



2005 Water Year CHRISTINA RIVER BASIN

01480870 East Branch Brandywine Creek below Downingtown, PA

Latitude: 39° 58 ' 07"

Longitude: 075° 40 ' 25"

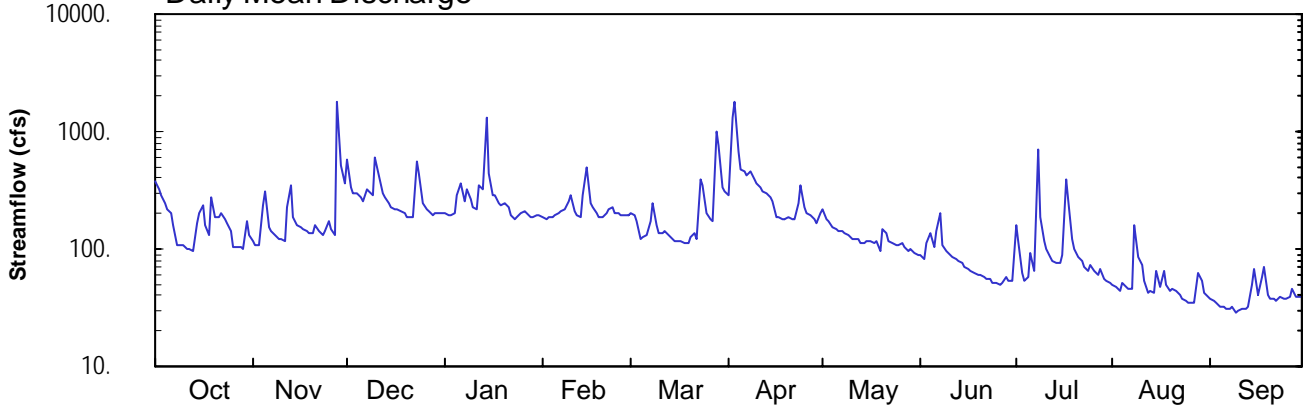
Hydrologic Unit Code: 02040205

Chester County

Datum: 195 feet

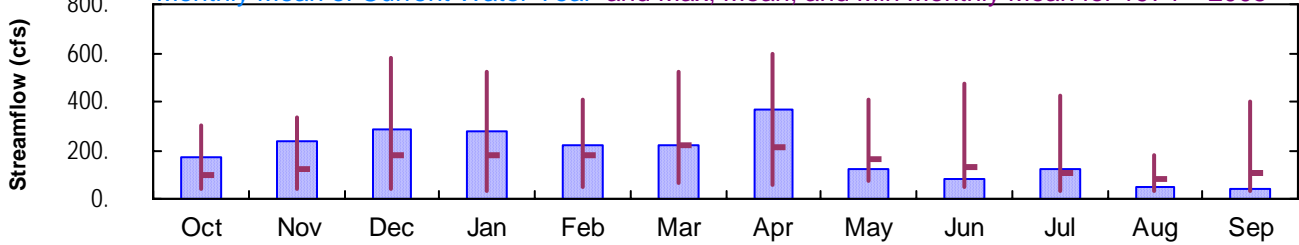
Drainage Area: 89.9 mi²

Daily Mean Discharge

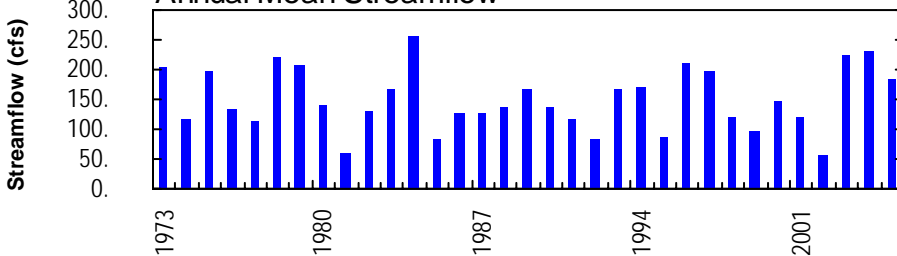


Monthly Statistics

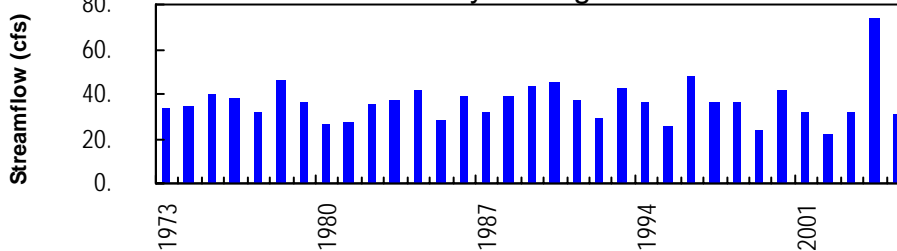
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1974 – 2005



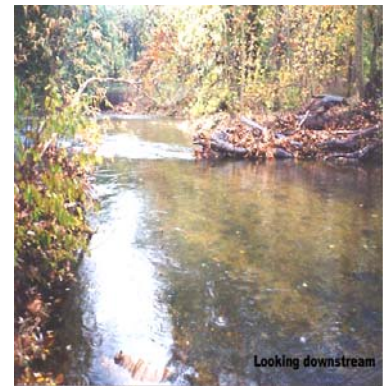
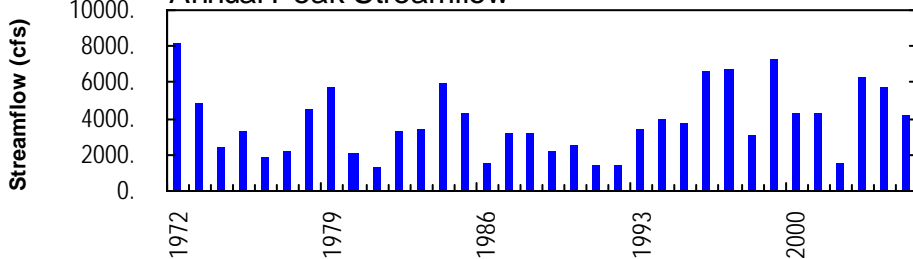
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



01480870-EB Brandywine Creek below Downingtown

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA

LOCATION.--Lat 39°58'07", long 75°40'25", Chester County, Hydrologic Unit 02040205, on left bank at downstream side of Sugars Bridge (U.S. Highway 322), 2,000 ft upstream from Valley Creek, 1.5 mi north of Marshallton, and 3.3 mi southeast of Downingtown.

DRAINAGE AREA.--89.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1972 to current year.

