

LEHIGH RIVER BASIN

01452000 JORDAN CREEK AT ALLENTOWN, PA

LOCATION.--Lat 40°37'23", long 75°28'58", Lehigh County, Hydrologic Unit 02040106, on right bank 200 ft upstream from bridge on State Highway 145, 0.5 mi northwest of city limits of Allentown, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--75.8 mi².

PERIOD OF RECORD.--October 1944 to current year.

REVISED RECORDS.--WDR PA-76-1: 1970(M), 1971.

GAGE.--Water-stage recorder, crest-stage gage and rubble masonry control. Crest raised 1 ft in August 1958 and further modified filling in square notches on sides and notching center of dam at 17:1 slope in August 1974. Datum of gage is 259.82 ft above sea level (Pennsylvania Department of Transportation datum).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 23, 1942, reached a stage of approximately 7.1 ft, from floodmarks 650 ft downstream.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 9	2400	2,080	5.39	Jan. 24	1730	1,510	5.06
Jan. 19	0030	*5,930	*7.25	Sept. 17	0400	4,850	6.77

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	19	20	e9.0	87	152	89	65	27	9.5	7.5	8.7
2	9.7	18	18	e8.0	294	112	87	59	26	9.6	7.8	8.5
3	11	17	18	e90	367	98	77	56	36	9.4	8.6	8.3
4	12	16	17	184	288	145	74	56	30	9.3	7.5	8.3
5	10	16	16	71	233	128	70	56	24	9.1	7.4	8.5
6	9.7	16	16	e40	191	134	63	49	22	9.1	7.3	8.3
7	9.7	15	16	e40	168	148	59	47	19	8.7	7.3	9.0
8	60	14	16	e35	156	117	55	69	18	8.6	8.2	8.1
9	134	14	18	392	135	118	62	65	16	8.8	7.4	11
10	252	14	18	638	126	118	123	48	16	8.7	7.4	11
11	223	18	16	174	112	108	85	40	15	8.4	7.4	8.4
12	153	28	15	e100	109	97	109	36	15	8.5	7.4	8.4
13	110	21	14	e95	152	86	95	34	15	9.0	13	8.3
14	95	17	13	e110	127	84	88	34	14	9.4	19	8.2
15	82	15	13	e60	119	96	83	31	15	9.2	8.3	14
16	63	14	13	e70	119	95	91	28	14	8.3	7.6	896
17	54	13	15	e80	114	99	108	27	15	8.2	8.1	2820
18	47	12	14	945	152	95	82	26	15	8.1	7.9	519
19	43	12	13	1680	152	83	74	100	18	8.2	7.9	274
20	39	12	13	410	137	77	83	78	14	8.2	9.1	189
21	35	13	13	246	129	83	92	51	13	8.0	8.5	166
22	34	13	13	392	108	391	78	40	12	8.2	8.4	169
23	31	12	13	412	91	390	84	59	11	8.0	8.3	127
24	28	11	11	899	103	305	121	73	12	7.8	8.0	98
25	26	11	11	582	90	239	99	76	11	7.7	7.6	86
26	24	36	10	323	89	190	98	59	11	7.9	13	75
27	24	63	10	235	79	161	93	52	11	7.6	9.0	68
28	23	31	11	193	92	151	84	45	11	7.6	7.8	65
29	24	25	e10	160	---	130	78	39	10	7.7	8.0	64
30	25	21	e10	131	---	109	71	34	9.7	7.6	8.2	296
31	22	---	e10	108	---	94	---	30	---	7.6	8.5	---
TOTAL	1723.1	557	434	8912.0	4119	4433	2555	1562	495.7	262.0	267.4	6049.0
MEAN	55.6	18.6	14.0	287	147	143	85.2	50.4	16.5	8.45	8.63	202
MAX	252	63	20	1680	367	391	123	100	36	9.6	19	2820
MIN	9.7	11	10	8.0	79	77	55	26	9.7	7.6	7.3	8.1
CFSM	.73	.24	.18	3.79	1.94	1.89	1.12	.66	.22	.11	.11	2.66
IN.	.85	.27	.21	4.37	2.02	2.18	1.25	.77	.24	.13	.13	2.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1999, BY WATER YEAR (WY)

MEAN	66.3	111	150	153	164	211	172	120	76.0	53.7	50.9	63.0
MAX	309	321	520	570	354	791	551	438	517	255	326	449
(WY)	1997	1971	1997	1996	1951	1994	1983	1989	1972	1945	1955	1987
MIN	3.93	8.62	14.0	8.45	34.3	55.0	38.0	22.3	5.89	1.21	1.81	2.83
(WY)	1964	1965	1999	1981	1980	1985	1985	1965	1965	1966	1966	1964

