

LEHIGH RIVER BASIN

01447800 LEHIGH RIVER BELOW FRANCIS E. WALTER RESERVOIR NEAR WHITE HAVEN, PA

LOCATION.--Lat 41°06'17", long 75°43'57", Luzerne County, Hydrologic Unit 02040106, on right bank 0.7 mi downstream from Francis E. Walter Reservoir, 2.0 mi upstream from Fawn Run, and 4.0 mi northeast of White Haven.

DRAINAGE AREA.--290 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1962 published as "*below Bear Creek Reservoir*", October 1962 to September 1971 published as "*below Francis E. Walter Reservoir*."

GAGE.--Water-stage recorder. Datum of gage is 1,212.95 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since February 1961 by Francis E. Walter Reservoir (station 01447780) 0.7 mi upstream. Satellite and landline telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1955 reached a discharge of 54,200 ft³/s based on slope-area measurement at site 4.9 mi downstream.

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	97	123	224	437	485	457	1050	399	344	145	106	72
2	97	123	206	430	470	391	1380	399	380	179	106	72
3	98	123	203	423	433	401	1380	297	629	199	87	72
4	99	123	151	313	424	405	1520	301	803	199	208	90
5	100	123	112	289	381	405	1480	399	680	199	246	109
6	110	123	113	316	326	430	1470	396	428	251	117	109
7	182	123	113	319	287	446	1480	328	293	268	72	89
8	124	116	113	318	271	443	1510	236	366	160	72	76
9	133	111	113	315	246	388	1850	225	546	153	73	76
10	147	111	113	289	238	350	2260	239	346	168	97	76
11	155	112	139	272	373	348	2300	239	164	243	129	76
12	125	114	162	302	534	348	2080	269	167	285	197	76
13	94	231	161	319	621	352	1350	243	161	363	235	76
14	83	310	161	319	605	560	743	241	168	355	235	78
15	83	305	189	319	537	713	764	200	171	168	202	237
16	92	301	206	319	449	679	851	163	178	138	123	120
17	110	223	235	230	422	631	1070	150	578	131	106	101
18	123	170	2280	180	427	637	1150	147	818	133	106	91
19	151	170	3920	196	427	638	1010	199	815	133	106	90
20	324	152	2660	206	427	660	848	185	715	150	106	74
21	419	107	1300	212	426	699	791	202	567	182	106	115
22	170	83	887	e210	423	1230	777	230	551	138	106	152
23	170	83	754	e210	421	1580	776	282	708	97	106	122
24	170	97	748	e210	421	1510	685	372	570	91	125	105
25	170	125	735	210	421	1480	609	409	351	91	150	359
26	144	126	719	e210	465	1270	537	417	254	91	120	609
27	125	338	790	210	553	917	451	373	232	98	85	488
28	125	479	809	210	584	747	394	507	203	106	72	270
29	125	334	572	e220	---	735	399	587	159	106	72	205
30	125	247	447	336	---	829	399	552	144	106	72	147
31	124	---	443	485	---	986	---	455	---	106	72	---
TOTAL	4394	5306	19778	8834	12097	21665	33364	9641	12489	5232	3815	4432
MEAN	142	177	638	285	432	699	1112	311	416	169	123	148
MAX	419	479	3920	485	621	1580	2300	587	818	363	246	609
MIN	83	83	112	180	238	348	394	147	144	91	72	72

e Estimated.

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01447800 LEHIGH RIVER BELOW FRANCIS E. WALTER RESERVOIR NEAR WHITE HAVEN, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	442	639	700	649	657	1022	1127	757	519	343	256	325
MAX (WY)	1435	1488	2079	2596	1542	2018	3198	1968	1359	1165	1153	1784
MIN (WY)	1978	1986	1997	1996	1981	1977	1993	1989	1972	1973	1969	1987
MIN (WY)	68.5	68.1	142	131	197	326	341	311	135	66.1	55.9	43.2
(WY)	1964	1965	1999	1981	1980	1981	1966	2001	1962	1999	1999	1964