REVISED RECORDS.--WDR PA-75-1: 1972(P), 1973, 1974.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 195 ft above National Geodetic Vertical Datum of 1929, from topographic map. Feb. 1 to Apr. 10, and June 25 to Nov. 17, 1972, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated since November 1973 by Marsh Creek Reservoir (station 01480684) about 7.5 mi upstream. Satellite and landline telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	376	115	578	201	185	203	283	221	88	160	50	38
2	317	109	334	194	182	194	1290	178	84	115	47	36
3	285	106	299	194	183	172	1770	170	114	62	45	34
4	249	233	299	199	186	124	678	157	138	54	51	33
5	219	311	276	285	193	124	475	146	105	58	48	32
6	200	155	257	361	201	130	450	142	144	91	45	31
7	162	141	327	257	208	173	417	141	203	64	46	31
8	109	132	311	318	220	248	465	134	108	702	161	32
9	108	124	292	268	257	157	397	131	96	184	84	29
10	106	120	598	230	288	136	363	122	92	119	73	30
11	100	118	418	222	214	134	336	123	87	100	54	31
12	99	231	304	347	193	140	314	120	83	87	43	31
13	98	342	274	322	187	130	295	113	79	79	45	33
14	169	183	249	1330	284	123	275	114	77	75	43	49
15	205	163	230	440	491	117	254	118	71	77	66	67
16	237	153	220	285	248	116	186	116	69	89	48	40
17	157	146	215	289	230	115	185	112	65	392	66	59
18	130	142	206	247	202	114	181	117	62	264	49	72
19	280	138	206	233	188	113	181	98	61	122	44	41
20	187	138	190	247	186	124	190	149	60	100	46	38
21	188	159	184	228	204	136	180	136	57	86	44	37
22	202	139	189	192	218	121	177	116	56	78	41	37
23	182	134	548	e180	228	389	250	111	55	72	38	39
24	169	142	444	e190	205	349	349	110	51	65	36	37
25	144	171	242	e200	199	200	226	109	51	74	35	37
26	106	146	216	213	194	179	201	111	50	65	35	39
27	103	133	209	198	194	171	194	103	52	61	35	46
28	103	1800	194	e185	195	998	181	97	59	67	64	40
29	100	522	199	e190	---	753	168	101	54	56	53	39
30	176	359	201	198	---	337	205	93	54	53	42	39
31	130	---	202	191	---	312	---	89	---	51	40	---
TOTAL	5396	7005	8911	8634	6163	6832	11116	3898	2425	3722	1617	1177
MEAN	174	234	287	279	220	220	371	126	80.8	120	52.2	39.2
MAX	376	1800	598	1330	491	998	1770	221	203	702	161	72
MIN	98	106	184	180	182	113	168	89	50	51	35	29
CFSM	1.94	2.60	3.20	3.10	2.45	2.45	4.12	1.40	0.90	1.34	0.58	0.44
IN.	2.23	2.90	3.69	3.57	2.55	2.83	4.60	1.61	1.00	1.54	0.67	0.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2005, BY WATER YEAR (WY)

MEAN	99.2	121	179	183	180	219	211	165	127	108	77.7	105
MAX	304	333	577	527	409	525	594	410	477	421	177	396
(WY)	1997	2004	1997	1979	1979	1994	1983	1989	2003	1984	1996	2003
MIN	36.7	41.8	40.8	30.9	49.2	61.6	53.1	75.9	45.5	32.5	28.6	29.5
(WY)	2002	2002	1981	1981	2002	1985	1985	1999	1999	2002	1999	1980

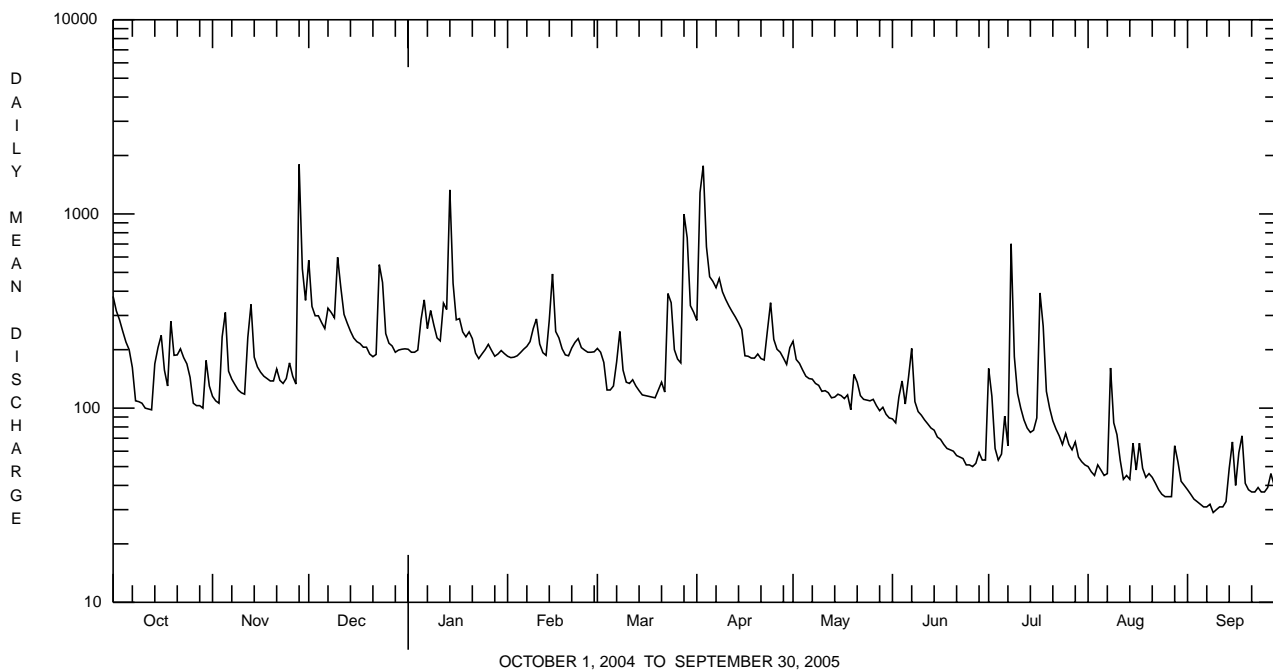
e Estimated.

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1974 - 2005	
ANNUAL TOTAL	74594		66896			
ANNUAL MEAN	204		183		148	
HIGHEST ANNUAL MEAN					257	1984
LOWEST ANNUAL MEAN					57.0	2002
HIGHEST DAILY MEAN	1900	Sep 29	1800	Nov 28	3080	Sep 16 1999
LOWEST DAILY MEAN	63	Jul 11	29	Sep 9	19	Sep 14 2002
ANNUAL SEVEN-DAY MINIMUM	74	Jul 5	31	Sep 6	22	Sep 9 2002
MAXIMUM PEAK FLOW			a4160	Nov 28	b8160	Jun 22 1972
MAXIMUM PEAK STAGE			10.63	Nov 28	c14.79	Sep 16 1999
ANNUAL RUNOFF (CFSM)	2.27		2.04		1.64	
ANNUAL RUNOFF (INCHES)	30.87		27.68		22.34	
10 PERCENT EXCEEDS	312		320		283	
50 PERCENT EXCEEDS	165		144		97	
90 PERCENT EXCEEDS	94		44		41	

- a From rating curve extended above 3,600 ft³/s on basis of runoff comparison with nearby stations.
- b From rating curve extended above 3,600 ft³/s on basis of slope-area measurement of peak flow at gage height 13.40 ft.
- c Discharge, 7,200 ft³/s on basis of runoff comparison with nearby stations.



CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1965 to September 1966, October 1970 to current year.**PERIOD OF DAILY RECORD.**--

SPECIFIC CONDUCTANCE: February 1972 to current year.

pH: February 1972 to current year.

WATER TEMPERATURES: February 1972 to current year.

