

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 sea level.

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

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)
Jan. 3	1315	1,720	6.25	May 24	1245	2,380	7.11
Mar. 22	0600	2,190	6.88	Sept. 16	Unknown	*12,400	*14.77
Aug. 14	0545	3,200	9.86				

**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	12	17	16	16	28	118	59	36	28	40	9.8	e22
2	11	18	16	e15	272	52	59	35	28	27	10	e21
3	11	18	16	612	82	48	51	38	29	88	8.9	e20
4	29	18	16	68	46	134	50	39	27	20	9.0	e22
5	22	18	16	28	40	47	48	37	25	22	9.3	e27
6	15	18	16	e25	35	79	46	35	25	22	8.6	e37
7	13	19	16	23	33	87	46	34	24	24	7.8	e380
8	248	21	23	21	66	43	44	53	24	17	9.9	e34
9	101	22	34	152	44	39	100	53	23	15	26	e110
10	119	22	21	e56	34	39	211	33	22	17	13	e350
11	26	70	16	e30	31	37	112	31	21	14	8.9	e35
12	20	29	15	27	42	37	137	31	22	13	8.6	e25
13	17	17	16	29	83	34	62	35	22	14	8.6	e32
14	74	16	16	30	35	43	52	29	25	14	e974	e31
15	24	16	16	433	31	92	50	28	36	13	e137	e30
16	19	15	16	e87	31	85	77	27	21	13	e47	e4900
17	18	16	17	54	31	84	83	27	21	12	e34	e1100
18	17	16	16	458	293	70	49	27	21	11	e31	e100
19	17	16	16	136	76	49	46	218	20	11	e28	e66
20	18	17	16	47	46	43	52	78	20	24	e105	e51
21	17	e19	16	38	40	254	48	33	32	18	e50	190
22	17	17	20	40	37	1010	52	29	24	15	e35	109
23	16	17	22	42	34	129	68	62	20	15	e28	70
24	16	17	21	383	33	97	80	742	19	14	e27	63
25	16	17	17	100	32	85	45	129	19	13	e26	58
26	15	112	15	53	32	76	44	52	18	10	e800	51
27	15	31	15	41	31	71	42	42	18	9.9	e368	49
28	16	18	16	37	82	75	39	38	17	9.8	e38	48
29	15	17	21	34	---	66	39	34	18	9.6	e29	47
30	15	17	37	30	---	59	37	31	17	9.6	e27	213
31	16	---	22	29	---	55	---	29	---	9.7	e24	---
TOTAL	1005	701	572	3174	1700	3237	1928	2145	686	564.6	2946.4	8291
MEAN	32.4	23.4	18.5	102	60.7	104	64.3	69.2	22.9	18.2	95.0	276
MAX	248	112	37	612	293	1010	211	742	36	88	974	4900
MIN	11	15	15	15	28	34	37	27	17	9.6	7.8	20
CFSM	.65	.47	.37	2.06	1.22	2.10	1.29	1.39	.46	.37	1.91	5.55
IN.	.75	.52	.43	2.37	1.27	2.42	1.44	1.60	.51	.42	2.20	6.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999				
MEAN	59.5	75.8	96.3	101	96.6	120	121	102	82.6	86.0	71.0	74.0																											
MAX	174	300	311	334	252	273	338	194	245	257	163	276																											
(WY)	1997	1973	1997	1979	1979	1994	1983	1978	1989	1975	1967	1999																											
MIN	20.3	17.5	18.5	14.0	35.5	33.5	32.5	42.5	21.4	18.2	15.7	17.4																											
(WY)	1966	1966	1999	1981	1969	1985	1985	1995	1995	1999	1966	1970																											

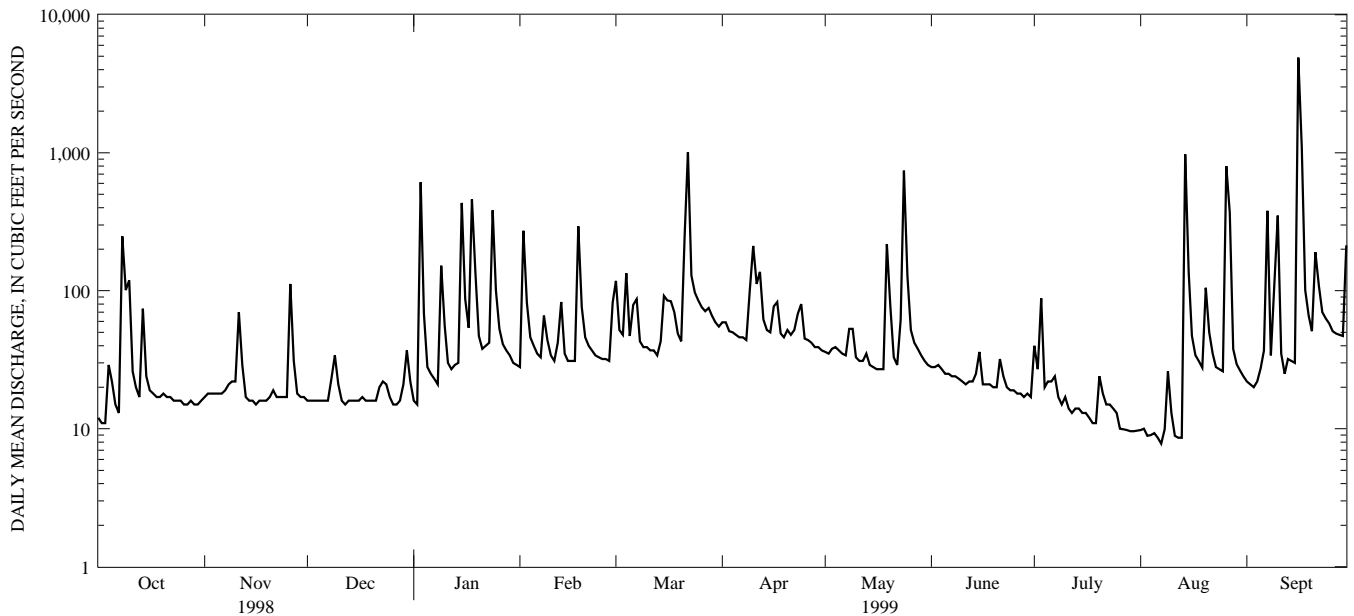
e Estimated.

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

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1965 - 1999	
ANNUAL TOTAL	24686		26950.0		91.0	
ANNUAL MEAN	67.6		73.8		165	
HIGHEST ANNUAL MEAN					1973	
LOWEST ANNUAL MEAN					43.2	
HIGHEST DAILY MEAN	701	Jan 23	e4900	Sep 16	e4900	Sep 16 1999
LOWEST DAILY MEAN	11	Oct 2,3	7.8	Aug 7	7.8	Aug 7 1999
ANNUAL SEVEN-DAY MINIMUM	12	Sep 27	9.1	Aug 1	9.1	Aug 1 1999
INSTANTANEOUS PEAK FLOW			a12400	Sep 16	a12400	Sep 16 1999
INSTANTANEOUS PEAK STAGE			b14.77	Sep 16	b14.77	Sep 16 1999
INSTANTANEOUS LOW FLOW			6.6	Aug 7	6.0	Oct 11 1966
ANNUAL RUNOFF (CFSM)	1.36		1.48		1.83	
ANNUAL RUNOFF (INCHES)	18.44		20.13		24.83	
10 PERCENT EXCEEDS	131		100		170	
50 PERCENT EXCEEDS	39		29		49	
90 PERCENT EXCEEDS	16		15		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.



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