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1961 - 2001
ANNUAL TOTAL	189329	141047	
ANNUAL MEAN	517	386	619
HIGHEST ANNUAL MEAN			954
LOWEST ANNUAL MEAN			289
HIGHEST DAILY MEAN	3920	Dec 19	3920
LOWEST DAILY MEAN	83	Sep 10 ^a	72
ANNUAL SEVEN-DAY MINIMUM	99	Sep 29	72
MAXIMUM PEAK FLOW			4020
MAXIMUM PEAK STAGE			6.35
INSTANTANEOUS LOW FLOW			8.86
10 PERCENT EXCEEDS	1060	790	1320
50 PERCENT EXCEEDS	353	237	410
90 PERCENT EXCEEDS	121	97	107

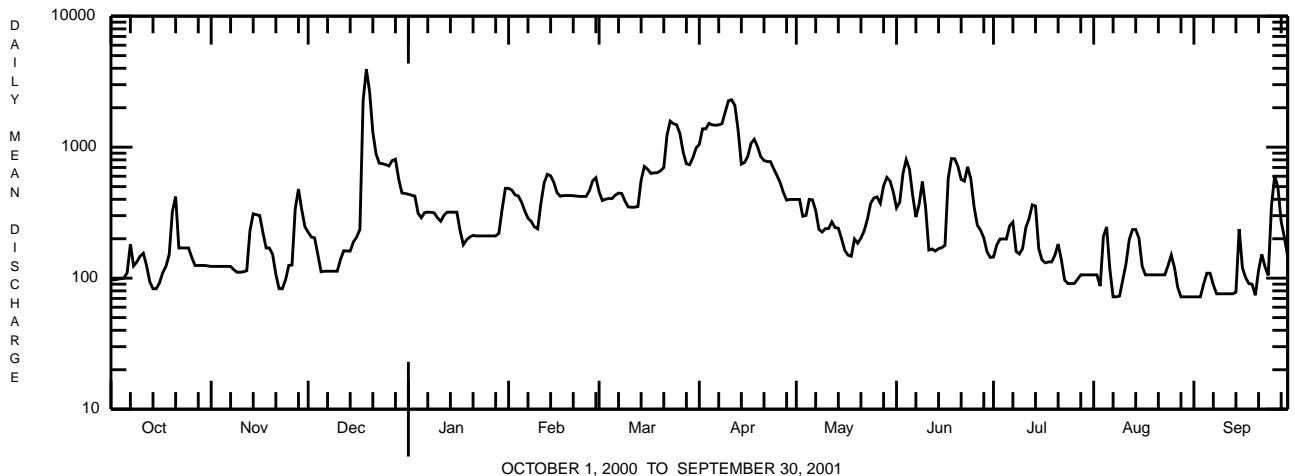
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1960, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	378	571	1002	692	678	790	1886	909	425	245	190	371
MAX (WY)	502	854	1504	778	1039	926	2536	1134	521	339	270	744
MIN (WY)	1960	1960	1958	1960	1960	1958	1958	1958	1960	1960	1960	1960
MIN (WY)	173	347	371	549	467	610	1262	520	310	195	129	135
(WY)	1958	1958	1959	1959	1959	1960	1959	1959	1959	1959	1959	1959

SUMMARY STATISTICS WATER YEARS 1958 - 1960

ANNUAL TOTAL ANNUAL MEAN	676
HIGHEST ANNUAL MEAN	807
LOWEST ANNUAL MEAN	478
HIGHEST DAILY MEAN	10700
LOWEST DAILY MEAN	50
ANNUAL SEVEN DAY MINIMUM	63
INSTANTANEOUS PEAK FLOW	f13800
INSTANTANEOUS PEAK STAGE	9.85
ANNUAL RUNOFF (CFSM)	2.33
ANNUAL RUNOFF (INCHES)	31.69
10 PERCENT EXCEEDS	1390
50 PERCENT EXCEEDS	440
90 PERCENT EXCEEDS	141

- a Also Oct. 14, 15, Nov. 22, 23.
- b Also Aug. 8, 28-31, Sept. 1-3.
- c Also July 22, 23, 1965.
- d Result of shutoff at reservoir.
- f From rating curve extended above 6,100 ft³/s.



