

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 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)
Oct. 12	0730	1,310	4.99	July 22	0745	1,850	5.40
Mar. 21	0700	1,360	5.03	Sept. 23	1945	*5,350	*7.00
June 21	0745	3,980	6.45				

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	7.2	140	87	178	41	87	254	59	228	105	80	45
2	7.1	138	76	639	45	134	236	58	210	92	79	90
3	6.7	123	68	639	49	464	197	55	187	84	71	115
4	7.1	106	e40	484	64	194	173	49	480	75	82	121
5	6.2	94	e55	334	124	170	171	48	565	66	303	92
6	5.7	130	e60	265	69	442	147	51	384	60	637	72
7	6.1	102	e42	218	66	263	130	50	388	58	350	60
8	6.7	83	e47	190	52	175	131	54	566	66	248	55
9	6.9	76	e41	192	42	315	143	52	441	59	186	49
10	11	73	e35	211	51	452	192	44	318	60	234	43
11	210	71	e65	206	43	197	254	39	236	60	203	40
12	949	78	e370	185	38	152	336	54	486	50	308	38
13	424	119	e350	171	33	211	306	50	623	42	214	48
14	239	86	697	150	31	480	248	40	485	38	232	89
15	165	81	808	136	33	299	208	35	362	35	158	374
16	351	102	539	94	26	357	181	33	261	32	133	1000
17	737	553	349	e80	19	430	154	35	204	31	140	528
18	411	743	251	e60	19	424	136	32	218	30	107	313
19	259	529	205	e65	31	312	129	30	184	41	90	456
20	192	356	303	e70	36	286	108	28	373	33	78	373
21	146	259	285	e60	38	1010	99	29	2750	61	69	286
22	113	233	242	e56	73	629	103	30	1110	1020	62	221
23	93	198	214	e52	e620	417	94	28	663	471	57	2420
24	77	157	182	e48	584	315	81	32	447	377	48	1580
25	70	138	203	e46	257	246	72	39	322	253	45	582
26	161	125	215	e48	154	211	87	173	241	194	44	408
27	133	125	170	e44	123	225	105	168	194	164	44	288
28	110	112	155	39	102	173	77	124	162	163	41	323
29	105	98	146	43	---	186	69	105	135	121	36	233
30	128	94	137	42	---	249	65	88	119	99	68	195
31	156	---	128	41	---	273	---	80	---	85	53	---
TOTAL	5299.7	5322	6565	5086	2863	9778	4686	1792	13342	4125	4500	10537
MEAN	171	177	212	164	102	315	156	57.8	445	133	145	351
MAX	949	743	808	639	620	1010	336	173	2750	1020	637	2420
MIN	5.7	71	35	39	19	87	65	28	119	30	36	38
CFSM	2.26	2.34	2.79	2.16	1.35	4.16	2.06	0.76	5.87	1.76	1.92	4.63
IN.	2.60	2.61	3.22	2.50	1.41	4.80	2.30	0.88	6.55	2.02	2.21	5.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2003, BY WATER YEAR (WY)

MEAN	67.4	109	148	148	160	212	169	119	84.1	54.0	52.2	66.0
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.

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01452000 JORDAN CREEK AT ALLENTOWN, PA--Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1945 - 2003	
ANNUAL TOTAL	35018.7		73895.7		115	
ANNUAL MEAN	95.9		202		203	
HIGHEST ANNUAL MEAN					1984	
LOWEST ANNUAL MEAN					44.9	
HIGHEST DAILY MEAN	949	Oct 12	2750	Jun 21	6650	Sep 9 1987
LOWEST DAILY MEAN	5.7	Oct 6	5.7	Oct 6	0.00	Jul 7 1966
ANNUAL SEVEN-DAY MINIMUM	6.5	Oct 3	6.5	Oct 3	0.06	Jul 9 1966
MAXIMUM PEAK FLOW			5350	Sep 23	a16200	Jun 23 1972
MAXIMUM PEAK STAGE			7.00	Sep 23	b11.61	Jun 23 1972
ANNUAL RUNOFF (CFSM)	1.27		2.67		1.52	
ANNUAL RUNOFF (INCHES)	17.19		36.27		20.70	
10 PERCENT EXCEEDS	231		449		250	
50 PERCENT EXCEEDS	54		125		61	
90 PERCENT EXCEEDS	7.3		38		12	

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

