

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 of control 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.--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)
Nov. 28	1845	3,600	6.28	Mar. 29	0600	4,050	6.48
Dec. 1	1800	1,440	5.09	Apr. 3	0700	*5,750	*7.17
Jan. 14	1945	1,610	5.23				

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	458	72	884	115	e60	93	335	109	27	13	10	9.1
2	315	66	887	104	e65	90	1030	87	25	15	11	8.9
3	248	63	521	98	e65	75	4280	82	26	11	10	8.3
4	198	72	346	120	68	69	1380	76	33	10	10	7.1
5	165	116	263	111	67	67	636	72	31	11	10	6.6
6	131	84	210	275	68	69	411	68	45	11	9.7	7.2
7	109	78	205	376	72	80	313	67	58	12	9.4	8.6
8	94	74	223	566	77	163	311	64	37	53	18	8.4
9	82	68	178	711	87	173	227	61	29	57	20	6.8
10	74	63	338	487	120	164	197	58	27	26	16	8.1
11	65	60	541	342	111	151	175	56	28	18	11	6.7
12	59	91	449	342	95	139	155	54	44	15	10	6.9
13	54	140	336	277	88	132	142	50	33	23	9.6	7.9
14	68	95	256	953	92	130	128	48	28	51	9.1	8.9
15	109	93	203	1080	304	124	115	64	25	25	9.3	9.3
16	162	92	174	570	257	123	104	59	23	21	9.5	9.0
17	101	87	158	378	253	121	97	50	22	34	9.6	9.1
18	85	81	139	250	207	118	92	44	21	56	9.5	7.0
19	153	75	129	186	171	114	86	40	19	33	11	7.1
20	164	71	93	e150	155	114	81	48	19	22	9.0	8.0
21	155	80	86	e120	154	120	77	58	18	18	7.9	8.0
22	159	67	101	e85	137	111	72	44	17	15	7.9	7.7
23	130	64	201	e80	129	153	107	39	16	12	8.3	7.6
24	113	62	424	e75	119	366	194	37	15	11	8.3	7.1
25	104	141	267	e75	109	399	118	38	14	15	7.8	6.1
26	94	144	217	e80	97	340	99	37	13	12	7.7	6.1
27	84	127	188	e70	93	269	103	34	13	14	8.3	6.2
28	75	1690	141	e65	92	710	99	33	12	12	12	7.5
29	69	1320	158	e60	---	2560	85	37	22	11	7.7	8.8
30	104	568	134	e65	---	855	87	33	16	11	8.2	8.5
31	94	---	122	e60	---	477	---	29	---	9.8	9.7	---
TOTAL	4075	5904	8572	8326	3412	8669	11336	1676	756	657.8	315.5	232.6
MEAN	131	197	277	269	122	280	378	54.1	25.2	21.2	10.2	7.75
MAX	458	1690	887	1080	304	2560	4280	109	58	57	20	9.3
MIN	54	60	86	60	60	67	72	29	12	9.8	7.7	6.1
CFSM	1.73	2.60	3.65	3.54	1.61	3.69	4.99	0.71	0.33	0.28	0.13	0.10
IN.	2.00	2.90	4.21	4.09	1.67	4.25	5.56	0.82	0.37	0.32	0.15	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2005, BY WATER YEAR (WY)

	70.2	111	153	149	159	212	172	117	82.5	55.0	53.8	70.9
MEAN	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.

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01452000 JORDAN CREEK AT ALLENTOWN, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR			FOR 2005 WATER YEAR			WATER YEARS 1945 - 2005		
ANNUAL TOTAL	59749			53931.9			117		
ANNUAL MEAN	163			148			203		
HIGHEST ANNUAL MEAN							1984		
LOWEST ANNUAL MEAN							44.9		
HIGHEST DAILY MEAN	3440	Sep	18	4280	Apr	3	6650	Sep	9 1987
LOWEST DAILY MEAN	12	Jul	6	6.1	Sep	25,26	0.00	Jul	7 1966
ANNUAL SEVEN-DAY MINIMUM	13	Jul	5	6.9	Sep	22	0.06	Jul	9 1966
MAXIMUM PEAK FLOW				5750	Apr	3	a16200	Jun	23 1972
MAXIMUM PEAK STAGE				7.17	Apr	3	b11.61	Jun	23 1972
ANNUAL RUNOFF (CFSM)	2.15			1.95			1.54		
ANNUAL RUNOFF (INCHES)	29.32			26.47			20.96		
10 PERCENT EXCEEDS	263			323			252		
50 PERCENT EXCEEDS	99			74			62		
90 PERCENT EXCEEDS	40			9.0			12		

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

