

CHRISTINA RIVER BASIN

01478245 WHITE CLAY CREEK NEAR STRICKERSVILLE, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 39°44'51", long 75°46'15", Chester County, Hydrologic Unit 02040205, on right bank 0.1 mi downstream from West Branch White Clay Creek, in the White Clay Creek State Preserve, and 1.5 mi northeast of Strickersville.

DRAINAGE AREA.--59.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1996 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good 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 a base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Mar. 20	1700	*457	*5.07	(No peaks above base discharge.)			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	26	28	e20	50	28	69	43	25	19	9.2	24
2	27	26	27	e19	44	29	49	80	24	18	8.6	24
3	26	27	27	e19	38	204	46	70	22	17	8.4	15
4	25	27	27	e18	37	62	43	43	22	16	8.5	12
5	24	26	27	e18	e34	44	41	39	22	16	8.1	10
6	24	26	27	41	e34	40	41	36	49	15	8.2	9.6
7	24	25	27	88	34	38	39	35	106	14	7.2	9.2
8	24	25	29	52	33	36	38	33	31	14	6.9	8.9
9	24	25	46	42	32	35	39	33	28	14	7.2	8.8
10	25	25	32	38	32	44	42	34	26	19	7.0	8.5
11	26	25	35	132	35	35	38	30	25	14	6.6	8.5
12	25	24	33	69	32	34	38	35	24	13	6.4	8.0
13	25	24	32	46	31	47	39	56	25	13	6.2	8.7
14	25	25	38	39	30	45	38	55	75	15	5.7	9.2
15	35	25	42	37	30	38	39	35	40	16	5.4	10
16	28	25	33	35	31	37	46	32	33	13	5.6	14
17	28	24	32	34	30	35	38	30	27	12	7.1	12
18	27	24	54	33	29	64	35	176	26	12	15	10
19	27	24	39	33	29	52	40	66	32	12	7.6	9.5
20	27	26	34	e36	30	196	49	44	27	13	7.1	9.6
21	27	25	31	e34	35	112	37	38	24	12	6.7	9.4
22	27	24	30	32	31	62	43	35	22	11	6.4	9.3
23	27	24	30	35	30	50	38	33	21	11	6.4	9.1
24	27	24	46	105	29	46	34	31	20	13	12	8.8
25	26	45	37	79	29	43	35	29	41	13	25	8.7
26	25	62	32	47	29	43	35	29	23	11	11	13
27	25	33	30	41	29	155	32	30	21	12	9.4	60
28	25	30	e27	39	28	64	148	30	30	13	9.6	41
29	26	29	e29	37	---	52	68	29	21	12	60	17
30	27	29	e26	36	---	48	44	27	19	11	20	13
31	25	---	e21	52	---	51	---	26	---	9.7	12	---
TOTAL	811	829	1008	1386	915	1869	1361	1342	931	423.7	330.5	418.8
MEAN	26.2	27.6	32.5	44.7	32.7	60.3	45.4	43.3	31.0	13.7	10.7	14.0
MAX	35	62	54	132	50	204	148	176	106	19	60	60
MIN	24	24	21	18	28	28	32	26	19	9.7	5.4	8.0
CFSM	0.44	0.47	0.55	0.76	0.55	1.02	0.77	0.73	0.52	0.23	0.18	0.24
IN.	0.51	0.52	0.63	0.87	0.57	1.17	0.86	0.84	0.59	0.27	0.21	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

MEAN	54.0	54.1	86.0	84.7	86.3	121	89.8	68.0	49.1	33.5	38.6	67.7
MAX	143	119	246	134	134	191	126	90.3	64.4	59.3	96.2	231
(WY)	1997	1997	1997	1997	1997	2000	1997	1998	1998	2000	1996	1999
MIN	25.8	27.6	26.6	44.7	32.7	60.3	45.4	43.3	27.7	13.7	10.7	14.0
(WY)	1998	2002	1999	2002	2002	2002	2002	2002	1999	2002	2002	2002

