

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 National Geodetic Vertical Datum of 1929 (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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	257	629	971	745	373	582	2120	532	383	575	247	255
2	257	523	937	1550	370	568	1990	491	3060	580	297	888
3	201	523	663	1450	367	e570	2010	455	4450	536	342	1360
4	390	458	542	1150	368	e570	1820	385	4050	571	426	1120
5	468	421	582	1150	564	567	1590	385	3030	447	853	932
6	171	422	539	1280	614	542	1530	385	1850	336	1450	734
7	171	483	511	1250	514	e480	1130	346	651	339	1620	543
8	151	614	501	904	e460	471	962	326	197	346	1240	358
9	137	745	493	644	e460	475	983	408	1650	351	936	291
10	138	740	392	651	323	476	987	499	2360	364	990	294
11	248	739	343	696	e290	472	1050	454	1700	448	1280	297
12	456	733	1010	691	e310	471	1190	457	1310	581	2050	262
13	648	945	1360	609	e310	467	1190	459	1260	450	1800	242
14	1100	1070	1360	501	e360	434	1100	459	1070	264	1010	343
15	1330	1050	1430	405	e370	416	851	455	1200	226	742	843
16	1330	1040	1630	367	e370	424	751	375	1610	227	625	3250
17	2210	1040	1640	e380	e370	1010	752	490	1200	227	761	3340
18	2160	1450	1250	e430	318	1960	748	402	1020	227	784	1490
19	1240	3020	729	e430	248	2580	745	331	958	229	594	896
20	1390	2400	692	e430	336	1860	736	314	879	230	535	1190
21	1390	1110	1090	e430	e370	1870	651	314	358	232	460	1610
22	1020	1110	1150	e430	385	3100	609	315	652	313	400	1560
23	675	1110	1910	e430	608	3230	613	350	4660	716	383	775
24	546	1110	1840	e390	889	3630	543	411	6820	986	385	3690
25	523	1100	1530	334	891	3390	516	411	6420	768	334	5080
26	523	1090	1100	323	612	3070	548	418	6520	593	296	3630
27	527	1080	659	e320	515	2960	553	729	4120	396	263	2090
28	714	1060	613	e320	571	2560	561	919	1340	339	249	2120
29	823	1030	628	363	---	2290	561	757	1030	405	249	2130
30	818	1000	635	382	---	2260	549	509	717	372	253	1500
31	736	---	707	380	---	2360	---	550	---	306	253	---
TOTAL	22748	29845	29437	19815	12536	46115	29939	14091	66525	12980	22107	43113
MEAN	734	995	950	639	448	1488	998	455	2218	419	713	1437
MAX	2210	3020	1910	1550	891	3630	2120	919	6820	986	2050	5080
MIN	137	421	343	320	248	416	516	314	197	226	247	242

e Estimated.

LEHIGH RIVER BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2003, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	441	635	696	639	642	1017	1113	767	565	343	267	348
MAX (WY)	1435	1488	2079	2596	1542	2018	3198	1968	2218	1165	1153	1784
MIN (WY)	1978	1986	1997	1996	1981	1977	1993	1989	2003	1973	1969	1987
MIN (WY)	68.5	68.1	142	131	197	326	341	311	135	66.1	55.9	43.2
MIN (WY)	1964	1965	1999	1981	1980	1981	1966	2001	1962	1999	1999	1964

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1961 - 2003	
ANNUAL TOTAL	219126	349251		
ANNUAL MEAN	600	957	622	2003
HIGHEST ANNUAL MEAN			957	1965
LOWEST ANNUAL MEAN			289	1965
HIGHEST DAILY MEAN	7830	May 29	6820	Jun 24
LOWEST DAILY MEAN	100	Aug 20-29 ^a	137	Oct 9
ANNUAL SEVEN-DAY MINIMUM	100	Aug 20	210	Oct 6
MAXIMUM PEAK FLOW			7090	Jun 26
MAXIMUM PEAK STAGE			7.47	Jun 26
INSTANTANEOUS LOW FLOW				8.86
10 PERCENT EXCEEDS	1240	2000	1330	Nov 14 1961
50 PERCENT EXCEEDS	450	612	411	
90 PERCENT EXCEEDS	170	310	108	

