

LEHIGH RIVER BASIN

01451000 LEHIGH RIVER AT WALNUTPORT, PA

LOCATION.--Lat 40°45'25", long 75°36'12", Northampton County, Hydrologic Unit 02040106, on left bank 0.3 mi upstream from bridge on SR 4022 at Walnutport, and 0.4 mi upstream from Trout Creek.

DRAINAGE AREA.--889 mi².

PERIOD OF RECORD.--October 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 350.27 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Wild Creek Reservoir (station 01449700) since January 1941, Penn Forest Reservoir (station 01449400) since October 1958, Francis E. Walter Reservoir (station 01447780) since February 1961, and Beltzville Lake (station 01449790) since February 1971. Several measurements of water temperature were made during the year. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 20.6 ft, May 23, 1942, from floodmarks, discharge not determined.

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	317	440	523	e280	2600	1560	1910	1040	588	374	237	188
2	385	432	513	e270	3090	1930	1770	993	578	308	230	230
3	462	409	502	e280	3840	1620	1720	964	577	386	227	264
4	478	393	498	e400	4060	2180	1740	964	575	371	242	305
5	449	375	462	e760	3530	3330	1720	967	560	360	264	306
6	352	342	415	e840	2760	2680	1620	912	517	358	261	322
7	341	306	407	e800	2620	2410	1490	913	498	384	258	566
8	690	306	432	e640	2540	2120	1330	1060	480	367	270	459
9	927	301	477	e600	2180	1630	1280	980	450	315	285	266
10	1910	319	463	e1100	1890	1620	1750	1080	419	305	311	248
11	1920	490	453	e1600	1830	1670	1990	954	405	301	273	232
12	1240	567	437	e1500	1860	1610	1950	821	453	303	317	214
13	897	485	413	e1300	2180	1500	1600	774	605	422	305	207
14	1120	439	410	e1100	2170	1470	1380	728	553	513	560	202
15	1040	412	365	e1100	2110	1510	1360	794	515	409	587	230
16	894	406	357	e1200	2020	1470	1390	713	444	316	374	3270
17	1040	403	400	e1200	1750	1400	1470	640	435	310	247	8110
18	823	396	347	e1200	1840	1510	1400	614	544	320	219	3110
19	617	389	370	e3600	1850	1680	1350	769	477	309	213	1480
20	549	380	328	4660	1730	1670	1500	988	430	268	210	1100
21	507	392	322	3720	1670	1690	1410	981	422	270	214	1080
22	480	386	358	3210	e1500	3730	1380	945	409	296	216	1250
23	482	376	383	3760	e1300	4230	1380	1050	392	308	210	1180
24	487	353	360	10200	e1200	4040	1500	1140	372	241	205	1270
25	487	320	e310	9300	1340	3380	1440	1310	364	226	204	1790
26	482	538	e290	10200	1280	2950	1410	1140	431	222	278	1810
27	474	656	e320	8540	1210	2450	1370	979	594	221	270	1230
28	470	563	e340	6300	1280	2410	1180	889	440	264	216	1170
29	476	552	383	4650	---	2300	1150	979	422	260	201	1160
30	465	530	362	3280	---	2220	1060	712	368	210	192	2750
31	449	---	e320	2970	---	2120	---	602	---	241	189	---
TOTAL	21710	12656	12320	90560	59230	68090	45000	28395	14317	9758	8285	35999
MEAN	700	422	397	2921	2115	2196	1500	916	477	315	267	1200
MAX	1920	656	523	10200	4060	4230	1990	1310	605	513	587	8110
MIN	317	301	290	270	1200	1400	1060	602	364	210	189	188
CFSM	.79	.47	.45	3.29	2.38	2.47	1.69	1.03	.54	.35	.30	1.35
IN.	.91	.53	.52	3.79	2.48	2.85	1.88	1.19	.60	.41	.35	1.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1999, BY WATER YEAR (WY)

MEAN	1152	1823	2294	2071	2141	2978	3216	2359	1466	1082	864	935
MAX	4857	3990	6352	6136	4464	6302	8455	6389	5413	4465	5264	5812
(WY)	1956	1973	1997	1979	1951	1977	1993	1989	1972	1947	1955	1987
MIN	194	251	370	223	790	1335	1156	908	477	241	226	179
(WY)	1964	1965	1981	1981	1980	1981	1985	1995	1999	1965	1964	1964

e Estimated.

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SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1947 - 1999	
ANNUAL TOTAL	613595		406320		1863	
ANNUAL MEAN	1681		1113		2892	
HIGHEST ANNUAL MEAN					1952	
LOWEST ANNUAL MEAN					1965	
HIGHEST DAILY MEAN	8170	Mar 11	10200	Jan 24,26	62400	Aug 19 1955
LOWEST DAILY MEAN	e 290	Dec 26	188	Sep 1	134	Sep 18 1964
ANNUAL SEVEN-DAY MINIMUM	a 332	Dec 25	210	Aug 19	143	Sep 16 1964
INSTANTANEOUS PEAK FLOW			15300	Sep 17	77800	Aug 19 1955
INSTANTANEOUS PEAK STAGE			7.53	Sep 17	17.68	Aug 19 1955
INSTANTANEOUS LOW FLOW					b 57	Jul 27 1965
ANNUAL RUNOFF (CFSM)	1.89		1.25		2.10	
ANNUAL RUNOFF (INCHES)	25.68		17.00		28.47	
10 PERCENT EXCEEDS	3760		2250		3860	
50 PERCENT EXCEEDS	931		567		1290	
90 PERCENT EXCEEDS	341		264		408	

- a** Computed using estimated daily discharges.
- b** Result of upstream shutoff.
- e** Estimated.

