

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 16	2300	*6,240	*8.80	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	10	11	11	17	22	36	18	230	73	9.5	7.7
2	16	10	10	11	16	21	32	17	127	20	9.3	7.8
3	15	10	10	10	15	21	31	16	23	13	9.4	7.4
4	157	10	10	11	15	35	29	16	21	13	14	7.2
5	59	9.4	10	11	185	41	28	16	19	19	10	7.8
6	16	9.5	9.5	12	55	30	47	15	19	12	9.4	7.7
7	14	9.5	9.5	11	43	33	27	15	18	13	9.2	7.3
8	14	9.0	9.5	17	26	26	29	16	17	13	9.5	6.7
9	14	12	9.4	17	29	33	74	17	16	16	10	6.9
10	14	92	9.5	11	57	23	44	16	14	15	121	6.9
11	14	10	9.5	12	24	23	51	19	14	14	15	8.1
12	14	10	9.0	11	23	23	38	16	14	11	e270	6.5
13	14	9.7	8.8	10	25	216	25	16	15	12	e57	6.9
14	14	35	202	10	23	28	23	16	14	12	12	103
15	14	12	15	32	22	79	27	16	62	11	10	9.3
16	14	10	29	14	58	60	50	16	1220	12	9.6	7.3
17	14	10	282	14	e100	59	24	15	970	12	8.9	7.2
18	27	11	25	15	e27	31	25	16	47	20	8.4	6.7
19	14	10	17	160	e23	26	22	17	30	14	10	6.7
20	13	16	16	70	e22	25	22	15	26	13	51	38
21	13	14	15	29	e20	335	26	102	50	13	9.6	37
22	12	10	14	19	19	53	22	178	21	13	8.7	8.0
23	12	10	12	17	25	32	23	31	70	13	8.8	7.2
24	13	10	12	16	20	29	22	16	26	12	10	7.3
25	12	10	11	15	59	28	20	15	17	12	8.2	48
26	13	219	11	14	30	28	20	362	16	18	7.5	8.4
27	12	16	11	14	22	26	19	115	15	12	15	7.1
28	11	12	11	14	22	25	18	31	14	11	11	6.9
29	9.4	26	10	13	---	42	17	50	13	11	8.1	7.1
30	9.3	24	12	162	---	551	17	22	13	13	15	11
31	9.6	---	12	24	---	43	---	18	---	9.9	13	---
TOTAL	613.3	666.1	842.7	807	1022	2047	888	1264	3171	475.9	778.1	421.1
MEAN	19.8	22.2	27.2	26.0	36.5	66.0	29.6	40.8	106	15.4	25.1	14.0
MAX	157	219	282	162	185	551	74	362	1220	73	270	103
MIN	9.3	9.0	8.8	10	15	21	17	15	13	9.9	7.5	6.5
CFSM	.65	.73	.89	.86	1.20	2.17	.97	1.34	3.48	.50	.83	.46
IN.	.75	.82	1.03	.99	1.25	2.50	1.09	1.55	3.88	.58	.95	.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)

MEAN	27.6	34.4	37.5	35.8	34.7	51.6	48.1	49.4	42.6	50.5	39.3	46.0
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1982 - 2001	
ANNUAL TOTAL	14971.2		12996.2			
ANNUAL MEAN	40.9		35.6		41.5	
HIGHEST ANNUAL MEAN					61.7	1996
LOWEST ANNUAL MEAN					22.2	1995
HIGHEST DAILY MEAN	614	Sep 19	1220	Jun 16	3140	Sep 16 1999
LOWEST DAILY MEAN	7.8	Jul 13	6.5	Sep 12	2.1	Sep 16 1995
ANNUAL SEVEN-DAY MINIMUM	9.3	Dec 7	7.0	Sep 7	2.3	Jul 30 1999
MAXIMUM PEAK FLOW			6240	Jun 16	a10300	Jul 31 1985
MAXIMUM PEAK STAGE			8.80	Jun 16	11.82	Jul 31 1985
INSTANTANEOUS LOW FLOW			5.2	Sep 18	.60	Aug 31 1995
ANNUAL RUNOFF (CFSM)	1.35		1.17		1.36	
ANNUAL RUNOFF (INCHES)	18.32		15.90		18.54	
10 PERCENT EXCEEDS	93		56		80	
50 PERCENT EXCEEDS	18		15		16	
90 PERCENT EXCEEDS	10		9.3		7.4	

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

