

CHRISTINA RIVER BASIN

01479820 RED CLAY CREEK NEAR KENNETT SQUARE, PA

LOCATION.--Lat 39°49'00", long 75°41'31", Chester County, Hydrologic Unit 02040205, on left bank along SR 82 (Creek Road), and 3.0 mi south of the intersection of SR 82 and U.S. Highway 1 at Kennett Square.

DRAINAGE AREA.--28.3 mi².

PERIOD OF RECORD.--January 1988 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 200 ft above sea level, from topographic map.

REMARKS.--Records poor. Some regulation upstream of gage. Several measurements of water temperature were made during the year. Satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Mar. 22	0315	*2,470	*7.89	No other peak greater than base discharge.			

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	22	19	31	e27	e35	39	55	41	31	29	25	45
2	17	42	30	e26	e30	38	54	42	31	25	19	22
3	17	44	29	e30	e28	37	54	39	30	28	20	21
4	28	21	28	e50	e27	36	69	39	29	36	19	18
5	70	21	28	76	e25	35	55	40	29	26	17	16
6	23	22	61	35	e24	34	52	40	50	22	16	16
7	20	20	39	31	e23	34	50	38	37	22	17	17
8	17	20	34	29	e23	34	51	38	31	19	16	15
9	17	19	33	28	e23	35	95	36	29	18	15	17
10	93	19	54	58	e25	36	60	42	28	18	17	12
11	35	18	42	45	e35	49	54	45	26	18	17	15
12	24	18	32	32	e40	81	51	35	25	17	17	13
13	21	22	42	30	e30	44	49	38	32	16	20	25
14	22	21	272	26	130	39	48	49	30	20	39	16
15	21	20	83	24	85	38	50	36	30	27	25	82
16	21	19	50	26	77	43	66	33	30	29	23	26
17	19	19	41	e25	58	187	90	36	27	27	21	22
18	25	18	37	e24	51	58	75	35	30	20	23	18
19	19	18	35	e22	210	49	58	50	32	25	25	126
20	52	21	43	e30	86	46	53	44	26	27	19	69
21	30	21	47	e27	55	362	115	41	24	19	16	18
22	24	21	37	e25	48	1010	99	41	42	17	17	15
23	32	21	34	e25	48	84	60	43	26	15	18	14
24	22	29	34	e26	49	65	54	56	22	16	20	14
25	19	50	e32	e28	47	58	47	38	21	17	19	34
26	19	78	e31	e35	43	53	46	34	22	53	17	228
27	18	208	e31	e27	39	59	45	34	20	41	17	40
28	17	46	e30	e28	55	242	44	35	144	26	33	22
29	17	37	e30	e29	40	67	43	35	58	21	18	18
30	17	33	e29	e30	---	61	41	33	35	21	17	17
31	19	---	e28	e45	---	57	---	32	---	30	20	---
TOTAL	817	985	1407	999	1489	3110	1783	1218	1027	745	622	1031
MEAN	26.4	32.8	45.4	32.2	51.3	100	59.4	39.3	34.2	24.0	20.1	34.4
MAX	93	208	272	76	210	1010	115	56	144	53	39	228
MIN	17	18	28	22	23	34	41	32	20	15	15	12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

MEAN	28.5	33.4	41.1	50.1	44.4	62.2	47.8	42.2	32.3	28.4	22.6	31.3
MAX	75.5	61.3	128	96.1	81.2	116	85.5	79.2	57.3	94.5	55.2	89.4
(WY)	1997	1997	1997	1996	1994	1994	1993	1989	1996	1989	1996	1999
MIN	10.8	10.9	12.9	22.0	24.9	34.0	24.9	21.7	16.0	12.0	5.84	8.83
(WY)	1995	1999	1999	1992	1995	1990	1992	1999	1995	1995	1995	1995

e Estimated.

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01479820 RED CLAY CREEK NEAR KENNETT SQUARE, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL	13333.7		15233			
ANNUAL MEAN	36.5		41.6		38.9	
HIGHEST ANNUAL MEAN					52.0	1997
LOWEST ANNUAL MEAN					21.4	1995
HIGHEST DAILY MEAN	1820	Sep 16	1010	Mar 22	1820	Sep 16 1999
LOWEST DAILY MEAN	2.4	Aug 25	12	Sep 10	.86	Sep 3 1995
ANNUAL SEVEN-DAY MINIMUM	4.4	Aug 10	15	Sep 6	1.1	Sep 2 1995
INSTANTANEOUS PEAK FLOW			a2470	Mar 22	a4680	Sep 16 1999
INSTANTANEOUS PEAK STAGE			7.89	Mar 22	10.04	Sep 16 1999
10 PERCENT EXCEEDS	54		59		60	
50 PERCENT EXCEEDS	22		30		28	
90 PERCENT EXCEEDS	7.5		17		13	

a From rating curve extended above 2,100 ft³/s.

