

LEHIGH RIVER BASIN

01451650 LITTLE LEHIGH CREEK AT TENTH STREET BRIDGE AT ALLENTOWN, PA

LOCATION.--Lat 40°35'47", long 75°28'28", Lehigh County, Hydrologic Unit 02040106, on left bank at bridge on Tenth Street, and 0.9 mi upstream from confluence with Jordan Creek in Allentown, Pa.

DRAINAGE AREA.--98.2 mi².

PERIOD OF RECORD.--October 1986 to current year.

REVISED RECORDS.--WRD PA-98-1: 1997(M).

GAGE.--Water-stage recorder. Crest-stage gage and concrete control. Datum of gage is 245.63 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diversion upstream for municipal water supply by city of Allentown. Several measurements of water temperature were made during the year. Satellite telemetry at station.

COOPERATION.--Records of diversion provided by city of Allentown.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Dec. 17	1445	*2,050	*5.45	June 23	0815	1,460	4.81
June 22	2215	1,470	4.82	Aug. 11	1500	1,050	4.29

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	54	62	71	116	111	188	123	134	e154	95	104
2	65	55	59	71	116	108	168	123	213	e180	92	66
3	66	78	58	68	106	108	156	113	145	129	89	56
4	80	83	55	67	84	109	151	108	129	142	100	62
5	139	57	56	67	87	115	147	109	122	156	98	74
6	93	65	54	67	93	116	169	108	115	149	86	71
7	86	70	53	65	93	117	170	108	111	114	83	57
8	62	78	54	66	88	111	159	108	113	118	80	59
9	58	83	54	65	94	118	158	108	114	159	77	61
10	64	117	45	65	172	120	172	113	101	141	149	61
11	64	83	46	65	145	115	156	104	98	133	318	65
12	62	69	51	72	109	111	165	98	101	110	119	58
13	68	65	53	68	104	261	159	97	149	113	96	62
14	67	84	136	56	102	183	149	97	94	109	98	106
15	53	79	93	62	121	136	135	97	93	97	93	70
16	57	70	83	67	126	133	182	95	132	96	75	65
17	61	68	881	65	148	150	161	96	217	98	78	62
18	111	68	451	65	112	142	201	96	115	104	82	60
19	86	65	143	119	103	132	171	103	105	97	82	58
20	62	65	110	146	107	124	155	95	97	95	80	136
21	62	64	88	95	102	183	146	135	94	94	79	135
22	59	63	86	79	97	241	144	293	399	92	81	71
23	59	64	77	74	98	167	138	178	949	92	84	62
24	61	63	81	74	96	150	138	124	308	89	90	62
25	62	63	76	72	117	132	135	110	181	116	89	323
26	59	140	74	72	154	130	137	212	153	473	71	120
27	66	106	72	73	138	130	137	361	145	197	68	72
28	65	68	70	62	117	129	131	204	137	113	76	79
29	54	64	68	62	---	129	117	149	132	99	72	78
30	54	69	72	118	---	419	121	152	142	101	74	64
31	56	---	72	132	---	269	---	136	---	101	82	---
TOTAL	2126	2220	3433	2370	3145	4699	4616	4153	5138	4061	2936	2479
MEAN	68.6	74.0	111	76.5	112	152	154	134	171	131	94.7	82.6
MAX	139	140	881	146	172	419	201	361	949	473	318	323
MIN	53	54	45	56	84	108	117	95	93	89	68	56
(†)	9.9	10.9	11.0	10.4	14.5	9.6	8.8	9.9	11.6	10.2	11.5	10.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	86.8	98.7	128	132	129	177	175	147	117	104	87.7	104
MAX	210	192	435	292	219	415	355	236	184	174	147	368
(WY)	1997	1997	1997	1996	1996	1994	1994	1989	1989	1994	1994	1987
MIN	48.5	64.1	52.0	53.1	48.9	71.7	64.4	66.7	64.8	41.0	41.5	46.7
(WY)	1993	1998	1999	1992	1992	1992	1992	1992	1999	1999	1999	1995

† Diversion for municipal supply of city of Allentown, equivalent in cubic feet per second.

e Estimated.

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SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1987 - 2001	
ANNUAL TOTAL	41037		41376			
ANNUAL MEAN	112		113		124	
HIGHEST ANNUAL MEAN					192	1994
LOWEST ANNUAL MEAN					64.6	1992
HIGHEST DAILY MEAN	881	Dec 17	949	Jun 23	5200	Sep 9 1987
LOWEST DAILY MEAN	45	Dec 10	45	Dec 10	23	Aug 1 1999
ANNUAL SEVEN-DAY MINIMUM	51	Dec 7	51	Dec 7	30	Aug 1 1999
MAXIMUM PEAK FLOW			a2050	Dec 17	a7370	Sep 9 1987
MAXIMUM PEAK STAGE			5.45	Dec 17	9.47	Sep 9 1987
10 PERCENT EXCEEDS	173		160		203	
50 PERCENT EXCEEDS	92		97		97	
90 PERCENT EXCEEDS	61		62		55	

a From rating curve extended above 1,870 ft³/s on the basis of slope-area measurement at gage height 8.06 ft.