DISSOLVED OXYGEN: February 1972 to current year.

INSTRUMENTATION.--Water-quality monitor since February 1972.**REMARKS.**--Specific conductance record rated good except for periods Nov. 11-24 and Mar. 17 to Apr. 1, which are fair, and Apr. 7 to May 3, which are poor. pH record rated good except for periods Nov. 9-24 and Apr. 2 to May 3, which are poor. Water temperature record rated good except for period Apr. 2 to May 3, which is poor. Dissolved oxygen record rated fair, except for periods Nov. 9-14, Mar. 1-11, 24-28, Apr. 7 to May 3, 19-23, and June 23 to July 7, which are poor. Data collection discontinued during winter months since 1981 water year. Other interruptions in the record were due to malfunctions of the equipment.**EXTREMES FOR PERIOD OF DAILY RECORD.**--

SPECIFIC CONDUCTANCE: Maximum, 891 microsiemens, Mar. 5, 2001; minimum, 67 microsiemens, July 1, 1984.

pH: Maximum, 9.9, May 13, June 5, 1973; minimum, 5.4, Oct. 24, 26, 1973.

WATER TEMPERATURE: Maximum, 33.0°C, July 18, 1977; minimum, 0.0°C, many days during winters.

DISSOLVED OXYGEN: Maximum, 19.4 mg/L, Mar. 18, 1989; minimum, 0.8 mg/L, July 23, 1984.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, deg C (00010)	Fecal coli- form, M-FC col/ 100 mL (31625)
MAR 2005									
08...	1300	1028	1028	235	8.7	7.3	368	6.3	7
28...	1320	1028	1028	279	11.0	7.5	249	7.2	110
APR									
12...	1145	1028	1028	316	10.8	7.6	227	12.5	10
26...	1125	1028	1028	204	11.8	7.6	240	13.4	66
MAY									
04...	1025	1028	1028	161	10.7	7.7	269	11.5	130
17...	1150	1028	1028	108	11.6	8.1	289	15.7	160
24...	0845	1028	1028	106	7.9	7.5	290	14.3	200
JUN									
07...	1000	1028	1028	179	7.8	7.4	251	19.5	4700
20...	0905	1028	1028	60	8.8	7.6	337	17.6	380
27...	1315	1028	1028	52	9.4	7.8	354	22.7	1000
JUL									
07...	0900	1028	1028	63	7.9	7.5	320	22.1	760
19...	1130	1028	1028	123	7.5	7.6	262	24.3	930
28...	1140	1028	1028	70	8.1	7.8	329	23.5	1200
AUG									
03...	1140	1028	1028	44	8.6	7.9	381	24.1	510
25...	1010	1028	1028	35	9.3	7.7	403	18.5	240
31...	1030	1028	1028	40	8.0	7.7	392	23.0	E120
SEP									
08...	0930	1028	1028	35	9.3	7.6	437	17.3	E49
22...	0900	1028	1028	36	8.2	7.6	404	17.6	96

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
OCT 2004 18...	1300	1028	80020	127	11.7	7.4	8.0	258	241	12.2	24.4	8.16	3.48	
Date		Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd, end pt, lab, mg/L as CaCO3 (90410)	ANC, wat unfltrd, incrm. titr., field, mg/L as CaCO3 (00419)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, fltrd, µg/L (01106)	Arsenic, water, fltrd, µg/L (01000)
OCT 2004 18...	15.6	63	66	29.8	E.1	11.7	17.5	E.02	2.77	E.005	.09	4	<2	
Date		Boron, water, fltrd, µg/L (01020)	Cadmium, water, fltrd, µg/L (01025)	Chromium, water, fltrd, µg/L (01030)	Copper, water, fltrd, µg/L (01040)	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Manganese, water, fltrd, µg/L (01056)	Mercury, water, fltrd, µg/L (71890)	Molybdenum, water, fltrd, µg/L (01060)	Nickel, water, fltrd, µg/L (01065)			
OCT 2004 18...		55	<.2	<.8	2.3	54	<1	13.1	<.01	.7	<2.0			

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATESREMARKS.--Samples were collected using a Hess sampler with a mesh size of 500 μm . Each sample covered a total area of 2.4 m².

Date	10/18/04
Benthic macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	60
Nematoda (NEMATODES)	39
Nemertea (PROBOSCIS WORMS)	
Enopla	
Hoplonemertea	
Tetrastemmatidae	
<i>Prostoma</i>	6
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Ancyliidae	
<i>Ferrissia</i>	1
Hydrobiidae	
<i>Amnicola</i>	1
Bivalvia (CLAMS)	
Veneroida	
Corbiculidae	
<i>Corbicula fluminea</i>	33
Sphaeriidae	
<i>Sphaerium</i>	7
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbriculida	
Lumbriculidae	17
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	16
Crustacea	
Amphipoda (SCUDS)	
Gammaridae	
<i>Gammarus</i>	3
Insecta	
Ephemeroptera (MAYFLIES)	
Baetidae	
<i>Acentrella</i>	19
<i>Baetis</i>	2
Ephemerellidae	
<i>Serratella</i>	10
Heptageniidae	
<i>Stenonema</i>	58
Isonychiidae	
<i>Isonychia</i>	1

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES--Continued

Date	10/18/04
Benthic macroinvertebrate	Count
Plecoptera (STONEFLIES)	
Perlidae	
<i>Acroneuria</i>	1
Taeniopterygidae	
<i>Taeniopteryx</i>	25
Trichoptera (CADDISFLIES)	
Apataniidae	
<i>Apatania</i>	1
Brachycentridae	
<i>Micrasema</i>	39
Glossosomatidae	
<i>Glossosoma</i>	9
Hydropsychidae	
<i>Cheumatopsyche</i>	472
<i>Hydropsyche</i>	506
Hydroptilidae	
<i>Hydroptila</i>	1
<i>Leucotrichia</i>	2
Lepidostomatidae	
<i>Lepidostoma</i>	2
Leptoceridae	
<i>Mystacides</i>	1
Philopotamidae	
<i>Chimarra</i>	35
Uenoidae	
<i>Neophylax</i>	1
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
<i>Ancyronyx</i>	1
<i>Dubiraphia</i>	2
<i>Optioservus</i>	343
<i>Oulimnius</i>	42
<i>Promoresia</i>	6
<i>Stenelmis</i>	276
Psephenidae (WATER PENNIES)	
<i>Psephenus</i>	30
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	
	560
Empididae (DANCE FLIES)	
<i>Hemerodromia</i>	27
Simuliidae	
<i>Simulium</i>	254
Tipulidae (CRANE FLIES)	
<i>Antocha</i>	19
<i>Tipula</i>	1
Total organisms	
	2929
Total number of taxa	
	40

