



2005 Water Year  
LEHIGH RIVER BASIN  
01447500 Lehigh River at Stoddartsville, PA

Latitude: 41° 07' 49"

Longitude: 075° 37' 33"

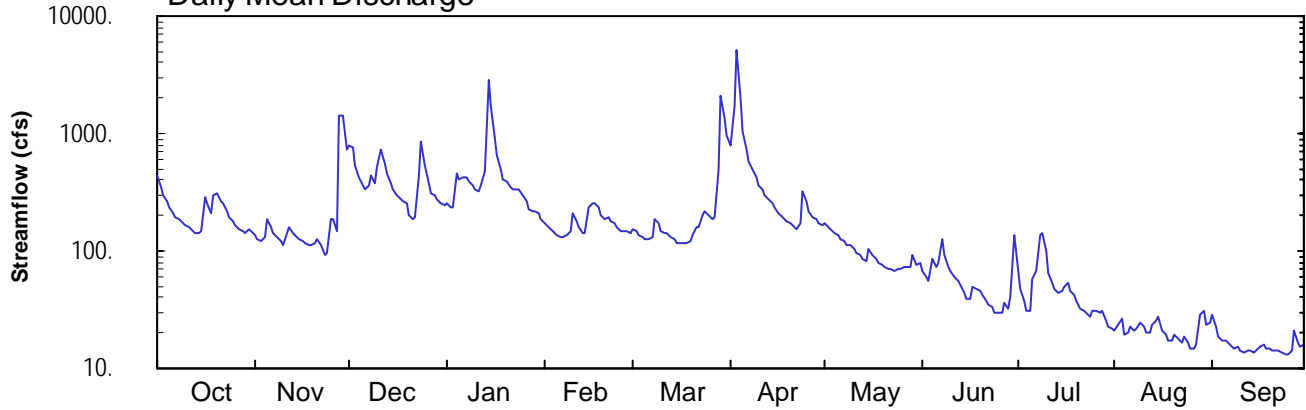
Hydrologic Unit Code: 02040106

Monroe County

Datum: 1463.81 feet

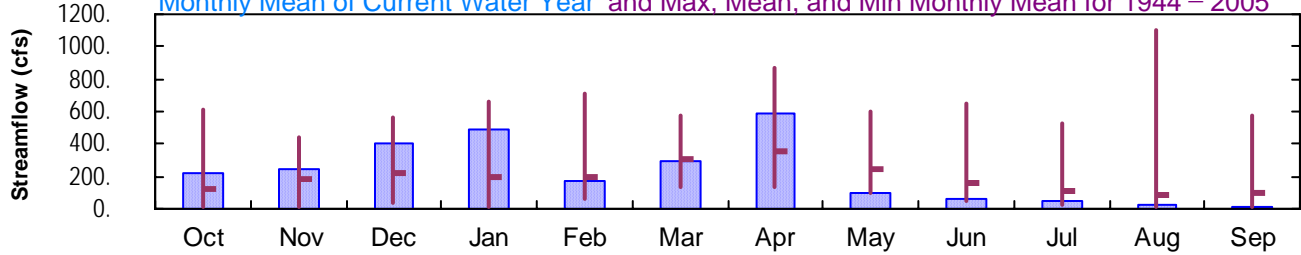
Drainage Area: 91.7 mi<sup>2</sup>

### Daily Mean Discharge

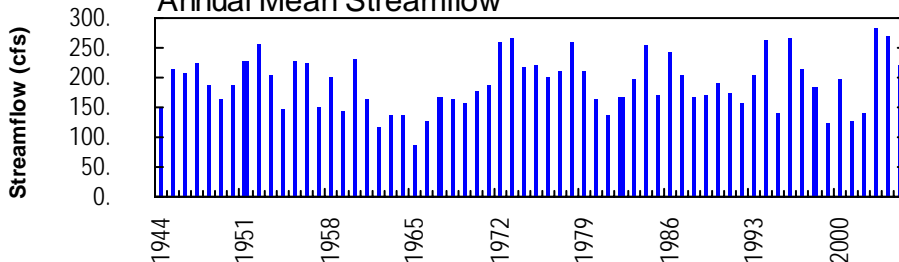


### Monthly Statistics

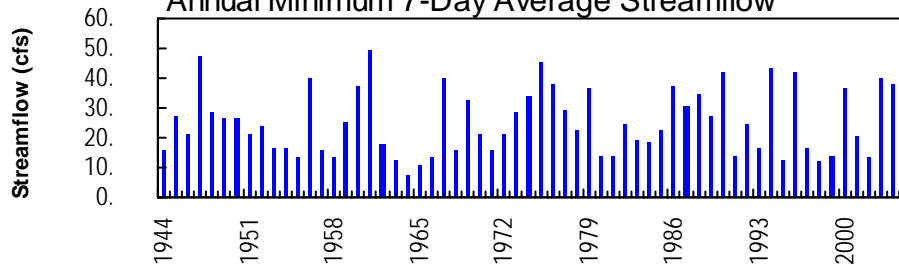
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1944 – 2005



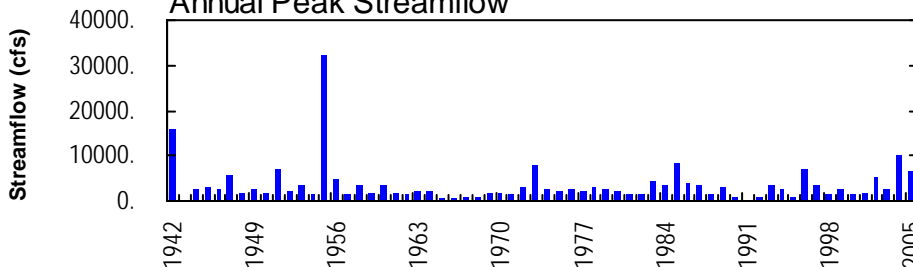
### Annual Mean Streamflow



### Annual Minimum 7-Day Average Streamflow



### Annual Peak Streamflow



## LEHIGH RIVER BASIN

01447500 LEHIGH RIVER AT STODDARTSVILLE, PA  
(Pennsylvania Water-Quality Network Station)

**LOCATION.**--Lat 41°07'49", long 75°37'33", Monroe County, Hydrologic Unit 02040106, on left bank 75 ft upstream from bridge on State Highway 115, at Stoddartsville, 1.9 mi upstream from Tobyhanna Creek, and 4.0 mi southwest of Thornhurst.

**DRAINAGE AREA.**--91.7 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--October 1943 to current year.

**REVISED RECORDS.**--WSP 1382: 1947, 1951.

**GAGE.**--Water-stage recorder. Datum of gage is 1,463.81 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1946, nonrecording gage at site 350 ft downstream at datum 2.14 ft lower.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Satellite and landline telemetry at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of May 22, 1942, reached a stage of 12.03 ft, from floodmark, present site and datum, discharge, 15,700 ft<sup>3</sup>/s.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 1,300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Nov. 28	1645	2,580	5.18	Mar. 29	0615	2,430	5.01
Jan. 14	1245	4,160	6.98	Apr. 3	0315	*6,500	*9.26

