

LACKAWAXEN RIVER BASIN

01429000 WEST BRANCH LACKAWAXEN RIVER AT PROMPTON, PA

LOCATION.--Lat 41°35'14", long 75°19'38", Wayne County, Hydrologic Unit 02040103, on left bank 500 ft downstream from Prompton Reservoir, 1,500 ft upstream from bridge on U.S. Highway 6 at Prompton, and 2,000 ft upstream from Van Auken Creek.

DRAINAGE AREA.--59.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1944 to current year. Prior to October 1952, published as Lackawaxen River at Prompton.

REVISED RECORDS.--WSP 1432: 1948-49. WDR PA-71-1: 1970(M).

GAGE.--Water-stage recorder. Datum of gage is 1,083.78 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since 1960 by Prompton Reservoir (station 01428900) 500 ft upstream. Satellite and landline telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 23, 1942 reached a stage of 16.7 ft, from floodmark, 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	13	15	18	18	92	115	235	66	49	15	6.9	7.4
2	13	14	17	17	134	133	237	61	44	15	6.6	7.0
3	13	13	17	17	252	117	223	56	40	14	6.4	6.8
4	13	12	17	18	264	397	203	53	38	14	6.0	6.5
5	12	11	16	18	229	377	181	54	35	13	5.7	6.3
6	12	11	16	17	188	267	152	52	34	12	5.3	6.8
7	12	11	16	16	157	204	134	50	32	12	5.0	7.5
8	17	11	16	16	137	157	116	69	32	11	5.2	8.0
9	27	10	17	16	117	132	112	126	30	10	5.7	8.3
10	30	9.9	17	18	106	120	154	121	28	10	5.3	8.8
11	34	11	17	21	99	103	142	100	27	10	5.2	8.8
12	35	12	16	22	119	92	146	84	26	9.7	5.2	8.5
13	34	13	16	24	217	82	174	72	24	9.5	5.3	8.2
14	33	13	16	26	183	79	157	62	23	8.9	6.5	8.0
15	33	13	15	27	143	79	133	55	23	8.6	6.8	8.2
16	32	12	15	28	129	74	118	50	22	8.3	6.8	17
17	31	12	15	28	126	82	132	45	21	8.0	6.5	95
18	29	12	14	29	122	137	149	42	22	8.1	6.4	96
19	29	11	14	61	119	180	136	45	23	8.9	6.0	64
20	28	11	14	124	109	159	125	66	22	9.1	5.9	47
21	27	11	13	123	94	144	120	61	21	8.5	8.0	41
22	26	10	16	121	76	288	107	52	20	8.6	8.4	59
23	25	10	21	149	64	305	106	49	19	8.3	8.4	87
24	24	9.7	23	508	63	265	156	81	17	8.0	8.1	71
25	22	9.5	23	753	59	254	143	170	17	7.9	7.7	56
26	21	11	22	427	58	229	123	156	16	7.8	8.6	45
27	e19	15	21	281	56	209	104	126	15	7.5	9.2	39
28	19	16	20	214	61	220	91	99	14	7.2	9.2	35
29	18	16	20	174	---	249	81	80	15	7.1	9.0	34
30	16	17	20	140	---	268	72	66	16	6.8	8.4	35
31	15	---	18	113	---	247	---	56	---	6.8	7.8	---
TOTAL	712	363.1	536	3564	3573	5764	4262	2325	765	299.6	211.5	936.1
MEAN	23.0	12.1	17.3	115	128	186	142	75.0	25.5	9.66	6.82	31.2
MAX	35	17	23	753	264	397	237	170	49	15	9.2	96
MIN	12	9.5	13	16	56	74	72	42	14	6.8	5.0	6.3

e Estimated.

LACKAWAXEN RIVER BASIN

01429000 WEST BRANCH LACKAWAXEN RIVER AT PROMPTON, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1999, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	59.8	98.1	117	105	124	212	229	131	70.2	39.8	29.9	39.4
MAX	307	362	309	312	369	620	556	329	260	133	127	221
(WY)	1978	1973	1997	1979	1981	1977	1993	1989	1973	1984	1994	1987
MIN	7.15	7.65	17.3	19.1	19.0	60.4	86.5	45.8	17.5	9.66	6.82	6.67
(WY)	1965	1965	1999	1981	1980	1981	1988	1965	1962	1999	1999	1964