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	308	298	302	---	---	---	---	---	---
2	---	---	---	311	298	305	---	---	---	---	---	---
3	---	---	---	313	297	305	---	---	---	---	---	---
4	---	---	---	314	196	288	---	---	---	---	---	---
5	261	253	256	---	---	---	---	---	---	---	---	---
6	267	257	262	---	---	---	---	---	---	---	---	---
7	313	267	276	---	---	---	---	---	---	---	---	---
8	324	303	317	---	---	---	---	---	---	---	---	---
9	---	---	---	302	282	296	---	---	---	---	---	---
10	---	---	---	306	293	301	---	---	---	---	---	---
11	---	---	---	309	288	301	---	---	---	---	---	---
12	---	---	---	319	208	280	---	---	---	---	---	---
13	---	---	---	252	204	222	---	---	---	---	---	---
14	326	257	292	274	252	267	---	---	---	---	---	---
15	---	---	---	283	273	279	---	---	---	---	---	---
16	---	---	---	288	280	283	---	---	---	---	---	---
17	---	---	---	290	276	286	---	---	---	---	---	---
18	---	---	---	296	289	292	---	---	---	---	---	---
19	---	---	---	296	285	292	---	---	---	---	---	---
20	---	---	---	297	285	292	---	---	---	---	---	---
21	277	255	271	294	278	284	---	---	---	---	---	---
22	264	255	259	295	285	290	---	---	---	---	---	---
23	271	261	266	296	291	293	---	---	---	---	---	---
24	277	269	273	300	295	298	---	---	---	---	---	---
25	314	274	284	296	265	279	---	---	---	---	---	---
26	323	314	319	286	266	277	---	---	---	---	---	---
27	321	315	319	289	282	286	---	---	---	---	---	---
28	330	316	320	---	---	---	---	---	---	---	---	---
29	332	304	319	---	---	---	---	---	---	---	---	---
30	321	254	279	230	212	218	---	---	---	---	---	---
31	301	271	289	---	---	---	---	---	---	---	---	---
MONTH	332	253	288	319	196	284	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	520	329	410	237	227	230	260	244	252
2	---	---	---	520	374	430	237	128	187	265	253	260
3	---	---	---	374	324	346	168	120	144	---	---	---
4	---	---	---	377	340	364	205	168	190	279	269	273
5	---	---	---	345	337	341	212	198	208	280	274	278
6	---	---	---	340	324	333	216	210	213	285	276	280
7	---	---	---	325	294	320	230	215	219	286	275	282
8	---	---	---	368	261	305	241	211	221	289	272	283
9	---	---	---	364	328	347	222	215	218	292	278	285
10	---	---	---	334	318	328	225	221	223	291	281	286
11	---	---	---	324	307	316	230	224	227	291	282	287
12	---	---	---	342	301	326	234	230	232	291	284	288
13	---	---	---	331	316	323	235	231	234	293	285	287
14	---	---	---	322	311	317	239	233	236	294	284	290
15	---	---	---	319	311	316	246	237	239	292	278	286
16	---	---	---	319	308	315	268	243	260	291	281	288
17	---	---	---	319	311	316	265	260	263	291	283	288
18	---	---	---	317	311	315	262	257	260	284	275	279
19	---	---	---	319	304	312	262	252	259	311	280	298
20	---	---	---	323	304	313	258	250	253	312	261	288
21	---	---	---	316	297	306	260	253	258	286	263	273
22	---	---	---	307	297	300	264	258	262	290	275	285
23	---	---	---	307	209	276	263	225	254	293	286	290
24	---	---	---	251	209	231	233	198	216	298	286	290
25	---	---	---	261	251	258	245	229	239	293	286	289
26	---	---	---	266	256	260	252	245	248	302	289	296
27	---	---	---	265	258	262	260	250	254	308	289	300
28	---	---	---	264	124	219	262	254	258	301	288	296
29	---	---	---	211	132	174	267	258	262	298	286	293
30	---	---	---	222	211	218	267	248	258	302	290	296
31	---	---	---	230	222	226	---	---	---	303	296	300
MONTH	---	---	---	520	124	304	268	120	234	312	244	286

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25° CELSIUS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	306	297	303	356	174	314	363	346	356	398	383	391
2	317	303	310	301	210	263	370	350	356	413	394	404
3	317	267	303	325	299	312	381	352	371	419	388	408
4	296	267	283	338	305	327	383	331	354	417	391	403
5	309	284	296	343	312	330	358	335	349	431	401	411
6	310	186	291	320	282	304	365	347	354	431	400	416
7	287	189	248	336	311	326	368	350	359	435	414	422
8	301	287	296	334	127	218	368	146	295	438	408	429
9	309	298	303	255	195	232	332	227	305	427	405	418
10	311	301	306	285	252	268	341	259	315	447	416	426
11	317	301	309	297	280	288	375	341	354	450	422	433
12	322	307	315	307	292	300	406	375	392	430	402	419
13	326	309	319	312	298	305	400	379	389	430	414	421
14	332	318	325	321	307	312	400	364	388	425	297	405
15	335	325	329	333	293	321	372	243	317	350	228	298
16	341	330	334	321	287	304	386	349	371	376	350	360
17	337	326	330	300	146	215	363	320	343	380	222	356
18	341	331	337	258	167	211	380	361	372	356	222	295
19	343	326	337	281	257	269	391	370	379	375	355	363
20	344	335	339	305	280	292	395	368	379	394	372	379
21	343	331	336	310	280	301	397	373	385	406	388	396
22	364	342	353	319	300	309	404	383	394	411	386	398
23	364	337	350	333	314	320	417	396	405	400	377	390
24	358	335	347	340	318	330	417	398	410	398	377	391
25	356	344	351	339	300	316	419	398	407	411	387	396
26	368	340	354	339	312	323	423	408	414	406	385	389
27	366	346	355	346	332	339	425	394	414	408	367	383
28	355	333	342	344	322	329	420	292	366	391	361	380
29	354	339	346	362	334	346	368	304	348	404	353	379
30	354	339	346	365	340	355	396	362	375	382	357	371
31	---	---	---	366	348	356	400	387	392	---	---	---
MONTH	368	186	323	366	127	301	425	146	368	450	222	391

