

FRANKFORD CREEK BASIN

01467087 FRANKFORD CREEK AT CASTOR AVENUE, PHILADELPHIA, PA

LOCATION.--Lat 40°00'57", long 75°05'50", Philadelphia County, Hydrologic Unit 02040203, on left bank at upstream side of Castor Avenue bridge, and 2.8 mi upstream from mouth in northeast Philadelphia.

DRAINAGE AREA.--30.4 mi².

PERIOD OF RECORD.--July 1982 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 16.56 ft above sea level.

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 3,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
June 18	1830	4,540	7.45	Sept. 13	0630	*6,010	*8.63
Aug. 11	1445	5,470	8.21	Sept. 15	0230	4,800	7.67
Sept. 3	1745	3,740	6.75	Sept. 19	1545	5,030	7.86

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	12	11	16	24	21	25	20	17	11	231	35
2	8.0	126	11	16	20	20	25	24	17	11	27	18
3	7.5	23	11	16	19	20	25	20	18	44	45	242
4	56	12	11	175	20	19	39	19	17	25	182	19
5	125	12	11	49	e19	19	24	18	18	11	18	10
6	12	11	114	18	e18	19	23	18	61	10	13	9.7
7	11	11	16	17	e18	18	23	18	22	10	27	e9.7
8	11	12	13	16	e17	19	23	18	18	9.5	22	e9.7
9	11	12	13	16	e17	19	82	17	18	10	12	9.7
10	93	12	58	88	e16	18	26	72	18	46	11	9.5
11	15	12	16	23	35	140	23	31	17	9.2	287	10
12	13	12	12	18	30	54	22	17	158	7.9	64	9.9
13	12	12	57	19	23	19	21	e60	61	7.8	15	241
14	11	12	284	17	216	18	21	e187	24	66	219	11
15	11	11	40	17	54	18	25	e23	19	97	27	586
16	11	11	25	17	31	103	96	15	18	67	16	16
17	12	11	22	14	33	231	95	15	25	20	14	12
18	16	11	21	e14	55	26	45	13	389	10	16	11
19	11	12	19	e13	180	23	25	201	74	40	15	614
20	92	12	77	e16	34	22	23	64	17	15	12	82
21	15	16	32	e14	28	345	121	25	54	9.4	12	18
22	25	11	21	e14	25	304	40	20	96	42	11	15
23	36	11	19	e14	24	39	25	18	17	8.7	11	14
24	12	11	19	e13	24	33	23	114	15	8.5	11	18
25	11	39	18	e17	24	30	22	39	14	9.5	11	124
26	12	35	19	e15	23	28	22	18	13	479	9.7	337
27	12	125	17	e14	20	44	22	18	12	118	9.7	25
28	12	13	17	e14	29	165	22	18	43	15	24	19
29	12	12	17	e13	20	30	21	18	23	13	17	17
30	13	11	16	e13	---	27	20	17	13	32	11	16
31	12	---	17	54	---	25	---	16	---	229	21	---
TOTAL	720.1	643	1054	790	1096	1916	1049	1191	1326	1491.5	1421.4	2568.2
MEAN	23.2	21.4	34.0	25.5	37.8	61.8	35.0	38.4	44.2	48.1	45.9	85.6
MAX	125	126	284	175	216	345	121	201	389	479	287	614
MIN	7.5	11	11	13	16	18	20	13	12	7.8	9.7	9.5
CFSM	.76	.71	1.12	.84	1.24	2.03	1.15	1.26	1.45	1.58	1.51	2.82
IN.	.88	.79	1.29	.97	1.34	2.34	1.28	1.46	1.62	1.83	1.74	3.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2000, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	28.0	35.0	38.1	36.3	34.6	50.8	49.1	49.9	39.1	52.3	40.1	47.7							
MAX	86.5	81.7	145	61.8	80.4	91.4	143	98.4	111	116	71.4	143							
(WY)	1997	1987	1997	1996	1988	1994	1983	1989	1989	1989	1999	1999							
MIN	8.20	12.6	6.47	10.6	17.4	11.7	14.4	20.8	11.1	4.91	5.66	9.02							
(WY)	1993	1999	1999	1985	1992	1985	1985	1986	1999	1999	1995	1998							

e Estimated.

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SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR			FOR 2000 WATER YEAR			WATER YEARS 1982 - 2000		
ANNUAL TOTAL	15886.0			15266.2					
ANNUAL MEAN	43.5			41.7			41.8		
HIGHEST ANNUAL MEAN							61.7		
LOWEST ANNUAL MEAN							22.2		
HIGHEST DAILY MEAN	3140	Sep 16		614	Sep 19		3140	Sep 16 1999	
LOWEST DAILY MEAN	2.2	Aug 1		7.5	Oct 3		2.1	Sep 16 1995	
ANNUAL SEVEN-DAY MINIMUM	2.3	Jul 30		9.7	Sep 6		2.3	Jul 30 1999	
INSTANTANEOUS PEAK FLOW				6010	Sep 13		a10300	Jul 31 1985	
INSTANTANEOUS PEAK STAGE				8.63	Sep 13		11.82	Jul 31 1985	
INSTANTANEOUS LOW FLOW							.60	Aug 31 1995	
ANNUAL RUNOFF (CFSM)	1.43			1.37			1.38		
ANNUAL RUNOFF (INCHES)	19.44			18.68			18.69		
10 PERCENT EXCEEDS	58			95			80		
50 PERCENT EXCEEDS	12			18			16		
90 PERCENT EXCEEDS	4.0			11			7.3		

a From rating curve extended above 8,000 ft³/s on basis of slope-area measurement at gage height 9.97 ft.