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	448	135	795	252	171	156	792	172	68	66	21	29
2	351	126	749	234	161	150	1740	157	59	47	24	23
3	303	123	533	237	156	135	5060	155	55	37	26	19
4	263	133	420	451	144	132	2020	143	85	31	19	17
5	236	190	359	400	135	125	1050	134	74	31	20	17
6	209	162	331	427	133	124	728	129	79	59	22	16
7	195	144	359	421	133	130	575	121	127	67	21	15
8	187	131	437	387	135	190	505	115	94	137	22	15
9	175	121	371	369	150	e170	423	111	73	144	24	15
10	167	114	508	329	211	e150	369	104	68	98	22	14
11	158	140	725	325	183	e140	330	98	60	66	20	14
12	152	160	552	367	158	140	298	94	57	54	21	14
13	144	143	450	469	144	131	276	85	51	47	23	14
14	143	134	384	2830	140	124	253	82	45	44	25	14
15	148	127	332	1740	232	119	233	102	40	47	28	14
16	287	120	e300	936	251	116	209	93	39	50	21	15
17	260	117	283	653	260	115	200	84	50	54	19	16
18	208	115	262	e490	236	117	190	79	47	46	17	15
19	304	114	251	e410	e200	123	180	75	45	43	17	15
20	309	118	e200	e390	e190	138	170	73	43	37	20	14
21	260	126	e190	355	195	157	163	71	38	33	18	14
22	251	113	194	e330	179	160	152	71	35	30	17	14
23	220	94	436	e330	173	202	175	68	33	29	19	14
24	196	95	845	e330	e160	222	322	70	30	27	17	13
25	180	186	533	e300	e150	200	268	70	30	31	15	13
26	168	187	e370	e270	149	188	218	74	30	31	15	14
27	157	146	e310	228	145	193	197	73	37	30	16	21
28	148	1430	296	217	140	491	186	72	32	31	28	17
29	141	1440	277	219	---	2090	170	91	40	25	31	15
30	154	742	254	209	---	1390	165	77	139	23	24	16
31	147	---	246	188	---	977	---	78	---	22	25	---
TOTAL	6669	7226	12552	15093	4814	8995	17617	3021	1703	1517	657	476
MEAN	215	241	405	487	172	290	587	97.5	56.8	48.9	21.2	15.9
MAX	448	1440	845	2830	260	2090	5060	172	139	144	31	29
MIN	141	94	190	188	133	115	152	68	30	22	15	13
CFSM	2.35	2.63	4.42	5.31	1.87	3.16	6.40	1.06	0.62	0.53	0.23	0.17
IN.	2.71	2.93	5.09	6.12	1.95	3.65	7.15	1.23	0.69	0.62	0.27	0.19

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2005, BY WATER YEAR (WY)

MEAN	123	182	220	200	195	305	354	250	164	105	91.3	96.7
MAX	613	439	561	665	709	577	867	604	655	528	1101	574
(WY)	1956	1973	1974	1996	1981	1977	1993	1989	1972	1947	1955	2004
MIN	14.1	17.1	35.5	18.3	62.2	131	135	92.9	43.0	19.8	14.2	9.18
(WY)	1964	1965	1981	1981	1980	1989	1995	1995	1962	1965	1964	1964

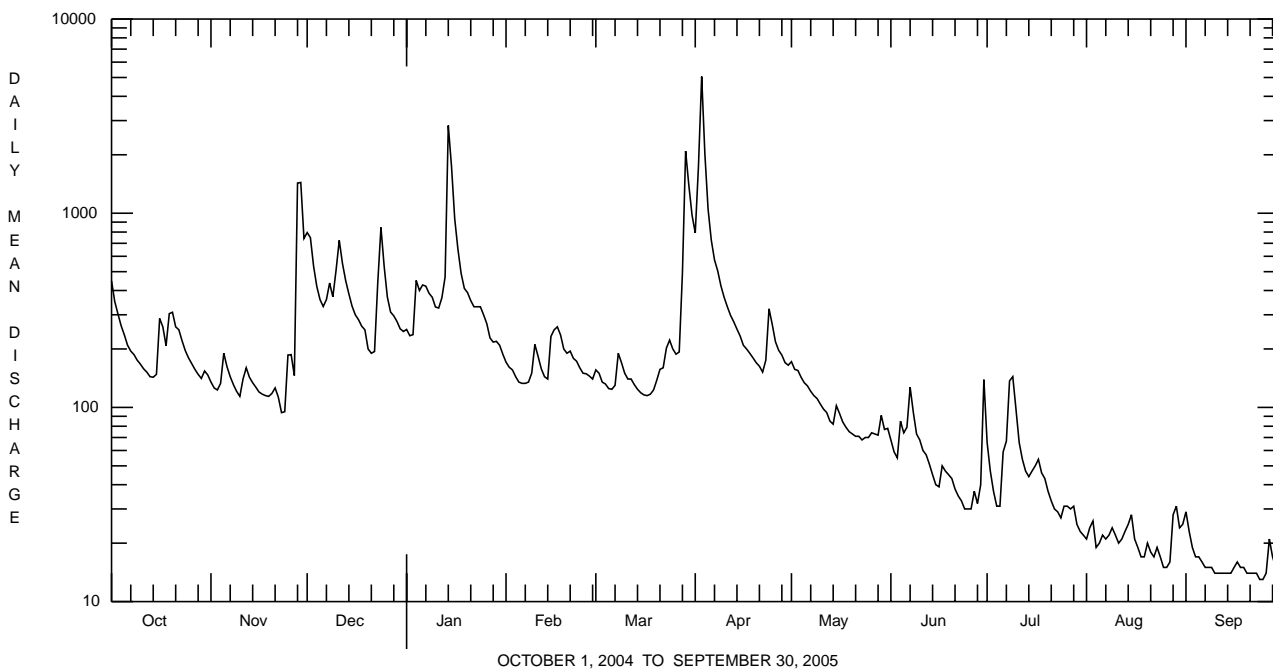
e Estimated.