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	---	---	---	7.5	7.3	7.3	---	---	---	---	---	---
2	---	---	---	7.5	7.3	7.3	---	---	---	---	---	---
3	---	---	---	7.5	7.3	7.3	---	---	---	---	---	---
4	---	---	---	7.6	7.3	7.3	---	---	---	---	---	---
5	7.5	7.4	7.4	---	---	---	---	---	---	---	---	---
6	7.5	7.4	7.4	---	---	---	---	---	---	---	---	---
7	7.5	7.4	7.4	---	---	---	---	---	---	---	---	---
8	7.5	7.4	7.4	---	---	---	---	---	---	---	---	---
9	---	---	---	7.8	7.4	7.6	---	---	---	---	---	---
10	---	---	---	7.8	7.6	7.6	---	---	---	---	---	---
11	---	---	---	7.7	7.4	7.6	---	---	---	---	---	---
12	---	---	---	7.5	7.4	7.4	---	---	---	---	---	---
13	---	---	---	7.5	7.4	7.5	---	---	---	---	---	---
14	7.5	7.3	7.4	7.6	7.4	7.5	---	---	---	---	---	---
15	---	---	---	7.6	7.4	7.5	---	---	---	---	---	---
16	---	---	---	7.7	7.4	7.5	---	---	---	---	---	---
17	---	---	---	7.7	7.5	7.6	---	---	---	---	---	---
18	---	---	---	7.6	7.4	7.5	---	---	---	---	---	---
19	---	---	---	7.6	7.4	7.4	---	---	---	---	---	---
20	---	---	---	7.6	7.4	7.5	---	---	---	---	---	---
21	7.6	7.4	7.5	7.6	7.4	7.5	---	---	---	---	---	---
22	7.6	7.4	7.4	7.8	7.4	7.5	---	---	---	---	---	---
23	7.6	7.4	7.5	7.8	7.5	7.6	---	---	---	---	---	---
24	7.6	7.4	7.4	8.0	7.6	7.7	---	---	---	---	---	---
25	7.6	7.4	7.4	8.0	7.7	7.8	---	---	---	---	---	---
26	7.5	7.4	7.4	8.3	7.8	8.0	---	---	---	---	---	---
27	7.6	7.4	7.5	8.3	7.8	8.0	---	---	---	---	---	---
28	7.6	7.4	7.4	---	---	---	---	---	---	---	---	---
29	7.5	7.4	7.4	---	---	---	---	---	---	---	---	---
30	7.4	7.3	7.3	7.4	7.2	7.3	---	---	---	---	---	---
31	7.4	7.2	7.3	---	---	---	---	---	---	---	---	---
MAX	7.6	7.4	7.5	8.3	7.8	8.0	---	---	---	---	---	---
MIN	7.4	7.2	7.3	7.4	7.2	7.3	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	7.6	7.3	7.4	7.3	7.2	7.3	7.8	7.4	7.5
2	---	---	---	7.6	7.3	7.4	7.3	7.2	7.3	7.7	7.4	7.5
3	---	---	---	7.6	7.3	7.4	7.2	7.2	7.2	---	---	---
4	---	---	---	7.6	7.3	7.4	7.2	7.2	7.2	8.2	7.5	7.7
5	---	---	---	7.6	7.3	7.4	7.5	7.2	7.2	8.2	7.5	7.7
6	---	---	---	7.7	7.3	7.4	7.5	7.4	7.4	8.2	7.5	7.7
7	---	---	---	7.7	7.3	7.4	7.6	7.3	7.4	8.3	7.5	7.7
8	---	---	---	7.5	7.2	7.3	7.6	7.4	7.4	8.4	7.5	7.6
9	---	---	---	7.7	7.3	7.5	7.6	7.4	7.5	8.4	7.5	7.6
10	---	---	---	7.8	7.5	7.5	7.7	7.5	7.5	8.5	7.5	7.6
11	---	---	---	7.9	7.5	7.6	7.7	7.4	7.5	8.6	7.5	7.7
12	---	---	---	7.9	7.5	7.6	7.7	7.5	7.5	8.5	7.4	7.6
13	---	---	---	7.9	7.5	7.6	7.7	7.5	7.5	8.6	7.5	7.7
14	---	---	---	7.9	7.4	7.6	7.8	7.5	7.6	8.7	7.5	7.7
15	---	---	---	7.9	7.5	7.6	7.8	7.5	7.6	8.6	7.4	7.7
16	---	---	---	8.0	7.4	7.5	7.8	7.5	7.6	8.6	7.4	7.6
17	---	---	---	8.1	7.4	7.6	7.9	7.5	7.6	8.6	7.4	7.7
18	---	---	---	8.2	7.5	7.6	8.0	7.5	7.6	8.5	7.5	7.6
19	---	---	---	8.2	7.4	7.6	8.2	7.5	7.6	8.5	7.4	7.6
20	---	---	---	7.8	7.4	7.5	8.4	7.4	7.6	7.6	7.4	7.4
21	---	---	---	8.1	7.4	7.6	8.5	7.4	7.7	8.0	7.4	7.5
22	---	---	---	8.4	7.5	7.6	7.8	7.5	7.6	8.0	7.4	7.6
23	---	---	---	7.6	7.4	7.5	7.9	7.5	7.5	8.0	7.4	7.5
24	---	---	---	7.5	7.4	7.4	7.7	7.4	7.5	7.7	7.4	7.5
25	---	---	---	7.7	7.4	7.5	7.9	7.5	7.6	7.7	7.4	7.5
26	---	---	---	7.8	7.5	7.5	8.0	7.4	7.6	7.7	7.4	7.5
27	---	---	---	7.7	7.4	7.5	8.0	7.4	7.5	7.8	7.4	7.5
28	---	---	---	7.6	7.3	7.5	8.0	7.4	7.6	7.8	7.4	7.5
29	---	---	---	7.3	7.3	7.3	8.0	7.4	7.6	7.8	7.4	7.5
30	---	---	---	7.4	7.3	7.3	7.5	7.4	7.4	7.8	7.4	7.5
31	---	---	---	7.4	7.3	7.3	---	---	---	7.8	7.4	7.5
MAX	---	---	---	8.4	7.5	7.6	8.5	7.5	7.7	8.7	7.5	7.7
MIN	---	---	---	7.3	7.2	7.3	7.2	7.2	7.2	7.6	7.4	7.4
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.8	7.4	7.5	8.2	7.3	7.5	8.7	7.5	7.9	8.2	7.6	7.7
2	7.9	7.4	7.5	7.7	7.3	7.4	8.7	7.5	7.8	8.3	7.6	7.7
3	7.6	7.4	7.5	7.9	7.4	7.6	8.6	7.5	7.7	8.3	7.6	7.7
4	7.7	7.4	7.5	8.0	7.5	7.6	8.6	7.5	7.8	8.3	7.6	7.7
5	7.8	7.4	7.5	8.0	7.5	7.6	8.7	7.5	7.8	8.3	7.6	7.7
6	7.9	7.3	7.5	7.9	7.4	7.6	8.6	7.5	7.8	8.3	7.5	7.7
7	7.7	7.2	7.4	7.9	7.5	7.6	8.5	7.5	7.7	8.3	7.6	7.7
8	7.7	7.4	7.4	7.6	7.3	7.4	8.0	7.1	7.5	8.3	7.6	7.7
9	7.8	7.4	7.5	7.6	7.4	7.5	7.7	7.2	7.5	8.5	7.6	7.7
10	7.8	7.4	7.5	7.7	7.5	7.6	7.8	7.5	7.6	8.5	7.6	7.7
11	7.8	7.4	7.5	7.8	7.5	7.6	8.0	7.5	7.6	8.4	7.6	7.7
12	7.8	7.4	7.5	7.9	7.5	7.6	8.2	7.6	7.7	8.5	7.6	7.7
13	7.9	7.4	7.5	8.0	7.5	7.7	8.2	7.5	7.7	8.5	7.5	7.6
14	8.0	7.4	7.6	8.0	7.5	7.7	8.2	7.5	7.7	8.4	7.5	7.6
15	8.0	7.4	7.6	8.0	7.5	7.6	7.9	7.4	7.6	7.9	7.3	7.5
16	8.0	7.5	7.6	8.0	7.5	7.6	7.8	7.5	7.6	8.2	7.4	7.6
17	8.1	7.5	7.6	7.5	7.3	7.4	8.0	7.5	7.6	8.2	7.4	7.6
18	8.1	7.5	7.6	7.6	7.3	7.4	8.1	7.5	7.7	7.9	7.3	7.5
19	8.1	7.5	7.6	7.9	7.5	7.6	7.9	7.6	7.7	8.1	7.5	7.6
20	8.2	7.5	7.7	7.9	7.6	7.7	8.1	7.6	7.6	8.2	7.5	7.7
21	8.3	7.5	7.6	8.2	7.6	7.7	8.2	7.5	7.7	8.2	7.5	7.7
22	8.3	7.5	7.7	8.3	7.6	7.8	8.1	7.6	7.7	8.2	7.6	7.7
23	8.3	7.5	7.6	8.2	7.6	7.8	8.2	7.6	7.7	8.3	7.5	7.7
24	8.5	7.5	7.7	8.4	7.6	7.8	8.2	7.6	7.7	8.4	7.5	7.8
25	8.5	7.5	7.7	8.4	7.6	7.8	8.2	7.6	7.7	8.3	7.5	7.7
26	8.5	7.5	7.7	8.5	7.5	7.8	8.4	7.6	7.8	8.2	7.5	7.6
27	8.0	7.4	7.6	8.6	7.5	7.8	8.2	7.6	7.8	8.0	7.4	7.6
28	8.3	7.4	7.6	8.6	7.5	7.8	7.8	7.5	7.6	8.2	7.5	7.6
29	8.2	7.4	7.6	8.6	7.6	7.8	8.2	7.5	7.6	8.0	7.5	7.6
30	8.3	7.4	7.7	8.6	7.5	7.9	8.1	7.5	7.6	8.2	7.6	7.6
31	---	---	---	8.7	7.5	7.9	8.1	7.6	7.6	---	---	---
MAX	8.5	7.5	7.7	8.7	7.6	7.9	8.7	7.6	7.9	8.5	7.6	7.8
MIN	7.6	7.2	7.4	7.5	7.3	7.4	7.7	7.1	7.5	7.9	7.3	7.5