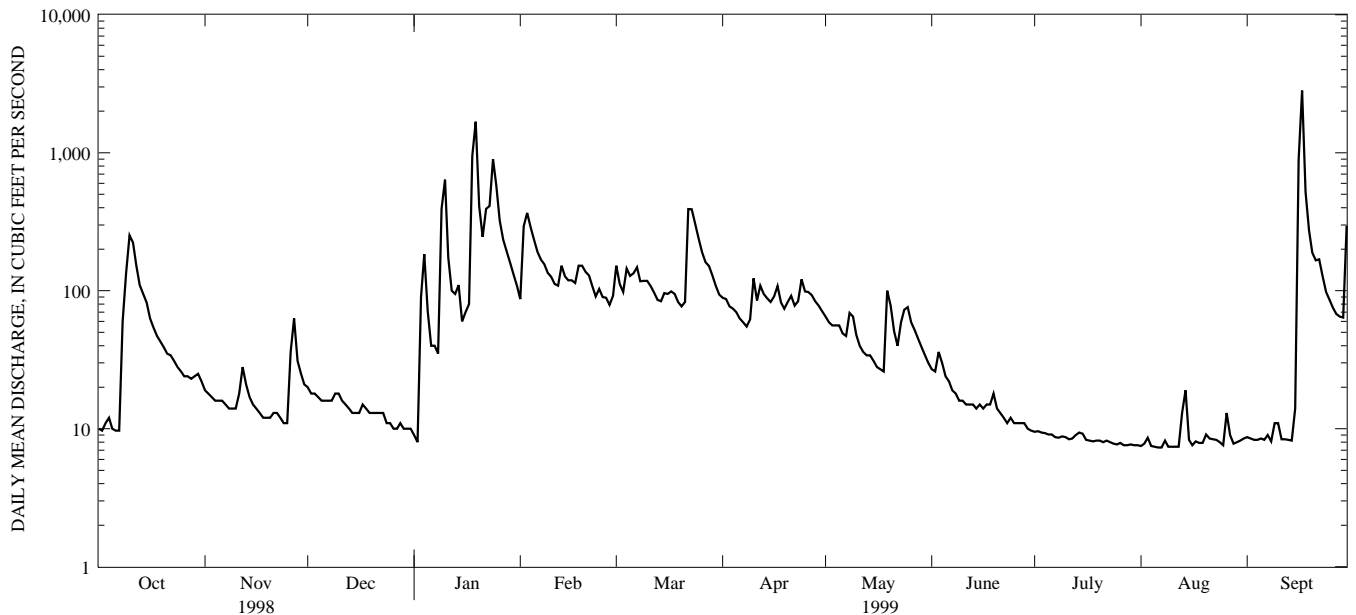
e Estimated.

LEHIGH RIVER BASIN

01452000 JORDAN CREEK AT ALLENTOWN, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1945 - 1999	
ANNUAL TOTAL	41496.0		31369.2		116	
ANNUAL MEAN	114		85.9		203	
HIGHEST ANNUAL MEAN					1984	
LOWEST ANNUAL MEAN					44.9	
HIGHEST DAILY MEAN	1040	May 12	2820	Sep 17	6650	Sep 9 1987
LOWEST DAILY MEAN	9.2	Sep 28	7.3	Aug 6,7	.00	Jul 7 1966
ANNUAL SEVEN-DAY MINIMUM	9.4	Sep 23	7.5	Aug 5	.06	Jul 9 1966
INSTANTANEOUS PEAK FLOW			5930	Jan 19	a16200	Jun 23 1972
INSTANTANEOUS PEAK STAGE			7.25	Jan 19	b11.61	Jun 23 1972
ANNUAL RUNOFF (CFSM)	1.50		1.13		1.52	
ANNUAL RUNOFF (INCHES)	20.36		15.39		20.72	
10 PERCENT EXCEEDS	264		163		250	
50 PERCENT EXCEEDS	52		28		60	
90 PERCENT EXCEEDS	11		8.2		12	

a From rating curve extended above 6,100 ft³/s on basis of slope-area measurement of peak flow.
 b From floodmark.



1-YEAR HYDROGRAPH
 OCTOBER 1, 1998 TO SEPTEMBER 30, 1999