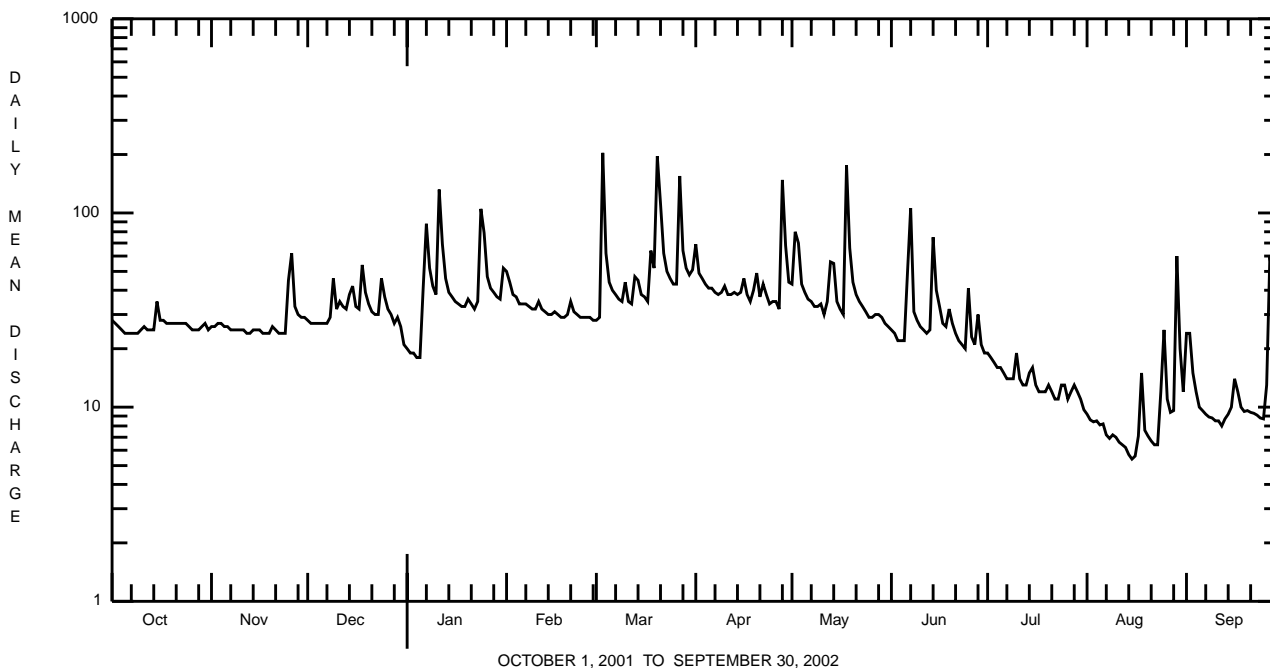
e Estimated.

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01478245 WHITE CLAY CREEK NEAR STRICKERSVILLE, PA--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1996 - 2002	
ANNUAL TOTAL	21340		11625.0			
ANNUAL MEAN	58.5		31.8		68.3	
HIGHEST ANNUAL MEAN					105	1997
LOWEST ANNUAL MEAN					31.8	2002
HIGHEST DAILY MEAN	703	Mar 30	204	Mar 3	4930	Sep 16 1999
LOWEST DAILY MEAN	18	Aug 8,9	5.4	Aug 15	5.4	Aug 15 2002
ANNUAL SEVEN-DAY MINIMUM	20	Aug 3	6.1	Aug 10	6.1	Aug 10 2002
MAXIMUM PEAK FLOW			457	Mar 20	a 14400	Sep 16 1999
MAXIMUM PEAK STAGE			5.07	Mar 20	b 16.71	Sep 16 1999
INSTANTANEOUS LOW FLOW			5.0	Aug 15,16	5.0	Aug 15 2002
ANNUAL RUNOFF (CFSM)	0.99		0.54		1.15	
ANNUAL RUNOFF (INCHES)	13.41		7.30		15.67	
10 PERCENT EXCEEDS	97		49		121	
50 PERCENT EXCEEDS	41		28		45	
90 PERCENT EXCEEDS	24		9.5		21	

a From rating curve extended above 1,180 ft³/s on basis of runoff comparison with nearby station.
b From floodmark in gage.



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01478245 WHITE CLAY CREEK NEAR STRICKERSVILLE, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

REMARKS.--Other data for the Water-Quality Network can be found on pages 410-425.