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	14.3	12.8	13.6	---	---	---	---	---	---
2	---	---	---	14.4	12.5	13.6	---	---	---	---	---	---
3	---	---	---	14.3	12.3	13.7	---	---	---	---	---	---
4	---	---	---	12.3	10.1	10.9	---	---	---	---	---	---
5	16.7	15.1	16.0	---	---	---	---	---	---	---	---	---
6	15.6	13.5	14.7	---	---	---	---	---	---	---	---	---
7	15.9	13.5	14.8	---	---	---	---	---	---	---	---	---
8	16.3	14.0	15.3	---	---	---	---	---	---	---	---	---
9	---	---	---	9.7	8.1	8.9	---	---	---	---	---	---
10	---	---	---	8.4	6.8	7.8	---	---	---	---	---	---
11	---	---	---	9.7	7.7	8.8	---	---	---	---	---	---
12	---	---	---	9.4	7.9	9.0	---	---	---	---	---	---
13	---	---	---	8.6	7.5	8.0	---	---	---	---	---	---
14	14.1	13.4	13.7	8.2	6.7	7.5	---	---	---	---	---	---
15	---	---	---	8.6	6.4	7.6	---	---	---	---	---	---
16	---	---	---	9.1	7.1	8.2	---	---	---	---	---	---
17	---	---	---	9.7	7.6	8.8	---	---	---	---	---	---
18	---	---	---	11.1	9.5	10.3	---	---	---	---	---	---
19	---	---	---	11.8	10.5	11.2	---	---	---	---	---	---
20	---	---	---	11.8	11.3	11.6	---	---	---	---	---	---
21	13.3	12.8	13.0	12.1	11.3	11.6	---	---	---	---	---	---
22	13.7	12.6	13.1	11.3	10.4	11.0	---	---	---	---	---	---
23	12.9	11.4	12.3	11.4	10.8	11.1	---	---	---	---	---	---
24	12.3	11.2	11.8	12.7	11.4	11.8	---	---	---	---	---	---
25	13.4	12.0	12.6	13.3	10.2	12.5	---	---	---	---	---	---
26	13.4	12.4	13.0	10.2	7.9	8.7	---	---	---	---	---	---
27	13.5	11.8	12.7	9.5	7.5	8.5	---	---	---	---	---	---
28	13.5	12.1	12.8	---	---	---	---	---	---	---	---	---
29	12.9	11.8	12.3	---	---	---	---	---	---	---	---	---
30	14.2	12.9	13.5	9.6	8.5	9.1	---	---	---	---	---	---
31	15.5	13.9	14.6	---	---	---	---	---	---	---	---	---
MONTH	16.7	11.2	13.5	14.4	6.4	10.2	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	5.2	2.3	3.7	13.4	9.9	11.6	15.3	12.8	13.8
2	---	---	---	5.2	3.4	4.3	12.7	9.4	10.3	13.9	11.6	12.6
3	---	---	---	4.8	2.2	3.7	9.7	8.0	8.6	---	---	---
4	---	---	---	5.3	2.0	3.7	11.0	7.9	9.2	13.2	11.4	12.3
5	---	---	---	6.1	2.6	4.3	11.6	8.9	10.2	14.2	10.6	12.6
6	---	---	---	6.2	3.1	4.8	13.3	9.5	11.3	13.3	11.7	12.2
7	---	---	---	8.9	4.8	7.0	13.6	10.9	12.3	15.6	10.7	13.1
8	---	---	---	8.7	2.9	6.3	14.5	12.4	13.3	17.0	12.3	14.7
9	---	---	---	4.5	1.2	2.8	14.0	10.7	12.3	18.2	13.4	15.9
10	---	---	---	5.0	1.7	3.4	14.3	10.3	12.3	18.9	14.4	16.6
11	---	---	---	6.6	3.4	5.1	14.8	11.4	13.0	19.2	15.0	17.1
12	---	---	---	7.4	4.8	6.2	13.7	10.3	12.1	18.8	16.4	17.4
13	---	---	---	7.9	4.8	6.4	13.7	10.1	11.9	17.7	13.6	15.7
14	---	---	---	8.4	5.3	6.6	14.3	10.1	12.2	19.3	14.6	16.9
15	---	---	---	8.0	4.3	6.1	13.9	10.3	12.2	18.8	16.9	17.9
16	---	---	---	7.7	4.5	6.2	13.8	10.1	12.0	19.6	16.1	17.6
17	---	---	---	7.3	5.4	6.2	14.8	10.3	12.7	17.0	14.4	15.8
18	---	---	---	8.8	4.7	6.8	15.9	12.0	14.0	17.3	13.4	15.3
19	---	---	---	9.5	5.8	7.7	17.2	13.1	15.3	17.9	13.5	15.7
20	---	---	---	8.2	7.7	8.0	18.3	14.8	16.6	16.3	13.0	14.5
21	---	---	---	8.1	7.0	7.7	17.8	15.5	16.5	16.5	11.9	14.2
22	---	---	---	10.1	5.6	7.9	15.5	12.7	13.6	16.2	14.3	15.2
23	---	---	---	8.9	5.5	7.4	14.1	12.3	13.0	15.9	13.9	14.9
24	---	---	---	7.1	5.1	6.1	13.8	11.8	12.7	15.1	13.9	14.5
25	---	---	---	8.2	6.6	7.3	12.1	10.6	11.4	13.9	13.0	13.3
26	---	---	---	8.3	6.2	7.4	14.8	10.3	12.4	15.0	12.7	13.8
27	---	---	---	8.3	7.3	7.9	15.1	12.9	13.9	18.2	13.1	15.6
28	---	---	---	7.9	7.0	7.3	15.2	12.5	13.9	19.4	15.0	16.7
29	---	---	---	9.8	7.1	8.3	14.3	12.3	13.3	19.2	14.5	16.7
30	---	---	---	11.9	8.6	10.2	13.9	12.9	13.2	18.3	15.0	16.6
31	---	---	---	10.8	9.1	10.1	---	---	---	19.7	14.7	17.0
MONTH	---	---	---	11.9	1.2	6.4	18.3	7.9	12.6	19.7	10.6	15.2