LEHIGH RIVER BASIN

01447500 LEHIGH RIVER AT STODDARTSVILLE, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR			FOR 2005 WATER YEAR			WATER YEARS 1944 - 2005	
ANNUAL TOTAL	88372			80340			191	
ANNUAL MEAN	241			220			282	
HIGHEST ANNUAL MEAN							86.2	
LOWEST ANNUAL MEAN							2003	
HIGHEST DAILY MEAN	6050	Sep 18		5060	Apr 3		18900	Aug 19 1955
LOWEST DAILY MEAN	34	Jul 11		13	Sep 24,25		7.0	Sep 26 1964
ANNUAL SEVEN-DAY MINIMUM	38	Jul 5		14	Sep 20		7.4	Sep 21 1964
MAXIMUM PEAK FLOW				a6500	Apr 3		a31900	Aug 19 1955
MAXIMUM PEAK STAGE				9.26	Apr 3		b16.37	Aug 19 1955
INSTANTANEOUS LOW FLOW							7.0	Sep 26 1964
ANNUAL RUNOFF (CFSM)	2.63			2.40			2.08	
ANNUAL RUNOFF (INCHES)	35.85			32.59			28.23	
10 PERCENT EXCEEDS	437			422			392	
50 PERCENT EXCEEDS	168			139			130	
90 PERCENT EXCEEDS	82			19			32	

a From rating curve extended above 1,700 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.  
 b From floodmark.



## LEHIGH RIVER BASIN

01447500 LEHIGH RIVER AT STODDARTSVILLE, PA--Continued  
(Pennsylvania Water-Quality Network Station)

## WATER-QUALITY RECORDS

**PERIOD OF RECORD.**--Water years 1926 to 1982; April 2002 to current year.

**PERIOD OF DAILY RECORD.**--

WATER TEMPERATURE: Water year 1981 to September 30, 2004.

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

**REMARKS.**--Water temperature records rated good. Interruptions in the record were due to malfunctions of the recording instrument. Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods.

**COOPERATION.**--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

**EXTREMES FOR PERIOD OF DAILY RECORD.**--

WATER TEMPERATURE: Maximum recorded, 31.5°C, July 6, 1999; minimum, 0.0°C, many days during winters.

**EXTREMES FOR CURRENT YEAR.**--

WATER TEMPERATURE: Maximum, 26.5°C, July 5; minimum, 0.0°C, many days during winter.