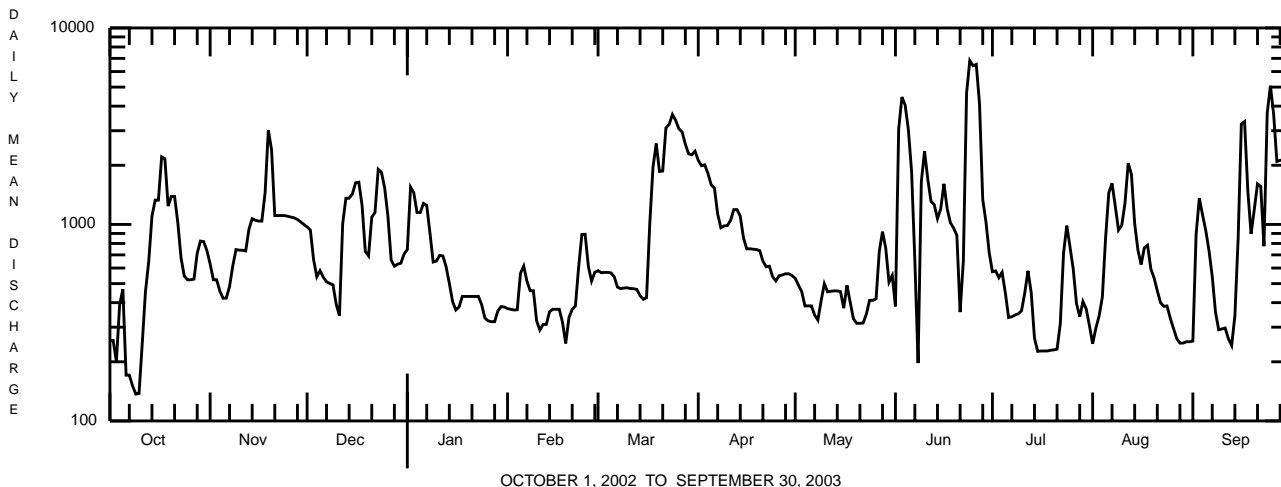
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1960, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	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
MIN (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	1960
LOWEST ANNUAL MEAN	478	1959
HIGHEST DAILY MEAN	10700	Dec 21 1957
LOWEST DAILY MEAN	50	Oct 4 1957
ANNUAL SEVEN DAY MINIMUM	63	Oct 1 1957
MAXIMUM PEAK FLOW	d13800	Dec 21 1957
MAXIMUM PEAK STAGE	9.85	Dec 21 1957
ANNUAL RUNOFF (CFSM)	2.33	
ANNUAL RUNOFF (INCHES)	31.69	
10 PERCENT EXCEEDS	1390	
50 PERCENT EXCEEDS	440	
90 PERCENT EXCEEDS	141	

- a Also Sept. 25, 26.
- b Also July 22, 23, 1965.
- c Result of shutoff at reservoir.
- d 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.

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, 23.5°C, Aug. 19; minimum, 0.0°C, many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.0	17.0	17.5	8.5	8.0	8.0	3.0	2.5	2.5	2.5	2.0	2.5
2	18.0	17.0	17.5	8.0	8.0	8.0	3.0	1.0	2.5	2.5	2.0	2.5
3	18.0	17.0	17.5	8.0	7.5	8.0	1.5	1.0	1.5	2.0	1.5	2.0
4	18.0	17.0	17.5	7.5	7.0	7.5	1.5	1.5	1.5	1.5	1.0	1.0
5	18.5	17.5	18.0	7.5	7.0	7.0	1.5	1.0	1.0	1.5	1.0	1.5
6	18.5	17.0	17.5	7.5	7.0	7.0	1.0	0.5	1.0	1.5	1.5	1.5
7	18.0	17.5	17.5	7.5	7.0	7.0	1.0	0.5	0.5	1.5	1.0	1.5
8	18.5	17.0	17.5	7.5	7.0	7.0	0.5	0.5	0.5	1.0	0.5	1.0
9	18.0	17.0	17.0	7.0	7.0	7.0	0.5	0.5	0.5	2.0	1.0	1.5
10	17.0	16.5	16.5	7.0	7.0	7.0	0.5	0.5	0.5	2.0	2.0	2.0
11	17.0	16.0	16.5	7.5	7.0	7.0	0.5	0.5	0.5	2.0	1.0	1.5
12	17.0	15.0	16.0	7.5	7.0	7.5	0.5	0.5	0.5	1.0	0.5	1.0
13	15.0	15.0	15.0	8.0	7.5	7.5	1.0	0.5	0.5	0.5	0.5	0.5
14	15.0	15.0	15.0	8.5	8.0	8.0	2.0	1.0	1.5	0.5	0.0	0.5
15	15.0	14.5	14.5	8.0	8.0	8.0	2.0	2.0	2.0	0.5	0.0	0.0
16	14.5	14.0	14.0	8.5	8.0	8.0	2.5	2.0	2.5	0.5	0.0	0.0
17	14.0	12.5	13.0	8.5	7.5	8.0	2.0	1.5	1.5	0.5	0.0	0.0
18	12.5	12.0	12.5	7.5	7.0	7.0	1.5	0.5	1.0	0.5	0.0	0.0
19	12.0	11.5	12.0	7.0	6.5	6.5	1.5	0.5	1.0	0.0	0.0	0.0
20	12.0	11.5	11.5	6.5	5.5	6.0	3.0	1.5	2.0	0.5	0.0	0.0
21	11.5	11.5	11.5	5.5	5.5	5.5	3.0	2.5	2.5	0.5	0.0	0.0
22	11.5	11.0	11.0	5.5	5.5	5.5	2.5	2.0	2.5	0.0	0.0	0.0
23	11.0	10.5	10.5	6.0	5.5	6.0	2.5	2.0	2.5	0.0	0.0	0.0
24	10.5	10.5	10.5	6.0	5.5	5.5	2.5	2.0	2.5	0.5	0.0	0.0
25	10.5	10.0	10.0	5.5	5.0	5.5	2.0	1.0	2.0	0.5	0.0	0.0
26	10.0	10.0	10.0	5.5	5.0	5.0	1.0	0.5	0.5	0.0	0.0	0.0
27	10.0	9.5	10.0	5.0	5.0	5.0	0.5	0.5	0.5	0.0	0.0	0.0
28	10.0	9.5	10.0	5.0	4.0	4.5	1.0	0.5	0.5	0.0	0.0	0.0
29	10.0	9.5	10.0	4.0	3.5	4.0	1.0	0.5	1.0	0.0	0.0	0.0
30	9.5	9.0	9.5	3.5	3.0	3.5	1.5	1.0	1.0	0.5	0.0	0.0
31	9.0	8.5	9.0	---	---	---	2.0	1.0	1.5	0.5	0.0	0.0
MONTH	18.5	8.5	13.7	8.5	3.0	6.6	3.0	0.5	1.4	2.5	0.0	0.7