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.3	15.8	17.9	25.3	22.5	23.4	25.4	22.4	23.7	24.8	20.9	22.5
2	19.7	16.4	17.9	25.0	22.1	23.3	27.1	22.1	24.3	24.5	19.8	22.0
3	17.9	16.3	16.8	24.4	20.5	22.3	27.9	22.9	25.1	23.6	19.4	21.4
4	18.1	16.0	17.0	25.2	20.3	22.5	28.0	23.5	25.4	23.0	18.6	20.6
5	21.8	16.7	19.1	24.3	22.0	22.9	27.1	23.5	25.1	22.7	18.7	20.5
6	23.1	19.0	20.8	24.4	21.7	23.0	26.6	23.3	24.6	22.7	18.2	20.3
7	23.1	19.4	21.2	23.2	21.8	22.4	24.8	22.2	23.3	22.6	17.8	19.9
8	24.5	20.1	22.2	21.8	19.4	20.3	23.4	22.0	22.5	22.5	17.2	19.6
9	24.0	20.8	22.3	23.2	19.4	21.2	22.9	21.6	22.2	21.6	18.1	19.7
10	24.6	21.5	22.7	24.6	20.4	22.5	24.1	21.1	22.5	22.4	17.9	19.8
11	25.1	21.6	23.2	25.2	21.0	23.1	25.7	21.6	23.4	21.7	17.5	19.6
12	25.0	21.9	23.4	26.0	22.0	23.8	26.7	22.2	24.3	22.6	17.6	19.9
13	25.1	21.8	23.2	24.7	22.8	23.7	27.9	23.6	25.4	23.2	18.4	20.5
14	25.9	22.3	23.9	24.8	23.0	23.8	28.0	23.9	25.7	21.6	19.6	20.6
15	25.8	22.5	23.8	24.5	23.1	23.7	26.1	23.8	25.0	23.0	20.8	21.8
16	23.6	21.1	22.4	24.0	22.9	23.4	23.8	21.5	22.5	24.2	21.1	22.3
17	21.9	18.8	20.3	25.0	22.8	23.8	24.4	20.4	22.1	23.5	21.5	22.3
18	21.6	17.6	19.4	26.0	23.4	24.6	24.7	20.5	22.4	22.9	20.1	21.4
19	20.2	18.0	18.9	26.6	23.9	25.1	22.6	21.2	21.8	23.1	19.4	21.0
20	21.2	17.5	19.1	27.1	23.7	25.2	23.5	20.7	21.8	21.8	19.4	20.6
21	22.7	17.4	19.8	26.7	22.8	24.7	26.0	21.8	23.4	22.4	18.8	20.4
22	23.4	18.6	20.8	26.9	23.5	25.1	25.1	20.8	22.7	21.9	17.6	19.7
23	23.8	18.5	20.9	26.9	23.6	24.9	23.7	19.7	21.5	22.1	18.9	20.4
24	24.7	19.3	21.6	25.2	21.4	23.2	23.6	19.2	21.0	20.9	19.2	20.1
25	25.8	20.0	22.5	25.1	22.1	23.5	23.4	18.2	20.5	20.4	18.6	19.4
26	26.1	20.8	23.2	27.6	23.3	25.1	22.5	18.9	20.6	20.8	18.7	19.8
27	23.4	22.1	22.7	28.5	24.2	25.9	22.0	19.6	20.9	21.3	18.3	19.8
28	26.0	21.6	23.4	25.9	22.8	24.3	21.2	20.4	20.8	19.7	16.1	17.8
29	25.1	22.5	23.6	25.3	21.4	23.2	23.5	20.4	21.7	18.9	16.7	17.8
30	25.6	22.4	23.7	25.6	22.3	23.6	23.3	21.3	22.3	17.9	14.4	16.0
31	---	---	---	24.8	22.0	23.4	24.4	22.6	23.3	---	---	---
MONTH	26.1	15.8	21.3	28.5	19.4	23.6	28.0	18.2	23.0	24.8	14.4	20.2

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	10.0	8.0	8.9	---	---	---	---	---	---
2	---	---	---	10.1	7.9	9.0	---	---	---	---	---	---
3	---	---	---	10.0	7.8	8.8	---	---	---	---	---	---
4	---	---	---	10.1	8.5	9.4	---	---	---	---	---	---
5	9.1	8.5	8.8	---	---	---	---	---	---	---	---	---
6	9.6	8.9	9.2	---	---	---	---	---	---	---	---	---
7	9.6	8.5	9.2	---	---	---	---	---	---	---	---	---
8	9.4	8.4	8.9	---	---	---	---	---	---	---	---	---
9	---	---	---	11.2	9.6	10.5	---	---	---	---	---	---
10	---	---	---	11.8	10.3	11.0	---	---	---	---	---	---
11	---	---	---	11.4	9.9	10.7	---	---	---	---	---	---
12	---	---	---	10.4	9.8	10.0	---	---	---	---	---	---
13	---	---	---	10.7	10.1	10.5	---	---	---	---	---	---
14	9.4	8.3	9.0	11.5	10.3	10.8	---	---	---	---	---	---
15	---	---	---	11.5	10.3	10.8	---	---	---	---	---	---
16	---	---	---	11.3	9.9	10.6	---	---	---	---	---	---
17	---	---	---	11.3	9.5	10.4	---	---	---	---	---	---
18	---	---	---	10.5	8.7	9.6	---	---	---	---	---	---
19	---	---	---	10.3	8.6	9.2	---	---	---	---	---	---
20	---	---	---	9.9	8.4	9.0	---	---	---	---	---	---
21	10.4	9.6	9.9	10.2	8.3	9.1	---	---	---	---	---	---
22	10.5	9.7	10.0	10.7	8.6	9.3	---	---	---	---	---	---
23	10.7	9.8	10.2	10.4	8.6	9.2	---	---	---	---	---	---
24	11.0	9.9	10.4	9.9	8.3	8.8	---	---	---	---	---	---
25	10.7	9.3	10.0	9.2	8.1	8.6	---	---	---	---	---	---
26	10.5	9.3	9.8	11.0	8.8	9.9	---	---	---	---	---	---
27	10.8	9.3	10	11.2	9.1	10.1	---	---	---	---	---	---
28	10.7	9.2	9.8	---	---	---	---	---	---	---	---	---
29	10.8	9.2	9.9	---	---	---	---	---	---	---	---	---
30	9.2	8.2	8.9	---	---	---	---	---	---	---	---	---
31	9.2	7.9	8.5	---	---	---	---	---	---	---	---	---
MONTH	11.0	7.9	9.5	11.8	7.8	9.7	---	---	---	---	---	---