COOPERATION.--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM- PLING METHOD, CODES (82398)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L) AS CACO3 (00900)	CALCIUM TOTAL RECOV- ERABLE (MG/L) AS CA (00916)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L) AS MG (00927)	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)
APR 2002 24...	1120	9813	33	30	13.0	8.1	342	10.4	150	35.1	14.3	86	27.2
JUN 25...	1210	9813	37	30	8.5	7.8	309	22.8	120	29.8	11.7	72	21.7
AUG 28...	0935	9813	9.3	30	7.5	7.9	365	21.4	140	35.7	13.5	98	28.4

Date	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L) (00515)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N (00610)	NITRO- GEN, NITRATE TOTAL (MG/L) AS N (00620)	NITRO- GEN, NITRITE TOTAL (MG/L) AS N (00615)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L) AS P (00671)	PHOS- PHORUS TOTAL (MG/L) AS P (00665)	CARBON, ORGANIC DIS- SOLVED TOTAL (MG/L) AS C (00681)	CARBON, ORGANIC TOTAL (MG/L) AS C (00680)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL, (HIGH LEVEL) (MG/L) (00340)	
APR 2002 24...	29.5	228	8	.030	3.60	<.010	3.7	.095	.150	2.5	3.0	.6	10
JUN 25...	29.3	88	108	.030	3.58	.070	4.5	.113	.310	7.5	7.3	2.6	23
AUG 28...	32.7	294	2	.060	2.23	.010	2.4	.111	.170	--	3.8	.7	<10

Date	FECAL COLI- FORM, MFC MF, WATER (COL/ 100 ML) (31616)	ARSENIC DIS- SOLVED (µG/L) AS AS (01000)	ARSENIC TOTAL (µG/L) AS AS (01002)	CADMIUM DIS- SOLVED (µG/L) AS CD (01025)	CADMIUM WATER UNFLTRD TOTAL (µG/L) AS CD (01027)	CHRO- MIUM, HEXA- VALENT, DIS- SOLVED (µG/L) AS CR (01032)	CHRO- MIUM, TOTAL RECOV- ERABLE (µG/L) AS CR (01034)	COPPER, DIS- SOLVED (µG/L) AS CU (01040)	COPPER, TOTAL RECOV- ERABLE (µG/L) AS CU (01042)	IRON, DIS- SOLVED (µG/L) AS FE (01046)	IRON, TOTAL RECOV- ERABLE (µG/L) AS FE (01045)	LEAD, DIS- SOLVED (µG/L) AS PB (01049)	LEAD, TOTAL RECOV- ERABLE (µG/L) AS PB (01051)
APR 2002 24...	--	<4.0	<4	<.20	<.2	<1	<4	<4	<4	70	190	<1.0	<1.0
JUN 25...	260000	<4.0	<4	<.20	<.2	<1	<4	<4	5.9	40	3220	<1.0	2.8
AUG 28...	280	<4.0	<4	<.20	<.2	<1	<4	<4	<4	40	180	<1.0	<1.0

Date	MANGA- NESE, DIS- SOLVED (µG/L) AS MN (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L) AS MN (01055)	MERCURY DIS- SOLVED (µG/L) AS HG (71890)	MERCURY TOTAL RECOV- ERABLE (µG/L) AS HG (71900)	NICKEL, DIS- SOLVED (µG/L) AS NI (01065)	NICKEL, TOTAL RECOV- ERABLE (µG/L) AS NI (01067)	SELE- NIUM, DIS- SOLVED (µG/L) AS SE (01145)	SILVER, DIS- SOLVED (µG/L) AS AG (01075)	SILVER, TOTAL RECOV- ERABLE (µG/L) AS AG (01077)	ZINC, DIS- SOLVED (µG/L) AS ZN (01090)	ZINC, TOTAL RECOV- ERABLE (µG/L) AS ZN (01092)
APR 2002 24...	<2.0	<2	<.20	<.2	<4.0	<4.0	<7	<.4	<.40	<5.0	<5.0
JUN 25...	20	100	<.20	<.2	<4.0	<4.0	<7	<.4	<.40	<5.0	10
AUG 28...	40	50	<.20	<.2	<4.0	<4.0	<7	<.4	<.40	6.5	<5.0