

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.--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)
June 21	0400	*3,340	*6.66	Sept. 15	1630	1,290	4.60
July 22	0200	1,460	4.81	Sept. 23	1100	1,370	4.70
July 23	0030	1,360	4.69	Sept. 24	0115	1,050	4.29

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	95	85	244	112	118	203	130	219	174	146	138
2	44	75	83	309	112	192	190	130	153	178	153	262
3	46	74	80	226	108	285	185	136	128	178	156	163
4	52	72	77	205	129	169	184	134	396	174	182	138
5	62	71	80	176	134	180	195	126	259	158	150	138
6	49	102	87	167	114	323	170	126	173	148	283	127
7	40	88	87	167	106	222	168	127	267	152	209	115
8	47	71	78	167	112	162	184	146	298	162	162	121
9	42	66	73	178	114	226	211	138	208	163	151	118
10	54	66	72	180	111	290	224	129	170	152	219	108
11	329	65	177	157	107	183	260	113	157	147	233	109
12	301	95	304	145	105	159	275	115	223	147	338	107
13	114	109	188	140	101	250	221	124	299	142	219	162
14	73	89	328	136	100	321	197	123	225	130	185	156
15	67	71	255	135	102	228	176	109	171	135	169	756
16	220	106	186	126	99	223	178	103	151	137	163	626
17	219	301	143	139	93	262	176	136	141	130	164	254
18	110	272	127	125	109	261	180	122	189	129	150	176
19	78	152	123	123	105	223	169	108	174	142	133	378
20	77	112	257	124	104	276	161	105	e680	128	133	251
21	76	106	223	122	103	593	159	117	e2170	223	141	190
22	79	126	161	118	288	341	166	109	606	726	139	166
23	74	121	137	116	512	253	166	109	394	817	134	770
24	63	99	123	115	352	223	160	127	298	369	120	685
25	64	92	183	115	224	210	146	124	258	206	117	325
26	158	92	181	115	161	217	174	304	235	173	118	309
27	101	107	153	113	133	233	163	182	222	162	130	261
28	72	103	143	110	122	201	151	125	213	223	126	484
29	75	98	130	113	---	201	153	118	195	176	114	375
30	96	88	123	112	---	257	139	114	182	155	115	259
31	116	---	130	112	---	235	---	131	---	150	117	---
TOTAL	3036	3184	4577	4630	4072	7517	5484	4040	9454	6386	5069	8227
MEAN	97.9	106	148	149	145	242	183	130	315	206	164	274
MAX	329	301	328	309	512	593	275	304	2170	817	338	770
MIN	38	65	72	110	93	118	139	103	128	128	114	107
(†)	8.8	6.8	6.8	6.0	7.5	6.3	6.1	7.7	6.8	7.4	6.8	5.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2003, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	85.8	96.7	125	129	125	174	169	145	129	108	90.0	111					
MAX	210	192	435	292	219	415	355	236	315	206	164	368					
(WY)	1997	1997	1997	1996	1996	1994	1994	1989	2003	2003	2003	1987					
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.

e Estimated.

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1987 - 2003	
ANNUAL TOTAL	30929		65676			
ANNUAL MEAN	84.7		180		124	
HIGHEST ANNUAL MEAN					192	
LOWEST ANNUAL MEAN					64.6	
HIGHEST DAILY MEAN	467	May 14	e2170	Jun 21	5200	Sep 9 1987
LOWEST DAILY MEAN	31	Sep 14	38	Oct 1	23	Aug 1 1999
ANNUAL SEVEN-DAY MINIMUM	38	Sep 19	47	Oct 1	30	Aug 1 1999
MAXIMUM PEAK FLOW			a3340	Jun 21	a7370	Sep 9 1987
MAXIMUM PEAK STAGE			6.66	Jun 21	9.47	Sep 9 1987
10 PERCENT EXCEEDS	152		286		208	
50 PERCENT EXCEEDS	65		147		97	
90 PERCENT EXCEEDS	43		82		53	

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