## 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 unfltrd lab, µS/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, 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)	
Date		Magnesium, water, unfltrd, fltrd, mg/L (00925)	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unfltrd fixed end pt, lab, mg/L as CaCO3 (00417)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 105degC, wat fltrd, 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...	1200	1028	9813	116	13.6	6.9	6.4	60	54	3.4	15	4.6	4.6	
JAN 2005 04...	1430	1028	9813	473	9.3	5.7	6.6	56	52	4.0	13	4.0	4.0	
MAR 16...	1630	1028	9813	119	13.1	6.9	6.5	82	78	4.4	18	5.0	5.4	
MAY 10...	0900	1028	9813	104	10.9	7.0	7.0	67	67	13.9	15	4.4	4.5	
JUL 26...	0800	1028	9813	33	7.8	6.9	6.8	81	81	19.5	25	7.2	7.5	
SEP 19...	1100	1028	9813	15	9.9	7.1	7.4	91	90	16.4	25	8.0	7.7	
NOV 2004 17...	.94	.95	7	5.6	52	<2	<.020	.11	<.040	.27	<.01	.02	.8	
JAN 2005 04...	.84	.82	6	5.9	70	4	<.020	.16	<.040	.38	<.01	.01	.7	
MAR 16...	.99	1.0	6	6.5	68	<2	.020	.21	<.040	.31	<.01	<.01	.8	
MAY 10...	.95	.97	7	6.0	92	<2	<.020	<.04	<.040	.48	<.01	.01	--	
JUL 26...	1.4	1.5	12	5.5	58	<2	.020	.11	<.040	.17	<.01	.02	.4	
SEP 19...	1.6	1.5	16	5.3	110	<2	.020	<.04	<.040	.47	<.01	.01	.5	

## LEHIGH RIVER BASIN

## 01447500 LEHIGH RIVER AT STODDARTSVILLE, 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...	40	60	<4	<4	110	160	<1.0	<1.0	10	20	<4.0	<4.0	<5.0
JAN 2005 04...	90	140	<4	<4	100	200	<1.0	<1.0	50	60	<4.0	<4.0	8.5
MAR 16...	30	60	<4	<4	50	100	<1.0	<1.0	30	40	<4.0	<4.0	6.3
MAY 10...	30	40	<4	<4	40	100	<1.0	<1.0	10	20	<4.0	<4.0	<5.0
JUL 26...	20	40	<4	<4	60	120	<1.0	<1.0	10	30	<4.0	<4.0	<5.0
SEP 19...	10	20	<4	<4	20	60	<1.0	<1.0	20	40	<4.0	<4.0	<5.0

Date	Zinc, water, unfltrd recover- able, µg/L (01092)
NOV 2004 17...	5.4
JAN 2005 04...	10
MAR 16...	6.3
MAY 10...	<5.0
JUL 26...	42
SEP 19...	<5.0

## LEHIGH RIVER BASIN

## 01447500 LEHIGH RIVER AT STODDARTSVILLE, 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	08/26/04
Benthic macroinvertebrate	Count
Nemertea (PROBOSCIS WORMS)	
Enopla	
Hoploneurtea	
Tetrastemmatidae	
<i>Prostoma</i>	2
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Ancyliidae	
<i>Ferrissia</i>	2
Bivalvia (CLAMS)	
Veneroida	
Sphaeriidae	
<i>Sphaerium</i>	22
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	2
Tubificida	
Naididae	1
Arthropoda	
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	13
<i>Baetis</i>	2
Ephemerellidae	
<i>Attenella</i>	2
<i>Dannella</i>	7
<i>Eurylophella</i>	1
<i>Serratella</i>	2
Heptageniidae	
<i>Epeorus</i>	7
<i>Stenonema</i>	14
Isonychiidae	
<i>Isonychia</i>	7
Leptophlebiidae	
<i>Paraleptophlebia</i>	9
Odonata (DRAGONFLIES AND DAMSELFLIES)	
Gomphidae	2
Plecoptera (STONEFLIES)	
Perlidae	
<i>Acroneuria</i>	2
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<i>Cheumatopsyche</i>	4
<i>Hydropsyche</i>	4
Philopotamidae	
<i>Chimarra</i>	7
<i>Dolophilodes</i>	1
Rhyacophilidae	
<i>Rhyacophila</i>	4

## LEHIGH RIVER BASIN

01447500 LEHIGH RIVER AT STODDARTSVILLE, PA--Continued

BIOLOGICAL DATA  
BENTHIC MACROINVERTEBRATES--Continued

Date	08/26/04
Benthic macroinvertebrate	Count
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Oulimnius</i>	2
<i>Stenelmis</i>	5
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	4
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	24
Total Organisms	152
Total Taxa	26