Water-Data Report 2008

01480065 CHRISTINA RIVER AT NEWPORT, DE

Lower Delaware Basin
Brandywine-Christina Subbasin

LOCATION.--Lat 39°42'38.3", long 75°36'31.4" referenced to North American Datum of 1983, New Castle County, DE, Hydrologic Unit 02040205, on downstream side of bridge on James Street, at Newport, and 7.5 mi upstream from the confluence with Delaware River.

DRAINAGE AREA.--Not determined.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--November 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.00 ft above National Geodetic Vertical Datum of 1929. (Mean Low-Low Water: Gage Datum + 2.84 ft).

REMARKS.--Records good, except those for days with missing data (equipment malfunction, frozen float). This is a tidal station. Discharges are not determined at this location. U.S. Geological Survey satellite collection platform at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 8.07 ft, September 17, 1999; minimum elevation, -5.55 ft, March 6, 2007.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 6.66 ft, May 12; minimum elevation, -3.83 ft, Feb. 11.

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

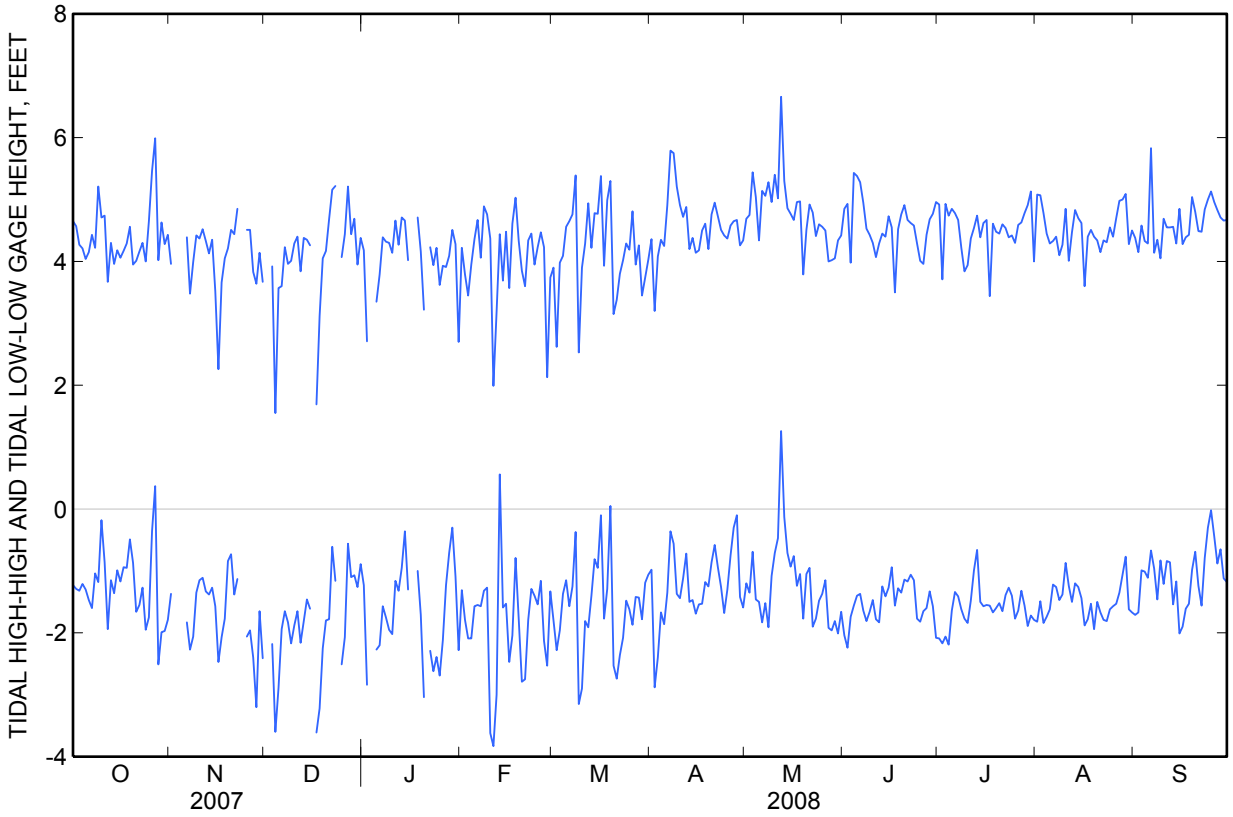
Day	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low
	October		November		December		January		February		March	
1	4.65	-1.23	3.96	-1.37	---	---	4.18	-1.23	4.22	-1.31	3.90	-1.80
2	4.57	-1.29	---	---	---	---	2.71	-2.84	3.79	-1.79	2.62	-2.28
3	4.27	-1.32	---	---	3.92	-2.18	---	---	3.45	-2.09	3.98	-1.96
4	4.21	-1.21	---	---	1.55	-3.60	---	---	3.95	-2.09	4.09	-1.37
5	4.04	-1.30	---	---	3.57	-2.89	3.35	-2.27	4.36	-1.57	4.56	-1.15
6	4.15	-1.47	4.39	-1.83	3.60	-1.94	3.79	-2.20	4.67	-1.55	4.65	-1.57
7	4.43	-1.60	3.48	-2.27	4.23	-1.65	4.39	-1.57	4.06	-1.57	4.76	-1.25
8	4.22	-1.04	3.99	-2.06	3.96	-1.83	4.32	-1.75	4.89	-1.32	5.39	-0.37
9	5.21	-1.18	4.42	-1.35	4.01	-2.17	4.30	-1.95	4.76	-1.27	2.53	-3.15
10	4.71	-0.18	4.37	-1.15	4.29	-1.88	4.14	-2.02	4.37	-3.62	3.90	-2.90
11	4.74	-0.86	4.52	-1.11	4.40	-1.65	4.66	-1.16	1.99	-3.83	4.29	-1.81
12	3.67	-1.94	4.33	-1.33	3.84	-2.16	4.27	-1.32	3.19	-3.00	4.94	-1.91
13	4.30	-1.15	4.13	-1.38	4.38	-1.81	4.71	-0.95	4.44	0.56	4.22	-1.40
14	3.96	-1.36	4.35	-1.27	4.35	-1.46	4.66	-0.36	3.69	-1.59	4.78	-0.81
15	4.18	-0.99	3.52	-1.57	4.26	-1.61	4.02	-1.30	4.48	-1.53	4.77	-0.95
16	4.06	-1.17	2.26	-2.47	---	---	---	---	3.57	-2.47	5.38	-0.10
17	4.17	-0.94	3.66	-2.07	1.69	-3.61	---	---	4.61	-2.04	3.93	-1.77
18	4.29	-0.95	4.05	-1.77	3.12	-3.22	4.71	-1.00	5.03	-0.79	4.99	-1.29
19	4.56	-0.49	4.21	-0.84	4.05	-2.25	4.16	-1.71	4.33	-1.78	5.30	0.05
20	3.95	-0.87	4.51	-0.73	4.17	-1.80	3.22	-3.04	3.85	-2.79	3.15	-2.53
21	4.01	-1.66	4.44	-1.38	4.68	-1.78	---	---	3.60	-2.75	3.38	-2.74
22	4.16	-1.55	4.85	-1.13	5.16	-0.61	4.23	-2.29	4.34	-1.79	3.80	-2.36
23	4.30	-1.27	---	---	5.22	-1.16	3.94	-2.62	4.45	-1.29	4.02	-2.08
24	4.00	-1.95	---	---	---	---	4.22	-2.39	3.95	-1.40	4.29	-1.48
25	4.65	-1.75	4.51	-2.06	4.07	-2.51	3.62	-2.69	4.23	-1.54	4.19	-1.62
26	5.46	-0.36	4.51	-1.96	4.44	-2.07	3.93	-2.12	4.47	-1.16	4.81	-1.87
27	5.99	0.37	3.83	-2.40	5.21	-0.56	3.91	-1.23	4.23	-2.13	3.95	-1.42
28	4.02	-2.51	3.64	-3.20	4.44	-1.10	4.09	-0.71	2.13	-2.53	4.26	-1.43
29	4.63	-1.99	4.14	-1.65	4.69	-1.07	4.51	-0.30	3.74	-1.33	3.45	-1.78
30	4.28	-1.97	3.67	-2.41	3.95	-1.26	4.28	-1.09	---	---	3.74	-1.19
31	4.43	-1.79	---	---	4.38	-0.89	2.70	-2.28	---	---	4.03	-1.06
Max	5.99	0.37	---	---	---	---	---	---	5.03	0.56	5.39	0.05
Min	3.67	-2.51	---	---	---	---	---	---	1.99	-3.83	2.53	-3.15