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1961 - 1999

ANNUAL TOTAL	40292.8			23311.3								
ANNUAL MEAN	110			63.9			104					
HIGHEST ANNUAL MEAN							176					
LOWEST ANNUAL MEAN							49.7					
HIGHEST DAILY MEAN	1020			Jan 9			753			Jan 25		
LOWEST DAILY MEAN	7.9			Sep 20,21			5.0			Aug 7		
ANNUAL SEVEN-DAY MINIMUM	8.7			Sep 16			5.3			Aug 6		
INSTANTANEOUS PEAK FLOW							947			Jan 24		
INSTANTANEOUS PEAK STAGE							3.56			Jan 24		
INSTANTANEOUS LOW FLOW										1.8		
10 PERCENT EXCEEDS	273						157			240		
50 PERCENT EXCEEDS	50						23			55		
90 PERCENT EXCEEDS	11						8.0			14		

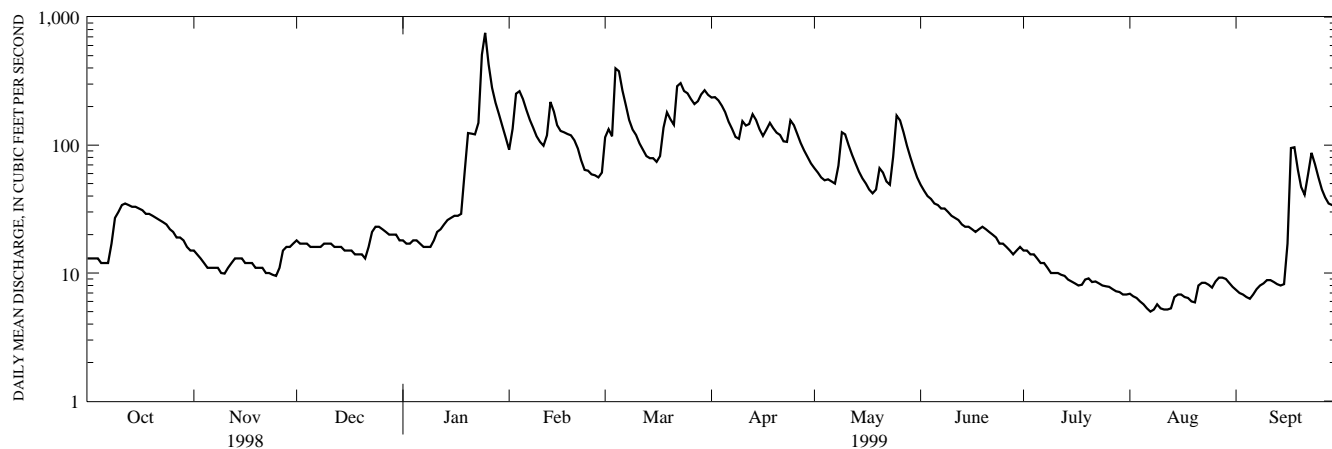
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1960, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	62.2	113	136	130	125	221	264	139	63.6	54.3	45.8	47.0
MAX	376	213	243	245	230	409	539	301	155	190	304	153
(WY)	1956	1946	1951	1952	1951	1945	1958	1947	1960	1947	1955	1960
MIN	15.2	23.7	28.8	36.2	46.4	104	57.4	38.6	16.4	10.3	1.33	11.6
(WY)	1958	1958	1947	1948	1958	1960	1946	1951	1959	1955	1960	1957

SUMMARY STATISTICS WATER YEARS 1945 - 1960

ANNUAL MEAN	117	
HIGHEST ANNUAL MEAN	152	1952
LOWEST ANNUAL MEAN	78.1	1957
HIGHEST DAILY MEAN	2440	Aug 19 1955
LOWEST DAILY MEAN	.00	Jul 27 1960
ANNUAL SEVEN DAY MINIMUM	.00	Jul 27 1960
INSTANTANEOUS PEAK FLOW	a5860	Aug 18 1955
INSTANTANEOUS PEAK STAGE	9.24	Aug 18 1955
INSTANTANEOUS LOW FLOW	b.00	Jul 26 1960
ANNUAL RUNOFF (CFSM)	1.95	
ANNUAL RUNOFF (INCHES)	26.56	
10 PERCENT EXCEEDS	257	
50 PERCENT EXCEEDS	62	
90 PERCENT EXCEEDS	15	

- a From rating curve extended above 3,600 ft³/s.
- b No flow July 26 to Aug. 25, 1960, result of construction work upstream.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999

LACKAWAXEN RIVER BASIN

01429000 WEST BRANCH LACKAWAXEN RIVER AT PROMPTON, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to 1987.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Water years 1987 to current year.

