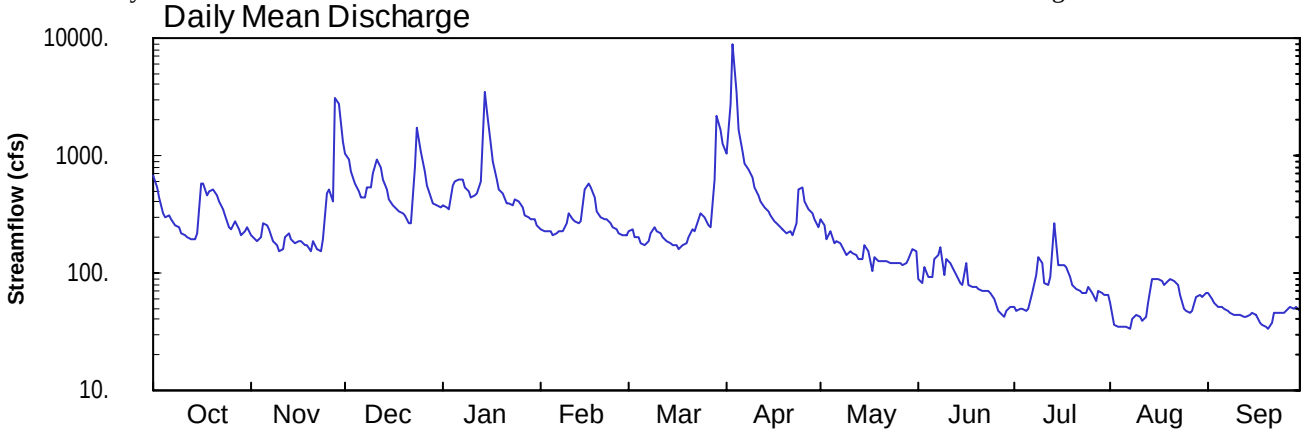
2005 Water Year
LEHIGH RIVER BASIN
01447720 Tobyhanna Creek near Blakeslee, PA

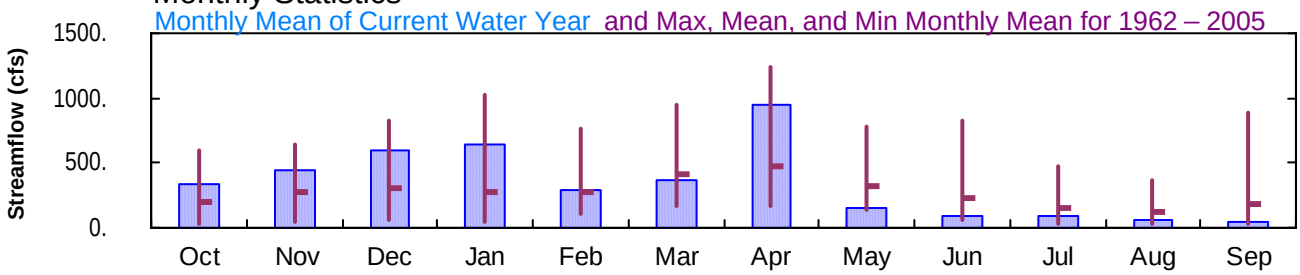
Latitude: 41° 05 ' 05" Longitude: 075° 36 ' 21" Hydrologic Unit Code: 02040106
Carbon County Datum: 1511.23 feet Drainage Area: 118. mi²

