

PENNYPACK CREEK BASIN

01467048 PENNYPACK CREEK AT LOWER RHAWN STREET BRIDGE, PHILADELPHIA, PA

LOCATION.--Lat 40°03'00", long 75°01'59", Philadelphia County, Hydrologic Unit 02040202, on left bank at downstream side of footbridge pier, 400 ft downstream from Lower Rhawn Street bridge, and 0.8 mi upstream from Wooden Bridge Run in Philadelphia.

DRAINAGE AREA.--49.8 mi².

PERIOD OF RECORD.--June 1965 to current year. Records for 1971-74 published in WDR PA-81-1.

REVISED RECORDS: WDR PA-81-1: 1974. WDR PA-89-1: 1988.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 21.27 ft above National Geodetic Vertical Datum of 1929.

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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Nov. 28	1300	2,420	7.15	Apr. 3	0045	*5,030	*9.74
Jan. 14	1230	2,610	7.38	July 8	1530	1,800	6.36
Mar. 28	1900	1,800	6.41	July 17	2200	4,450	9.23

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	93	33	366	53	e49	106	95	175	31	77	40	33
2	72	33	107	50	e50	98	1710	73	32	223	39	24
3	64	32	78	51	51	83	1210	68	86	35	37	21
4	59	e250	68	58	57	76	215	60	147	25	38	19
5	53	192	62	143	65	74	166	58	43	27	36	19
6	49	56	59	171	67	75	145	57	120	52	31	19
7	47	46	194	97	67	89	135	58	233	212	29	19
8	45	42	144	188	68	181	318	54	60	671	52	18
9	43	39	104	102	78	103	139	51	46	98	50	18
10	43	37	358	76	107	86	e105	52	201	48	36	18
11	40	37	173	85	75	82	e100	49	120	37	32	17
12	40	164	103	168	60	91	e100	51	40	31	29	17
13	40	e170	91	85	56	78	e94	44	29	29	28	17
14	64	e107	80	1020	223	73	98	42	28	28	27	48
15	60	57	74	167	425	69	92	43	26	27	160	115
16	68	52	69	117	137	67	88	41	25	208	52	57
17	44	49	67	103	120	66	85	38	23	1110	79	26
18	37	47	63	89	91	65	83	38	22	672	34	24
19	180	46	64	e75	81	63	80	36	22	110	31	22
20	61	46	e60	e74	78	77	77	159	22	92	31	22
21	49	69	e54	e65	103	75	74	73	22	72	30	22
22	51	47	55	e57	113	63	71	43	22	64	26	18
23	39	44	256	e50	102	212	87	40	53	58	25	16
24	37	51	147	e45	86	165	132	38	22	50	23	16
25	37	79	73	e50	94	83	74	41	20	102	20	15
26	35	57	64	e55	88	74	68	41	19	71	20	18
27	34	44	e60	e50	82	70	74	37	87	55	35	36
28	34	926	e56	e45	85	613	66	34	95	72	57	19
29	e32	120	57	e46	---	244	61	35	e75	48	43	18
30	68	76	57	e47	---	116	130	31	214	48	95	21
31	42	---	55	e48	---	102	---	31	---	42	52	---
TOTAL	1660	3048	3318	3530	2758	3519	5972	1691	1985	4494	1317	772
MEAN	53.5	102	107	114	98.5	114	199	54.5	66.2	145	42.5	25.7
MAX	180	926	366	1020	425	613	1710	175	233	1110	160	115
MIN	32	32	54	45	49	63	61	31	19	25	20	15
CFSM	1.08	2.04	2.15	2.29	1.98	2.28	4.00	1.10	1.33	2.91	0.85	0.52
IN.	1.24	2.28	2.48	2.64	2.06	2.63	4.46	1.26	1.48	3.36	0.98	0.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2005, BY WATER YEAR (WY)

MEAN	59.3	76.1	99.0	97.0	97.0	121	119	98.4	88.4	87.3	69.9	75.0
MAX	174	300	311	334	252	273	338	194	270	257	163	276
(WY)	1997	1973	1997	1979	1979	1994	1983	1978	2001	1975	1967	1999
MIN	18.1	17.5	18.5	14.0	27.1	33.5	32.5	42.5	21.4	18.2	15.7	17.4
(WY)	2002	1966	1999	1981	2002	1985	1985	1995	1995	1999	1966	1970

e Estimated.

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1965 - 2005	
ANNUAL TOTAL	38563		34064		91.0	
ANNUAL MEAN	105		93.3		165	
HIGHEST ANNUAL MEAN					1973	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	2800	Sep 29	1710	Apr 2	e4900	Sep 16 1999
LOWEST DAILY MEAN	17	Jul 11	15	Sep 25	7.8	Aug 7 1999
ANNUAL SEVEN-DAY MINIMUM	25	Sep 21	18	Sep 7	9.1	Aug 1 1999
MAXIMUM PEAK FLOW			a5030	Apr 3	a12400	Sep 16 1999
MAXIMUM PEAK STAGE			9.74	Apr 3	b14.77	Sep 16 1999
INSTANTANEOUS LOW FLOW			13	Sep 25,26	6.0	Oct 11 1966
ANNUAL RUNOFF (CFSM)	2.12		1.87		1.83	
ANNUAL RUNOFF (INCHES)	28.81		25.45		24.82	
10 PERCENT EXCEEDS	171		165		169	
50 PERCENT EXCEEDS	60		58		50	
90 PERCENT EXCEEDS	31		25		21	

- a From rating curve extended above 3,900 ft³/s on basis of slope-area measurement at gage height 13.15 ft.
- b From high-water mark in gage shelter.
- e Estimated.