LEHIGH RIVER BASIN

01447800 LEHIGH RIVER BELOW FRANCIS E. WALTER RESERVOIR NEAR WHITE HAVEN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to 1982.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Water years 1988 to current year.

INSTRUMENTATION.--Temperature probe interfaced with a data collection platform.

REMARKS.--Water temperature records rated good. Interruptions in the record were due to malfunctions of the recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 31.5°C, July 21, 1988; minimum, 0.0°C, many days during winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 29.0°C, July 25; minimum, 0.0°C, many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.0	12.0	12.5	10.0	7.5	8.0	3.0	2.5	2.5	.5	.0	.5
2	14.0	12.0	12.5	9.5	7.5	8.0	3.0	2.0	2.5	.5	.0	.0
3	14.0	12.5	13.0	9.0	7.5	8.0	2.5	2.0	2.0	.5	.0	.0
4	14.5	12.5	13.5	8.0	7.0	7.5	3.5	2.0	2.0	.5	.0	.0
5	13.5	13.5	13.5	8.5	7.5	8.0	3.0	2.0	2.0	.5	.0	.0
6	14.0	13.5	14.0	9.0	7.0	7.5	2.5	1.5	2.0	.5	.0	.5
7	15.0	12.5	13.5	8.0	6.5	7.0	2.5	1.5	2.0	.5	.0	.5
8	13.5	11.5	12.5	7.5	6.5	7.0	2.0	1.5	2.0	.5	.0	.0
9	12.0	10.0	11.0	7.0	6.5	7.0	2.0	1.0	1.5	.5	.0	.0
10	10.5	9.5	10.0	7.5	7.0	7.0	2.0	1.0	1.5	.5	.0	.0
11	11.0	9.0	9.5	8.0	7.0	7.5	2.0	1.0	1.5	.5	.0	.5
12	12.5	9.0	10.0	8.0	7.5	7.5	1.5	.5	1.0	.5	.0	.0
13	15.0	9.0	10.5	7.5	7.0	7.5	1.0	.5	.5	.5	.0	.0
14	15.5	8.5	11.0	7.5	7.0	7.5	1.0	.0	.5	.5	.0	.0
15	15.5	9.5	11.5	7.5	6.5	7.0	1.0	.5	.5	.5	.0	.5
16	12.5	11.0	11.5	6.5	5.5	6.0	1.0	.5	1.0	.5	.0	.5
17	11.5	11.0	11.0	6.5	5.5	5.5	2.5	1.0	1.5	.5	.0	.5
18	12.0	11.0	11.5	5.5	5.0	5.5	2.5	2.0	2.5	.5	.0	.5
19	12.5	11.0	11.5	5.5	4.5	5.0	2.0	1.5	2.0	.5	.0	.5
20	12.0	11.0	11.0	5.0	4.0	4.5	1.5	1.0	1.5	.5	.0	.5
21	12.0	10.5	11.0	4.0	3.0	3.5	1.0	1.0	1.0	.5	.0	.0
22	12.0	10.0	11.0	3.5	2.0	2.5	1.0	1.0	1.0	.5	.0	.0
23	11.5	10.0	10.5	3.5	2.0	2.5	1.0	.5	1.0	.5	.0	.0
24	11.0	9.5	10.0	3.5	1.5	2.5	.5	.5	.5	.5	.0	.0
25	11.0	10.0	10.5	3.0	2.5	3.0	.5	.5	.5	.5	.0	.0
26	12.0	10.0	10.5	3.5	3.0	3.0	.5	.5	.5	.5	.0	.0
27	12.0	10.0	11.0	3.0	1.5	2.0	.5	.5	.5	.5	.0	.0
28	12.0	10.5	11.0	2.0	1.5	2.0	.5	.5	.5	.5	.0	.0
29	11.5	9.5	10.5	2.5	2.0	2.5	.5	.5	.5	.5	.0	.0
30	10.5	8.0	9.0	2.5	2.5	2.5	.5	.0	.5	.5	.0	.5
31	10.0	7.5	8.5	---	---	---	.5	.0	.5	.5	.0	.5
MONTH	15.5	7.5	11.2	10.0	1.5	5.5	3.5	.0	1.3	.5	.0	.2