Daily Mean Discharge

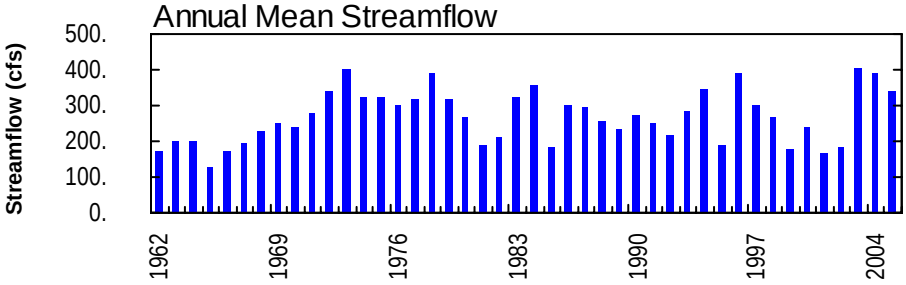


Monthly Statistics

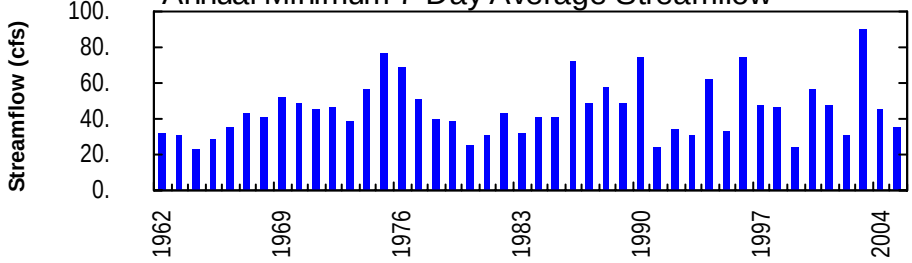
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1962 – 2005



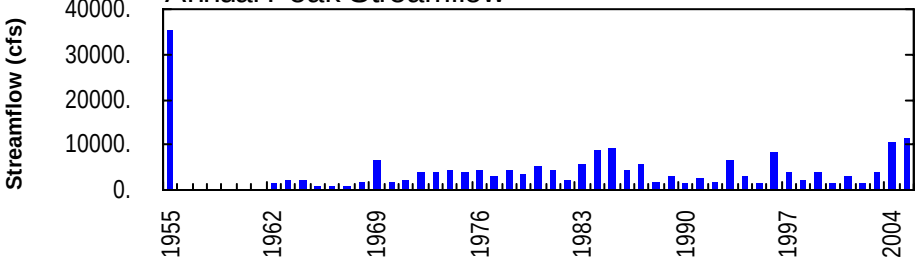
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



LEHIGH RIVER BASIN

01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 41°05'05", long 75°36'21", Carbon County, Hydrologic Unit 02040106, on left bank 50 ft downstream from bridge on State Highway 940, 500 ft downstream from Shingle Mill Run, and 1.5 mi southwest of Blakeslee.

DRAINAGE AREA.--118 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,511.23 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 16, 1962, nonrecording gage at site 50 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Power generation at Pocono Lake about 5.0 mi upstream since 1985 and minor diversion from Tunkhannock Creek Basin into Wild Creek Basin. Satellite and landline telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 19, 1955, reached a stage of 19.41 ft, from floodmark, discharge, 35,300 ft^3/s, by slope-area measurement.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft^3/s and maximum (*****):

