

## LEHIGH RIVER BASIN

## 01451500 LITTLE LEHIGH CREEK NEAR ALLENTOWN, PA

**LOCATION.**--Lat 40°34'56", long 75°29'00", Lehigh County, Hydrologic Unit 02040106, on right bank at downstream side of bridge on Lehigh Parkway in Allentown, 0.8 mi upstream from Cedar Creek, and 2.9 mi upstream from mouth.

**DRAINAGE AREA.**--80.8 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1945 to current year. Prior to October 1946, published as "at Allentown".

**REVISED RECORDS.**--WDR PA 73-1: 1946(M), 1951(P), 1955(M), 1956(M), 1958(M), 1962(M), 1963(M), 1965(M), 1969(M), 1971(M).  
WDR PA-87-1: 1946 to 1986(P).

**GAGE.**--Water-stage recorder, crest-stage gage, and masonry control. Datum of gage is 253.41 ft above National Geodetic Vertical Datum of 1929.

**REMARKS.**--Records fair except those for estimated daily discharges, which are poor. Occasional regulation at low flow by fish hatchery upstream. Several measurements of water temperature were made during the year. Satellite telemetry at station.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 900 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)
May 13	2000	*1,610	*4.77	June 27	2300	1,280	4.41

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	58	44	45	36	45	33	49	65	64	69	40	70
2	58	44	43	36	49	34	46	113	60	65	45	63
3	57	44	41	36	44	71	45	95	57	63	43	43
4	56	43	40	36	43	52	45	65	56	60	39	39
5	56	43	40	36	40	41	44	59	55	58	40	37
6	57	43	39	36	39	37	43	55	93	55	49	36
7	56	43	40	37	40	35	42	54	192	54	39	35
8	54	43	43	38	39	34	42	53	82	54	37	34
9	53	43	59	37	38	34	42	63	67	55	36	33
10	52	43	47	37	37	37	45	61	63	55	36	33
11	51	43	43	42	39	37	44	53	60	53	35	31
12	51	43	41	47	38	36	43	60	112	52	34	31
13	50	43	41	44	36	36	43	365	140	51	34	31
14	48	43	44	41	36	37	46	324	91	51	33	31
15	60	42	47	40	36	35	e98	122	87	50	33	35
16	50	42	43	40	36	34	61	89	73	50	33	43
17	50	42	41	39	36	34	49	79	67	48	32	35
18	48	42	57	38	36	42	45	221	64	47	32	34
19	47	41	51	38	36	45	44	149	149	59	31	32
20	48	42	45	37	36	88	44	97	84	69	36	32
21	46	42	42	37	36	85	42	87	68	50	33	32
22	44	41	40	37	36	53	45	82	63	48	32	31
23	44	41	40	37	34	46	44	78	60	54	32	30
24	44	41	46	50	34	43	42	75	59	56	33	29
25	44	61	42	59	34	41	42	71	58	47	35	29
26	44	68	40	47	34	43	44	70	61	45	33	31
27	43	49	39	42	34	e82	42	70	230	44	32	117
28	43	45	38	41	34	56	92	68	251	44	32	58
29	43	44	38	39	---	49	136	67	92	44	52	41
30	43	44	37	39	---	47	70	65	74	42	40	37
31	43	---	36	41	---	45	---	64	---	41	35	---
TOTAL	1541	1332	1328	1240	1055	1422	1559	3039	2732	1633	1126	1193
MEAN	49.7	44.4	42.8	40.0	37.7	45.9	52.0	98.0	91.1	52.7	36.3	39.8
MAX	60	68	59	59	49	88	136	365	251	69	52	117
MIN	43	41	36	36	34	33	42	53	55	41	31	29
CFSM	0.62	0.55	0.53	0.50	0.47	0.57	0.64	1.21	1.13	0.65	0.45	0.49
IN.	0.71	0.61	0.61	0.57	0.49	0.65	0.72	1.40	1.26	0.75	0.52	0.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

MEAN	67.9	75.6	97.0	106	118	135	142	120	101	85.5	76.1	71.1
MAX	195	177	371	385	325	355	331	315	381	366	192	213
(WY)	1997	1976	1997	1979	1979	1994	1983	1984	1972	1984	1971	1987
MIN	27.3	28.1	25.7	26.6	37.7	43.1	37.1	35.8	29.2	26.5	26.5	28.9
(WY)	1964	1966	1966	1966	2002	1965	1966	1965	1965	1965	1965	1965

e Estimated.

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SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	31569		19200			
ANNUAL MEAN	86.5		52.6		99.5	
HIGHEST ANNUAL MEAN					203	1984
LOWEST ANNUAL MEAN					33.8	1966
HIGHEST DAILY MEAN	1010	Jun 23	365	May 13	4050	Jul 7 1984
LOWEST DAILY MEAN	36	Dec 31	29	Sep 24,25	23	Dec 20 1965
ANNUAL SEVEN-DAY MINIMUM	39	Dec 25	31	Sep 20	23	Dec 18 1965
MAXIMUM PEAK FLOW			a1610	May 13	a11800	Jun 22 1972
MAXIMUM PEAK STAGE			4.77	May 13	11.80	Jun 22 1972
INSTANTANEOUS LOW FLOW			29	Sep 13b	17	Feb 4 1965
ANNUAL RUNOFF (CFSM)	1.07		0.65		1.23	
ANNUAL RUNOFF (INCHES)	14.53		8.84		16.73	
10 PERCENT EXCEEDS	127		71		170	
50 PERCENT EXCEEDS	81		43		78	
90 PERCENT EXCEEDS	43		34		40	

a From rating curve extended above 820 ft<sup>3</sup>/s on basis of slope-area measurements at 8.34 ft and at peak flow.  
 b Also Sept. 14, 22-26.

