

LEHIGH RIVER BASIN

01447680 TUNKHANNOCK CREEK NEAR LONG POND, PA

LOCATION.--Lat 41°03'55", long 75°31'14", Monroe County, Hydrologic Unit 02040106, on left bank 0.6 mi downstream from unnamed tributary, 0.9 mi downstream from bridge on SR 4002, 3.0 mi west of Long Pond, and 5.0 mi upstream from mouth.

DRAINAGE AREA.--18.0 mi². At site used prior to July 7, 1966, 16.8 mi².

PERIOD OF RECORD.--March 1965 to current year.

REVISED RECORDS.--WDR PA-90-1: 1990 (monthly runoff).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,804.83 ft above sea level. Prior to July 7, 1966, nonrecording gage at site 0.8 mi upstream at different datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diversion upstream to Wild Creek Basin since October 1969. Several measurements of water temperature were made during the year. Satellite telemetry at station.

COOPERATION.--Records of diversion provided by the city of Bethlehem.

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	5.1	8.3	16	e8.0	e40	37	34	20	14	6.7	e6.0	e4.0
2	4.6	7.9	15	e9.0	e76	37	35	19	13	7.4	e3.5	e3.5
3	4.3	7.9	13	e19	126	36	34	19	12	6.4	e3.0	e2.8
4	4.5	7.4	12	e25	110	63	34	20	12	5.7	e2.0	e1.7
5	4.2	7.2	12	e23	63	60	35	20	12	5.2	e2.0	1.6
6	3.9	6.7	13	e20	52	45	32	20	12	5.2	e2.2	2.3
7	3.9	6.9	12	18	45	e33	28	20	9.6	4.5	e2.0	3.4
8	10	6.9	13	13	41	e32	27	22	8.5	e4.2	e1.8	4.7
9	21	6.9	13	18	39	e29	32	23	9.0	e4.0	e1.8	4.1
10	58	7.6	14	e24	37	27	45	20	10	4.1	1.7	3.7
11	62	20	12	e25	38	e26	40	19	10	3.7	1.4	e2.5
12	58	33	12	e27	39	e28	34	17	9.5	4.2	1.4	e2.3
13	47	32	11	e23	52	e27	32	17	9.9	4.2	2.1	e2.1
14	40	24	9.8	e21	e40	25	29	16	11	4.0	4.1	e2.0
15	37	16	11	e22	38	24	29	16	14	3.4	4.4	5.2
16	34	14	10	e22	36	23	28	16	13	2.6	4.2	89
17	29	13	11	e23	36	28	34	16	13	2.2	3.3	277
18	22	11	10	e35	38	35	30	15	15	2.0	2.3	275
19	17	11	10	e82	40	38	28	23	14	1.9	1.7	167
20	14	10	9.5	98	35	34	27	35	13	2.0	e2.2	91
21	12	9.9	10	88	31	33	28	28	11	1.9	e2.7	58
22	11	10	10	81	e28	78	26	21	11	3.2	e2.4	47
23	10	10	e10	93	e26	67	26	21	9.9	3.1	e2.2	40
24	9.9	8.8	e10	222	26	57	31	29	8.7	3.0	e2.0	32
25	9.0	8.8	e10	250	25	47	30	32	7.7	2.9	e1.9	25
26	8.7	18	e9.0	e200	24	42	24	25	6.7	2.6	e2.2	21
27	8.3	33	e8.2	145	26	37	23	20	6.6	2.5	e3.0	18
28	8.0	33	e7.4	88	28	38	23	18	6.4	4.5	e2.5	17
29	7.8	25	e7.4	65	---	39	20	17	6.5	6.6	e2.3	16
30	7.9	20	e7.4	e52	---	37	21	15	6.3	8.9	e2.1	34
31	8.1	---	e8.0	e45	---	36	---	15	---	e7.0	e1.8	---
TOTAL	580.2	434.2	336.7	1884.0	1235	1198	899	634	315.3	129.8	78.2	1252.9
MEAN	18.7	14.5	10.9	60.8	44.1	38.6	30.0	20.5	10.5	4.19	2.52	41.8
MAX	62	33	16	250	126	78	45	35	15	8.9	6.0	277
MIN	3.9	6.7	7.4	8.0	24	23	20	15	6.3	1.9	1.4	1.6
(†)	0.9	1.1	1.0	11.6	14.1	12.4	6.5	9.5	3.0	0.6	0.7	5.5

† Diversion to Wild Creek Basin, equivalent in cubic feet per second.
e Estimated.

