450	817	845	902	786	630
20	1200	704	6030	2110	3970	2360	4090	791	830	1110	831	725
21	1190	697	6180	1940	3080	2050	4870	789	1160	1010	822	722
22	934	674	6030	1840	2520	3180	4230	2150	1290	905	789	727
23	730	674	5180	1720	2130	2810	3140	3670	e1100	879	790	718
24	698	672	4260	1420	1620	2300	2720	2510	e1020	887	796	701
25	952	679	3210	1320	1550	2010	2030	2920	e980	942	750	890
26	777	820	2750	1250	1560	1880	1770	3920	941	1140	720	739
27	684	1030	2670	1220	1530	1680	1650	2850	924	1010	843	702
28	699	1240	2510	1180	1450	1570	1380	2470	925	894	895	724
29	703	1460	1660	1140	---	1540	1190	2120	935	860	866	815
30	633	1530	1340	1710	---	1560	1200	1880	993	857	744	747
31	594	---	1290	5710	---	1580	---	1340	---	848	1010	---
TOTAL	32715	28790	93007	48660	106280	61249	97500	46397	33173	31475	25631	24244
MEAN	1055	960	3000	1570	3796	1976	3250	1497	1106	1015	827	808
MAX	1740	1530	10300	5710	5930	4760	8300	3920	1800	2040	1090	2550
MIN	594	599	947	1130	1450	979	1190	789	830	848	720	630
CFSM	.47	.43	1.34	.70	1.70	.88	1.45	.67	.49	.45	.37	.36
IN.	.54	.48	1.55	.81	1.77	1.02	1.62	.77	.55	.52	.43	.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2001, BY WATER YEAR (WY)

MEAN	1256	1796	2827	3432	3898	4851	3908	2630	1965	1476	1250	1183
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

e Estimated.

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SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1915 - 2001	
ANNUAL TOTAL	850185		629121			
ANNUAL MEAN	2323		1724		2539	
HIGHEST ANNUAL MEAN					3995	1956
LOWEST ANNUAL MEAN					834	1934
HIGHEST DAILY MEAN	23200	Apr 9	10300	Dec 17	47500	Jan 22 1959
LOWEST DAILY MEAN	594	Oct 31	594	Oct 31	88	Oct 5 1914
ANNUAL SEVEN-DAY MINIMUM	634	Oct 28	634	Oct 28	94	Oct 3 1914
MAXIMUM PEAK FLOW			12400	Apr 7	a50100	May 28 1946
MAXIMUM PEAK STAGE			9.24	Apr 7	b21.53	May 28 1946
INSTANTANEOUS LOW FLOW					c74	Jul 30 1933
ANNUAL RUNOFF (CFSM)	1.04		.77		1.14	
ANNUAL RUNOFF (INCHES)	14.15		10.47		15.44	
10 PERCENT EXCEEDS	4590		3940		5800	
50 PERCENT EXCEEDS	1440		1150		1410	
90 PERCENT EXCEEDS	778		725		564	

- 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.

