

## LEHIGH RIVER BASIN

## 01447680 TUNKHANNOCK CREEK NEAR LONG POND, PA

**LOCATION.**--Lat 41°03'55", long 75°31'19", 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.**--20.0 mi<sup>2</sup> (revised). At site used prior to July 7, 1966, 16.8 mi<sup>2</sup>.

**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 National Geodetic Vertical Datum of 1929. 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 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	8.0	70	e19	40	23	59	49	46	28	12	16
2	13	7.9	56	e17	e36	23	60	52	38	25	11	15
3	11	7.4	38	e15	e34	63	48	53	36	24	10	14
4	10	7.4	29	16	30	80	49	45	34	23	10	13
5	9.7	6.6	23	16	24	e50	46	36	32	20	11	12
6	9.5	6.3	20	15	24	40	40	34	55	20	11	11
7	9.2	8.0	19	15	23	35	40	31	175	20	14	11
8	9.2	9.1	20	17	23	33	36	32	172	19	14	9.7
9	9.6	6.7	20	19	23	33	36	34	125	19	12	8.9
10	9.1	8.0	21	19	25	43	42	33	72	19	11	8.1
11	8.4	6.4	20	19	e36	50	e46	32	49	19	9.8	6.8
12	7.8	7.0	22	21	e44	40	e38	35	46	19	9.4	6.6
13	7.9	7.2	23	20	42	34	e36	54	69	18	9.0	6.7
14	8.5	7.0	27	e17	e34	32	e46	75	75	17	8.6	6.3
15	12	6.8	27	19	e24	32	83	81	95	17	8.1	8.9
16	19	6.4	28	18	26	30	e100	65	86	16	7.7	76
17	17	6.9	25	17	23	34	e48	49	65	16	8.2	103
18	15	6.8	27	e16	22	32	35	91	49	16	8.6	86
19	14	6.7	34	15	e24	31	31	123	42	18	8.4	54
20	12	6.1	25	16	25	34	e29	99	44	18	7.9	28
21	11	7.6	21	16	27	e36	e29	69	40	17	8.1	18
22	9.8	7.3	20	15	32	e48	e29	56	36	15	8.6	15
23	9.5	7.3	22	15	28	e50	e29	50	36	17	9.0	13
24	9.0	7.2	22	19	25	43	e30	45	32	25	9.5	13
25	8.3	16	e20	27	24	40	29	44	31	25	9.9	12
26	8.1	41	e18	27	23	43	32	41	31	19	10	11
27	7.7	35	e15	e24	23	105	30	40	36	16	10	21
28	7.7	24	16	24	23	116	54	40	49	15	9.7	60
29	8.4	20	15	28	---	91	87	69	41	14	11	71
30	7.8	28	e14	38	---	67	66	84	32	13	17	56
31	8.1	---	e16	50	---	60	---	62	---	13	19	---
TOTAL	321.3	336.1	773	629	787	1471	1363	1703	1769	580	323.5	791.0
MEAN	10.4	11.2	24.9	20.3	28.1	47.5	45.4	54.9	59.0	18.7	10.4	26.4
MAX	19	41	70	50	44	116	100	123	175	28	19	103
MIN	7.7	6.1	14	15	22	23	29	31	31	13	7.7	6.3
(†)	3.0	0.9	6.9	0.5	0.0	0.0	5.8	6.9	0.0	0.0	0.0	0.0

† 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 - 2002, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	33.0	42.9	51.7	46.5	45.0	64.6	80.0	58.6	43.1	27.9	20.4	26.3
MAX (WY)	1978	1971	1997	1996	1996	1977	1993	1990	1972	1984	1990	1987
MIN (WY)	2001	1981	1981	1981	1980	1989	1985	1999	1999	1999	1999	1995

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1970 - 2002

ANNUAL TOTAL	7732.4	10846.9	
ANNUAL MEAN	21.2	29.7	45.0
HIGHEST ANNUAL MEAN			65.9 1978
LOWEST ANNUAL MEAN			22.2 2001
HIGHEST DAILY MEAN	114 Apr 11	175 Jun 7	643 Apr 6 1984
LOWEST DAILY MEAN	6.1 Nov 20	6.1 Nov 20	1.4 Aug 11,12 1999
ANNUAL SEVEN-DAY MINIMUM	6.7 Nov 14	6.7 Nov 14	a1.7 Aug 7 1999
MAXIMUM PEAK FLOW		191 Jun 7	679 Apr 6 1984
MAXIMUM PEAK STAGE		3.07 Jun 7	4.76 Apr 6 1984
10 PERCENT EXCEEDS	39	60	91
50 PERCENT EXCEEDS	18	23	32
90 PERCENT EXCEEDS	7.8	8.1	10

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 (WY)	1966	1969	1969	1969	1968	1966	1967	1968	1969	1969	1969	1969
MIN (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
MAXIMUM PEAK FLOW	480	Jul 30 1969
MAXIMUM 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.

