

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 National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records 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)
Oct. 15	2200	1,330	4.65	Jan. 14	1230	1,080	4.34
Nov. 28	1200	2,450	5.85	Mar. 28	2200	1,820	5.21
Dec. 1	1200	943	4.15	Apr. 3	0700	*4,160	*7.32
Dec. 23	1915	1,010	4.24	Apr. 8	0345	1,150	4.42

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	281	175	566	191	181	180	273	234	124	100	78	80
2	245	175	456	184	184	183	1190	216	120	148	85	76
3	227	173	316	187	185	175	2460	209	132	116	78	64
4	215	205	269	199	177	163	800	192	153	106	82	63
5	205	224	245	202	179	161	519	187	129	94	75	65
6	195	186	233	367	179	163	418	192	182	98	74	63
7	183	180	268	278	181	180	391	193	188	91	75	63
8	186	177	294	363	186	268	796	188	127	273	132	66
9	184	169	251	344	205	219	433	179	117	163	125	62
10	181	157	446	257	238	190	368	176	116	114	83	63
11	177	154	399	241	209	179	343	169	115	97	82	60
12	171	225	300	270	181	195	326	175	115	94	82	66
13	158	237	266	237	171	201	314	170	114	113	76	60
14	189	182	248	688	238	191	297	158	108	117	75	62
15	402	168	231	536	448	184	282	161	108	97	107	89
16	447	173	223	336	284	184	275	171	114	102	77	69
17	237	168	216	287	256	184	270	166	119	164	83	98
18	196	157	205	248	208	176	254	161	112	181	75	77
19	305	162	205	231	193	173	248	149	109	112	87	63
20	251	175	197	236	188	176	234	179	99	105	79	62
21	219	179	194	229	193	183	226	174	98	89	75	60
22	225	156	187	217	198	177	225	152	98	87	77	60
23	195	155	415	222	199	262	363	146	105	90	71	61
24	197	168	460	219	186	336	496	151	104	89	75	66
25	193	203	261	222	182	233	283	152	93	106	71	60
26	187	176	222	214	185	198	242	147	92	97	69	54
27	179	152	209	201	181	188	243	133	97	88	77	64
28	168	1270	201	191	174	716	234	137	98	91	88	61
29	176	682	206	191	---	1000	222	143	199	94	77	61
30	222	324	200	193	---	433	226	138	137	89	74	63
31	190	---	193	187	---	309	---	126	---	79	73	---
TOTAL	6786	7087	8582	8168	5769	7760	13251	5224	3622	3484	2537	1981
MEAN	219	236	277	263	206	250	442	169	121	112	81.8	66.0
MAX	447	1270	566	688	448	1000	2460	234	199	273	132	98
MIN	158	152	187	184	171	161	222	126	92	79	69	54
(†)	3.1	5.1	4.3	6.2	6.8	6.0	5.2	5.7	8.9	9.5	10.7	9.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2005, BY WATER YEAR (WY)

	100	111	142	139	134	178	183	146	128	113	92.9	123
MEAN	226	236	435	292	224	415	442	236	315	206	164	380
(WY)	2004	2005	1997	1996	2004	1994	2005	1989	2003	2003	2003	2004
MIN	48.5	57.0	52.0	49.5	45.6	62.9	64.4	66.7	64.8	41.0	41.5	46.7
(WY)	1993	2002	1999	2002	2002	2002	1992	1992	1999	1999	1999	1995

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

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1987 - 2005	
ANNUAL TOTAL	75502		74251			
ANNUAL MEAN	206		203		132	
HIGHEST ANNUAL MEAN					208	2004
LOWEST ANNUAL MEAN					64.6	1992
HIGHEST DAILY MEAN	e4600	Sep 18	2460	Apr 3	5200	Sep 9 1987
LOWEST DAILY MEAN	76	Jul 11	54	Sep 26	23	Aug 1 1999
ANNUAL SEVEN-DAY MINIMUM	86	Jul 5	60	Sep 20	30	Aug 1 1999
MAXIMUM PEAK FLOW			a4160	Apr 3	a9680	Sep 18 2004
MAXIMUM PEAK STAGE			7.32	Apr 3	b10.65	Sep 18 2004
10 PERCENT EXCEEDS	268		315		222	
50 PERCENT EXCEEDS	169		181		103	
90 PERCENT EXCEEDS	109		75		54	

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