Date	Time	Discharge ft^3/s	Gage Height (ft)	Date	Time	Discharge ft^3/s	Gage Height (ft)
Nov. 28	1830	4,690	9.12	Mar. 29	0945	2,280	6.95
Dec. 24	0330	1,950	6.55	Apr. 3	0630	*11,500	*13.27
Jan. 14	1415	4,450	8.93				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	679	209	1030	370	e240	231	1020	285	90	51	56	68
2	536	201	923	363	e230	233	2710	255	84	48	36	61
3	441	187	723	355	228	203	9000	195	113	50	35	56
4	323	198	579	564	225	199	3510	228	92	49	34	52
5	298	266	488	613	212	e180	1650	181	91	47	34	51
6	309	e260	440	614	219	e170	1090	187	134	49	34	49
7	292	e240	444	617	223	190	852	180	140	68	34	47
8	260	189	542	537	229	e220	763	168	169	96	41	46
9	245	174	545	492	264	e250	650	144	96	137	44	44
10	220	153	699	440	326	e230	543	151	133	121	42	44
11	211	158	916	453	292	222	461	146	120	83	39	43
12	199	206	776	471	278	202	403	140	103	79	43	43
13	194	222	628	596	260	186	365	131	95	93	56	42
14	194	196	523	3510	273	176	337	129	81	264	88	45
15	215	178	431	2490	518	170	315	173	78	116	88	47
16	577	187	382	1280	580	174	276	152	121	119	88	43
17	580	189	357	883	542	159	260	104	80	118	85	38
18	455	170	333	629	439	172	249	138	76	114	81	36
19	497	170	322	519	341	179	238	124	75	92	87	35
20	514	156	e310	479	300	203	222	126	73	79	89	34
21	452	184	e270	e390	292	233	224	125	72	72	85	37
22	402	163	265	e390	282	226	211	125	70	70	81	45
23	347	153	789	e380	266	292	262	124	71	68	66	45
24	305	194	1700	e420	247	321	523	121	69	67	49	46
25	244	480	1070	e400	237	303	546	120	61	75	47	45
26	240	516	734	356	216	254	412	120	48	68	46	49
27	272	407	552	e310	211	248	343	119	46	57	47	52
28	237	3070	437	e300	211	631	327	121	43	69	63	49
29	208	2790	394	e290	---	2170	288	131	48	67	65	51
30	230	1330	370	287	---	1680	247	158	52	65	63	48
31	243	---	356	e260	---	1260	---	157	---	64	69	---
TOTAL	10419	13196	18328	20058	8181	11567	28297	4758	2624	2615	1815	1391
MEAN	336	440	591	647	292	373	943	153	87.5	84.4	58.5	46.4
MAX	679	3070	1700	3510	580	2170	9000	285	169	264	89	68
MIN	194	153	265	260	211	159	211	104	43	47	34	34
CFSM	2.85	3.73	5.01	5.48	2.48	3.16	7.99	1.30	0.74	0.71	0.50	0.39
IN.	3.28	4.16	5.78	6.32	2.58	3.65	8.92	1.50	0.83	0.82	0.57	0.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

MEAN	200	269	310	281	268	413	470	319	234	147	124	184
MAX	598	644	827	1019	768	948	1247	784	826	481	372	882
(WY)	1977	1973	1997	1996	1981	1977	1993	1989	2003	1969	1969	2004
MIN	31.2	48.1	58.0	40.6	100	172	162	134	64.1	30.3	34.3	28.0
(WY)	1964	1965	1981	1981	1980	1989	1985	1999	1999	1999	1964	1964