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

REMARKS.--Interruptions in the record were due to malfunctions of the recording instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 26.5°C, Sept. 10, 1989; minimum, 0.0°C, several days during March and April 1994 and January 1996.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 25.0°C, July 10, Aug. 6, 7, 9; minimum, 0.5°C, Jan. 27, 28.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	17.5	18.0	10.5	10.0	10.5	6.0	5.5	5.5	3.5	3.0	3.5
2	17.5	17.0	17.0	10.0	9.5	10.0	6.0	5.5	5.5	3.5	3.0	3.5
3	17.0	16.5	17.0	9.5	9.0	9.5	6.0	5.5	5.5	3.5	3.0	3.5
4	17.0	16.0	16.5	9.0	8.5	9.0	7.0	6.0	6.5	3.5	3.5	3.5
5	17.0	16.0	16.0	8.5	8.0	8.5	6.5	6.5	6.5	3.5	3.5	3.5
6	16.5	15.0	15.5	8.0	7.5	8.0	7.0	6.5	6.5	3.5	3.5	3.5
7	15.5	15.0	15.0	8.0	7.5	7.5	7.0	6.5	7.0	3.5	3.5	3.5
8	15.5	15.0	15.0	7.5	7.5	7.5	7.0	6.5	7.0	3.5	3.5	3.5
9	15.5	15.5	15.5	7.5	7.0	7.5	7.0	6.5	6.5	3.5	3.5	3.5
10	15.5	15.0	15.0	7.5	7.0	7.0	6.5	6.0	6.0	4.0	3.5	3.5
11	15.0	15.0	15.0	8.0	7.5	7.5	6.0	5.5	6.0	3.5	3.5	3.5
12	15.0	14.5	15.0	8.0	7.5	7.5	5.5	5.0	5.5	4.0	3.5	3.5
13	15.0	14.0	14.5	7.5	7.0	7.0	5.5	5.0	5.0	4.0	3.5	3.5
14	15.0	14.0	14.5	7.5	7.0	7.0	5.0	4.5	5.0	3.5	3.5	3.5
15	15.0	14.5	15.0	7.0	7.0	7.0	5.0	4.0	4.5	4.0	3.5	3.5
16	15.0	14.5	14.5	7.0	6.5	7.0	4.5	4.0	4.5	4.0	3.5	3.5
17	14.5	14.0	14.5	7.0	6.5	7.0	4.5	4.0	4.0	4.0	3.5	3.5
18	14.5	14.0	14.0	7.0	6.5	6.5	4.0	3.5	3.5	4.0	3.5	3.5
19	14.5	14.0	14.0	6.5	6.0	6.5	4.0	3.5	4.0	3.5	3.0	3.0
20	14.5	14.0	14.5	6.5	6.0	6.5	4.0	3.5	4.0	3.0	2.5	3.0
21	14.0	13.5	14.0	6.0	5.5	6.0	4.0	4.0	4.0	2.5	2.5	2.5
22	13.5	12.5	13.0	6.0	5.5	5.5	4.5	3.0	4.0	2.5	2.0	2.5
23	13.0	12.5	12.5	6.0	5.5	5.5	3.5	3.0	3.0	2.0	2.0	2.0
24	13.0	12.5	12.5	6.0	5.5	6.0	3.0	2.5	3.0	2.5	1.5	2.0
25	13.5	12.5	13.0	6.0	5.5	5.5	3.0	2.5	3.0	1.5	1.0	1.0
26	13.0	12.0	12.5	6.0	5.5	5.5	4.0	3.0	3.5	1.0	1.0	1.0
27	---	---	---	5.5	5.5	5.5	3.5	3.0	3.5	1.0	.5	1.0
28	12.0	12.0	12.0	6.0	5.5	5.5	3.5	3.5	3.5	1.0	.5	1.0
29	12.0	11.5	11.5	6.0	5.5	5.5	3.5	3.0	3.5	1.5	1.0	1.0
30	11.5	11.0	11.0	5.5	5.5	5.5	3.5	3.0	3.5	2.0	1.5	1.5
31	11.0	10.5	10.5	---	---	---	3.5	3.0	3.5	2.0	1.5	2.0
MONTH	18.5	10.5	14.3	10.5	5.5	7.0	7.0	2.5	4.7	4.0	.5	2.8