CHRISTINA RIVER BASIN

01480870 EAST BRANCH BRANDYWINE CREEK BELOW DOWNINGTOWN, PA--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	12.2	11.2	11.7	10.2	9.1	9.7	11.3	9.1	9.8
2	---	---	---	12.0	11.0	11.5	9.6	9.1	9.4	11.4	9.1	10.1
3	---	---	---	12.1	10.9	11.4	10.0	9.3	9.7	---	---	---
4	---	---	---	12.2	10.8	11.5	10.1	9.4	9.9	11.9	9.2	10.4
5	---	---	---	11.8	10.4	11.1	10.5	9.5	9.9	12.1	9.2	10.5
6	---	---	---	11.5	9.8	10.7	10.3	9.2	9.9	12.2	9.1	10.5
7	---	---	---	10.6	8.8	9.8	10.5	9.2	9.7	12.4	8.8	10.6
8	---	---	---	9.8	8.8	9.3	9.8	9.2	9.4	12.2	8.4	10.1
9	---	---	---	11.1	9.7	10.2	10.5	9.3	9.9	12.3	8.1	9.9
10	---	---	---	11.4	9.7	10.6	10.5	9.3	9.9	12.6	8.1	9.9
11	---	---	---	11.9	10.1	10.8	10.2	9.3	9.7	12.9	7.7	9.9
12	---	---	---	---	---	---	10.9	9.3	10.1	12.6	7.7	9.6
13	---	---	---	---	---	---	10.8	9.5	10.2	13.3	8.4	10.5
14	---	---	---	---	---	---	10.9	9.5	10.3	13.5	7.7	10.4
15	---	---	---	---	---	---	11.2	9.6	10.4	12.6	7.6	9.8
16	---	---	---	---	---	---	11.3	9.6	10.5	12.7	7.9	9.8
17	---	---	---	---	---	---	11.5	9.1	10.4	13.0	8.3	10.4
18	---	---	---	11.7	8.7	10.1	11.2	9.0	10.1	13.3	8.7	10.6
19	---	---	---	11.5	8.6	9.8	11.8	8.3	9.7	12.3	8.1	10
20	---	---	---	10.2	8.5	9.1	11.3	7.9	9.5	9.6	8.0	8.9
21	---	---	---	11.2	8.6	9.6	11.7	7.8	9.5	11.8	8.6	10.2
22	---	---	---	11.7	8.6	10	11.1	8.7	9.8	11.4	8.6	9.8
23	---	---	---	9.5	8.5	9.0	11.3	8.8	10	11.6	8.9	9.9
24	---	---	---	10.3	9.5	9.7	10.7	8.7	9.8	---	---	---
25	---	---	---	10.8	9.5	10.0	11.9	9.8	10.8	---	---	---
26	---	---	---	11.3	9.7	10.4	12.0	9.2	10.7	---	---	---
27	---	---	---	11.5	10.0	10.6	11.4	8.9	10	---	---	---
28	---	---	---	11.0	10.2	10.6	11.7	8.9	10.1	---	---	---
29	---	---	---	10.5	9.7	10.3	11.9	9.1	10.3	---	---	---
30	---	---	---	10.5	9.6	10.0	10.0	9.1	9.5	---	---	---
31	---	---	---	10.5	9.6	10.1	---	---	---	---	---	---
MONTH	---	---	---	12.2	8.5	10.3	12.0	7.8	10.0	13.5	7.6	10.1
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	9.3	6.2	7.2	11.1	6.6	8.3	9.8	7.0	8.1
2	---	---	---	7.7	6.1	6.8	11.1	6.4	8.2	10.3	7.2	8.4
3	9.2	7.9	8.5	8.4	6.5	7.3	10.7	6.2	7.8	10.4	7.1	8.5
4	9.5	7.9	8.7	8.8	6.8	7.7	10.7	6.1	7.8	11.0	7.7	9.1
5	9.5	7.1	8.4	8.6	6.5	7.3	11.0	6.1	8.0	11.0	7.8	9.0
6	9.5	6.8	7.9	8.4	6.6	7.4	11.1	6.2	8.0	11.4	7.9	9.2
7	8.6	6.6	7.6	8.9	6.7	7.6	11.0	6.5	8.1	11.4	7.9	9.2
8	8.8	7.0	7.7	8.4	7.7	7.9	9.9	6.6	7.4	11.8	8.0	9.4
9	9.1	6.9	7.8	8.2	7.4	7.9	8.6	6.7	7.6	12.4	7.9	9.6
10	8.9	6.9	7.7	8.3	7.3	7.7	8.6	7.1	7.7	12.0	7.9	9.4
11	9.0	6.7	7.6	8.4	7.3	7.8	9.7	6.9	7.9	12.1	7.8	9.4
12	9.0	6.6	7.6	8.7	7.4	8.0	9.4	6.6	7.8	12.0	7.7	9.3
13	9.2	6.8	7.7	9.5	7.8	8.5	9.2	6.5	7.6	12.0	7.5	9.1
14	9.3	6.8	7.8	9.8	7.9	8.6	9.2	6.4	7.5	11.0	7.0	8.6
15	9.5	6.7	7.8	9.7	7.0	8.4	8.3	5.9	7.0	9.2	6.8	7.6
16	9.6	6.9	8.0	9.1	6.9	7.9	8.4	6.7	7.5	9.4	6.7	7.7
17	10.3	7.3	8.7	7.7	6.6	7.2	9.0	7.4	8.1	9.6	6.7	7.7
18	10.6	8.0	9.0	7.4	6.5	6.9	9.4	7.1	8.1	9.1	6.8	7.7
19	10.6	8.0	9.1	7.9	6.5	7.1	9.0	7.1	7.9	9.8	7.2	8.2
20	11.1	8.3	9.4	7.9	6.6	7.2	9.5	7.3	8.3	9.8	7.2	8.2
21	11.0	8.0	9.3	8.3	6.6	7.3	9.1	6.9	7.7	10.0	7.1	8.2
22	11.2	7.8	9.1	8.5	6.6	7.4	9.2	6.9	7.9	10.4	7.4	8.5
23	11.2	7.8	9.0	8.8	6.6	7.5	9.9	7.3	8.4	10.6	7.3	8.5
24	10.9	7.4	8.9	9.6	7.0	8.1	10.1	7.5	8.6	11.3	7.2	8.7
25	10.9	7.2	8.7	9.9	7.0	8.1	10.1	7.6	8.6	11.0	7.6	8.8
26	10.7	6.9	8.4	9.9	6.7	7.9	10.6	7.6	8.8	10.8	7.2	8.5
27	9.2	6.6	7.7	10.2	6.4	7.8	10.0	7.5	8.5	10.1	7.0	8.2
28	9.7	6.5	7.7	10.3	6.0	8.0	8.8	7.4	8.0	11.1	7.8	9.2
29	9.1	6.3	7.4	10.9	7.0	8.6	10.0	7.2	8.4	10.6	8.0	8.9
30	9.6	6.3	7.6	10.7	6.7	8.2	9.8	7.1	8.2	11.9	8.4	9.9
31	---	---	---	11.0	6.7	8.4	9.2	6.9	7.7	---	---	---
MONTH	11.2	6.3	8.2	11.0	6.0	7.7	11.1	5.9	8.0	12.4	6.7	8.7