

## 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 mi<sup>2</sup>.

**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 National Geodetic Vertical Datum of 1929 (Pennsylvania Department of Transportation datum).

**REMARKS.**--No estimated daily discharges. Records fair. 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 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)
Apr. 15	1000	*707	*4.36	(No peaks above base discharge.)			

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	29	8.7	29	17	83	20	138	228	46	41	8.6	9.5
2	26	8.3	22	16	103	21	108	368	39	36	11	6.0
3	23	8.3	15	16	79	86	96	425	36	33	8.8	6.1
4	21	7.7	13	17	78	77	93	308	33	27	8.0	7.3
5	19	8.0	12	16	62	52	76	229	32	22	8.0	7.3
6	17	8.2	11	16	66	55	70	185	54	19	8.4	7.2
7	16	8.5	11	16	70	51	62	156	184	17	8.0	6.5
8	16	8.5	15	20	60	47	58	131	81	17	8.5	6.0
9	14	8.9	38	22	53	42	56	146	62	17	8.3	6.8
10	13	8.5	38	21	46	58	67	139	56	15	8.2	7.4
11	13	8.5	26	24	52	51	53	96	49	15	7.6	7.3
12	13	8.9	23	36	45	43	46	87	53	12	7.1	7.3
13	12	8.4	22	36	43	41	44	123	99	11	8.7	7.7
14	11	8.2	26	32	30	44	53	212	76	9.8	7.8	6.8
15	23	8.0	43	32	30	38	349	160	103	9.6	8.0	10
16	29	8.1	34	34	42	35	264	138	81	12	8.9	7.2
17	17	8.1	31	35	32	33	201	122	70	11	8.6	6.9
18	17	7.8	64	33	28	53	163	308	63	11	7.6	7.0
19	15	7.9	72	20	26	98	139	293	114	11	7.9	6.8
20	13	8.6	60	21	29	151	156	242	99	10	9.7	6.9
21	11	7.9	54	33	38	432	111	196	75	9.3	8.1	6.9
22	9.9	7.8	45	30	38	315	108	163	63	9.4	6.7	6.0
23	11	7.6	40	27	28	225	99	136	55	13	7.0	5.9
24	11	7.8	49	40	24	178	79	117	50	11	9.6	6.8
25	10	13	44	136	23	144	76	98	46	11	7.0	7.2
26	9.7	29	34	110	23	126	84	84	41	10	6.6	9.9
27	11	21	21	96	26	249	62	78	51	9.6	6.7	20
28	9.1	13	26	87	24	175	162	72	127	9.2	6.8	37
29	8.9	11	30	79	---	163	326	65	61	8.7	15	16
30	9.2	11	21	75	---	148	261	57	46	8.9	7.0	7.2
31	9.3	---	17	72	---	130	---	52	---	8.6	5.8	---
TOTAL	467.1	295.2	986	1265	1281	3381	3660	5214	2045	465.1	254.0	266.9
MEAN	15.1	9.84	31.8	40.8	45.8	109	122	168	68.2	15.0	8.19	8.90
MAX	29	29	72	136	103	432	349	425	184	41	15	37
MIN	8.9	7.6	11	16	23	20	44	52	32	8.6	5.8	5.9
CFSM	0.20	0.13	0.42	0.54	0.60	1.44	1.61	2.22	0.90	0.20	0.11	0.12
IN.	0.23	0.14	0.48	0.62	0.63	1.66	1.80	2.56	1.00	0.23	0.12	0.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2002, BY WATER YEAR (WY)

MEAN	65.6	107	147	148	161	210	170	120	77.9	52.6	50.6	61.1
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

## LEHIGH RIVER BASIN

## 01452000 JORDAN CREEK AT ALLENTOWN, PA--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1945 - 2002	
ANNUAL TOTAL	28015.9		19580.3		114	
ANNUAL MEAN	76.8		53.6		203	
HIGHEST ANNUAL MEAN					1984	
LOWEST ANNUAL MEAN					44.9	
HIGHEST DAILY MEAN	1290	Jun 23	432	Mar 21	6650	Sep 9 1987
LOWEST DAILY MEAN	7.6	Nov 23	5.8	Aug 31	0.00	Jul 7 1966
ANNUAL SEVEN-DAY MINIMUM	7.9	Nov 18	6.6	Sep 18	0.06	Jul 9 1966
MAXIMUM PEAK FLOW			707	Apr 15	a16200	Jun 23 1972
MAXIMUM PEAK STAGE			4.36	Apr 15	b11.61	Jun 23 1972
ANNUAL RUNOFF (CFSM)	1.01		0.71		1.50	
ANNUAL RUNOFF (INCHES)	13.75		9.61		20.43	
10 PERCENT EXCEEDS	178		138		248	
50 PERCENT EXCEEDS	41		27		60	
90 PERCENT EXCEEDS	9.5		7.7		11	

a From rating curve extended above 6,100 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.

b From floodmark.