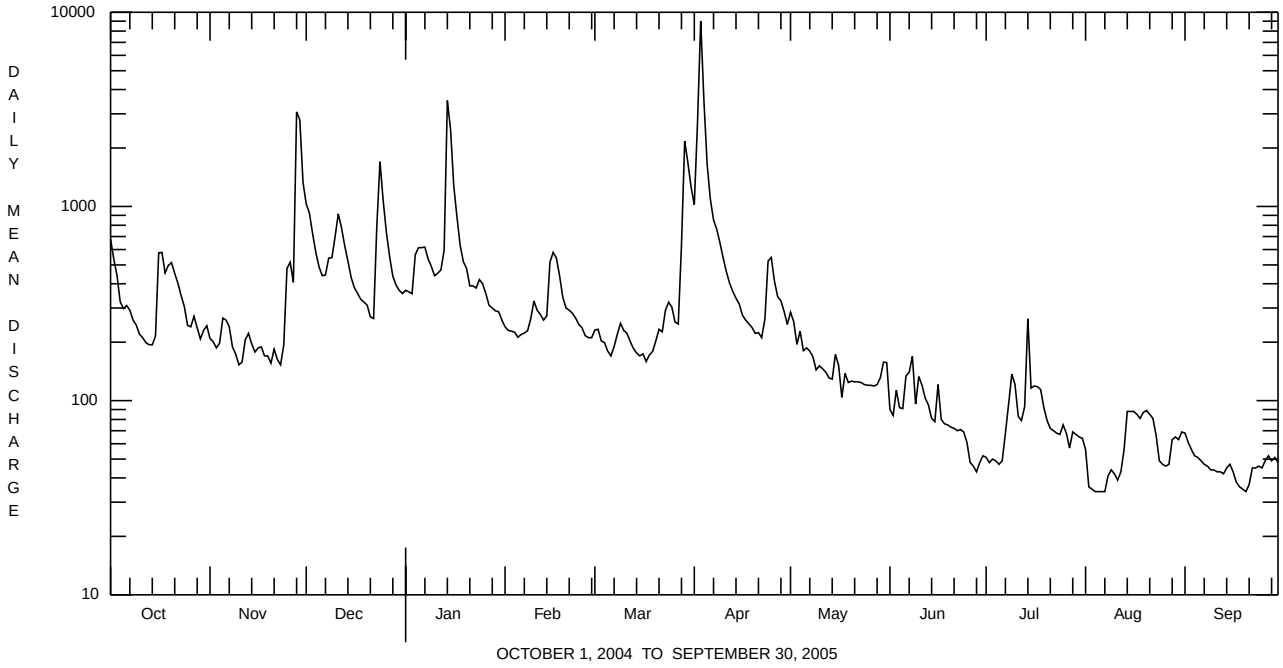
e Estimated.

LEHIGH RIVER BASIN

01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	132045		123249			
ANNUAL MEAN	361		338		268	
HIGHEST ANNUAL MEAN					406	2003
LOWEST ANNUAL MEAN					129	1965
HIGHEST DAILY MEAN	7740	Sep 18	9000	Apr 3	9000	Apr 3 2005
LOWEST DAILY MEAN	43	Jul 11	34	Aug 4-7**a**	21	Aug 12 1999**b**
ANNUAL SEVEN-DAY MINIMUM	45	Jul 5	35	Aug 2	23	Sep 21 1964
MAXIMUM PEAK FLOW			**c**11500	Apr 3	**c**11500	Apr 3 2005
MAXIMUM PEAK STAGE			13.27	Apr 3	13.27	Apr 3 2005
INSTANTANEOUS LOW FLOW					16	Aug 8 1991
ANNUAL RUNOFF (CFSM)	3.06		2.86		2.27	
ANNUAL RUNOFF (INCHES)	41.63		38.85		30.87	
10 PERCENT EXCEEDS	646		603		535	
50 PERCENT EXCEEDS	240		203		180	
90 PERCENT EXCEEDS	126		48		58	

a Also Sept. 20.
b Also Sept. 3, 4, 1999.
c From rating curve extended above 9,300 ft^3/s.



01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1930 to 1982, 2002 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Water year 1980 to September 30, 2004.

REMARKS.--Some values for *"dissolved"* parameters exceed values for the corresponding *"total"* parameter. These results are within the limits of analytical precision and methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, µS/cm 25 degC (90095)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Calcium water unfltrd recoverable, mg/L (00916)
NOV 2004													
17...	1330	1028	9813	134	12.9	6.6	6.4	71	62	4.8	14	3.9	3.8
JAN 2005													
04...	1530	1028	9813	605	--	5.8	6.5	67	61	3.6	13	4.0	3.7
MAR													
16...	1200	1028	9813	182	13.8	6.6	6.6	109	104	2.7	17	4.8	4.7
MAY													
10...	1100	1028	9813	137	10.5	6.8	6.8	81	81	14.1	14	3.7	3.7
JUL													
25...	1650	1028	9813	71	8.4	6.5	6.8	94	87	24.8	19	5.3	5.3
SEP													
19...	1000	1028	9813	35	9.1	6.3	7.2	100	98	16.3	21	6.2	5.8