LEHIGH RIVER BASIN

01447680 TUNKHANNOCK CREEK NEAR LONG POND, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1999, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	34.8	45.3	53.7	49.1	46.9	66.5	83.1	60.4	43.4	28.9	21.0	27.2
MAX	93.2	90.1	161	137	89.3	148	209	115	116	89.5	63.6	142
(WY)	1978	1971	1997	1996	1996	1977	1993	1990	1972	1984	1990	1987
MIN	7.35	9.39	7.07	3.85	13.2	21.1	20.5	20.5	10.5	4.19	2.52	4.59
(WY)	1981	1981	1981	1981	1980	1989	1985	1999	1999	1999	1999	1995

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1970 - 1999
ANNUAL TOTAL	14367.2	8977.3	
ANNUAL MEAN	39.4	24.6	46.7
HIGHEST ANNUAL MEAN			65.9 1978
LOWEST ANNUAL MEAN			23.7 1985
HIGHEST DAILY MEAN	245 Mar 10	277 Sep 17	643 Apr 6 1984
LOWEST DAILY MEAN	3.9 Oct 6,7	1.4 Aug 11,12	1.4 Aug 11,12 1999
ANNUAL SEVEN-DAY MINIMUM	4.4 Oct 1	a1.7 Aug 7	a1.7 Aug 7 1999
INSTANTANEOUS PEAK FLOW		306 Sep 18	679 Apr 6 1984
INSTANTANEOUS PEAK STAGE		3.40 Sep 18	4.76 Apr 6 1984
10 PERCENT EXCEEDS	81	45	95
50 PERCENT EXCEEDS	29	15	33
90 PERCENT EXCEEDS	8.1	2.6	11

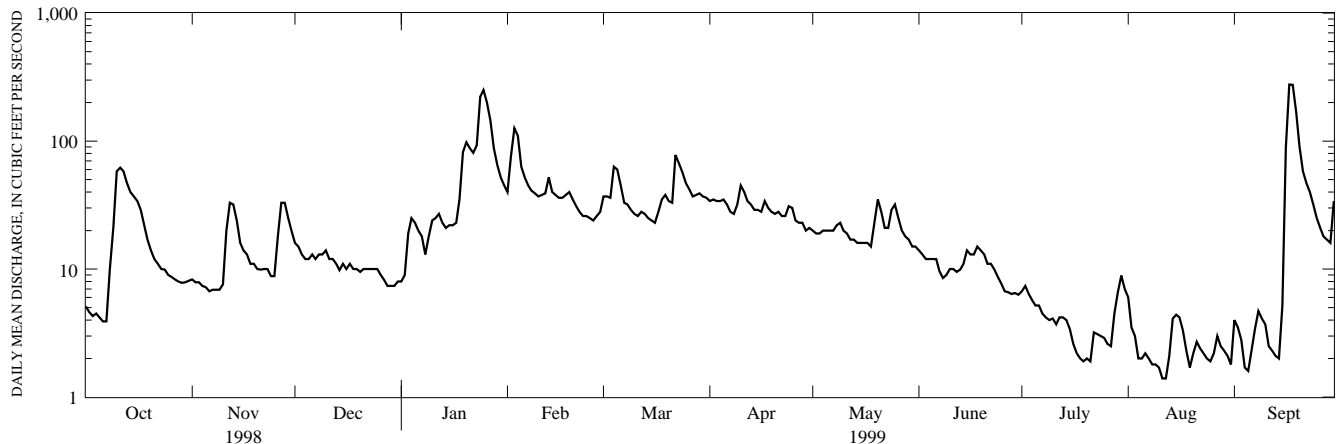
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1969, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	21.5	29.2	37.5	25.7	23.3	55.7	42.6	38.3	38.8	26.6	27.7	16.0
MAX	36.3	35.8	63.0	33.0	27.8	64.7	53.3	49.0	83.3	77.1	80.8	26.6
(WY)	1966	1969	1969	1969	1968	1966	1967	1968	1969	1969	1969	1969
MIN	12.5	22.9	21.0	17.1	21.1	42.2	29.4	20.8	10.4	7.17	8.46	8.86
(WY)	1969	1966	1966	1966	1967	1969	1966	1965	1965	1965	1966	1966

SUMMARY STATISTICS WATER YEARS 1965 - 1969

ANNUAL TOTAL ANNUAL MEAN	33.8	
HIGHEST ANNUAL MEAN	47.0	1969
LOWEST ANNUAL MEAN	24.7	1966
HIGHEST DAILY MEAN	448	Jul 30 1969
LOWEST DAILY MEAN	4.0	Sep 13 1966
ANNUAL SEVEN DAY MINIMUM	4.7	Sep 8 1966
INSTANTANEOUS PEAK FLOW	480	Jul 30 1969
INSTANTANEOUS PEAK STAGE	4.34	Jul 30 1969
INSTANTANEOUS LOW FLOW	3.0	Mar 11 1969
ANNUAL RUNOFF (CFSM)	1.88	
ANNUAL RUNOFF (INCHES)	25.53	
10 PERCENT EXCEEDS	60	
50 PERCENT EXCEEDS	24	
90 PERCENT EXCEEDS	8.6	

a Computed using estimated daily discharges.



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