Date	Magnesium, water, fltrd, mg/L (00925)	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 105degC wat flt mg/L (00515)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Total nitrogen, water, unfltrd mg/L (00600)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)
NOV 2004													
17...	1.0	1.0	6	3.9	--	<2	<.020	.21	<.040	.40	<.01	.01	.6
JAN 2005													
04...	.98	.91	6	4.7	48	<2	<.020	.23	<.040	.48	<.01	.01	1.3
MAR													
16...	1.2	1.2	5	4.8	82	<2	.030	.31	<.040	.48	<.01	<.01	.8
MAY													
10...	1.1	1.1	5	4.0	88	<2	<.020	.13	<.040	.54	<.01	.02	.2
JUL													
25...	1.4	1.3	10	4.5	62	<2	.020	.14	<.040	.37	<.01	.02	.5
SEP													
19...	1.8	1.6	10	4.4	130	2	<.020	.16	<.040	.28	<.01	.01	.3

LEHIGH RIVER BASIN

01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)	Mangan-ese, water, fltrd, µg/L (01056)	Mangan-ese, water, unfltrd recover-able, µg/L (01055)	Nickel, water, fltrd, µg/L (01065)	Nickel, water, unfltrd recover-able, µg/L (01067)	Zinc, water, fltrd, µg/L (01090)
NOV 2004													
17...	70	90	<4	<4	160	240	<1.0	<1.0	20	30	<4.0	<4.0	12
JAN 2005													
04...	120	170	<4	<4	120	200	<1.0	<1.0	40	50	<4.0	<4.0	22
MAR													
16...	50	100	<4	<4	60	110	<1.0	<1.0	30	40	<4.0	<4.0	12
MAY													
10...	50	80	<4	<4	60	140	<1.0	<1.0	20	30	<4.0	<4.0	6.9
JUL													
25...	30	60	<4	<4	100	270	<1.0	<1.0	20	60	<4.0	<4.0	<5.0
SEP													
19...	20	30	<4	<4	40	190	<1.0	<1.0	10	30	<4.0	<4.0	39

Date	Zinc, water, unfltrd recover-able, µg/L (01092)
NOV 2004	
17...	9.2
JAN 2005	
04...	24
MAR	
16...	17
MAY	
10...	7.4
JUL	
25...	<5.0
SEP	
19...	29

01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

REMARKS.--Samples were collected using a D-Frame net with a mesh size of 500 µm. Samples represent counts per 100 animal (approximate) subsamples.

Date	08/25/04
Benthic macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	1
Nemertea (PROBOSCIS WORMS)	
Enopla	
Hoplonemertea	
Tetrastemmatidae	
Prostoma	3
Mollusca	
Bivalvia (CLAMS)	
Veneroida	
Sphaeriidae	
Sphaerium	5
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	5
Polychaeta	
Sabellida	
Sabellidae	
Manayunkia speciosa	1
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
Acentrella	8
Baetis	8
Ephemerellidae	
Attenella	2
Dannella	4
Heptageniidae	
Epeorus	2
Stenonema	17
Isonychiidae	
Isonychia	2
Leptophlebiidae	
Paraleptophlebia	8
Plecoptera (STONEFLIES)	
Perlidae	
Acroneuria	3
Trichoptera (CADDISFLIES)	
Hydropsychidae	
Cheumatopsyche	9
Hydropsyche	8
Philopotamidae	
Chimarra	4
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
Oulimnius	7
Stenelmis	8
Psephenidae (WATER PENNIES)	
Psephenus	3

01447720 TOBYHANNA CREEK NEAR BLAKESLEE, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES--Continued

Date	08/25/04
Benthic macroinvertebrate	Count
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	27
Simuliidae (BLACK FLIES)	
Simulium	1
Tipulidae (CRANE FLIES)	
Antocha	1
Dicranota	1
Total Organisms	138
Total Taxa	24