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low	High-high	Low-low
	April		May		June		July		August		September	
1	4.36	-0.98	4.69	-1.20	4.85	-2.04	4.92	-2.09	5.08	-1.82	4.38	-1.71
2	3.20	-2.88	4.75	-1.35	4.93	-2.24	3.71	-2.17	5.07	-1.49	4.15	-1.67
3	4.08	-2.40	5.44	-0.69	3.98	-1.74	4.93	-2.06	4.78	-1.84	4.58	-0.99
4	4.35	-1.67	5.04	-1.46	5.43	-1.56	4.74	-2.19	4.45	-1.74	4.33	-1.01
5	4.25	-1.86	4.34	-1.50	5.38	-1.40	4.85	-1.64	4.29	-1.62	4.29	-1.11
6	4.91	-1.35	5.14	-1.83	5.28	-1.37	4.78	-1.34	4.33	-1.22	5.83	-0.67
7	5.79	-0.36	5.06	-1.52	4.95	-1.64	4.67	-1.41	4.40	-1.26	4.14	-0.96
8	5.75	-0.56	5.28	-1.91	4.53	-1.81	4.22	-1.62	4.10	-1.47	4.35	-1.46
9	5.21	-1.37	4.96	-1.08	4.43	-1.66	3.84	-1.77	4.27	-1.38	4.05	-0.83
10	4.91	-1.44	5.40	-0.71	4.30	-1.47	3.94	-1.84	4.85	-0.87	4.69	-1.21
11	4.72	-1.12	5.02	-0.47	4.07	-1.78	4.37	-1.48	4.01	-1.24	4.55	-0.84
12	4.88	-0.72	6.66	1.26	4.29	-1.83	4.54	-0.99	4.47	-1.50	4.55	-0.86
13	4.20	-1.50	5.30	-0.13	4.45	-1.25	4.74	-0.66	4.83	-1.20	4.56	-1.54
14	4.38	-1.47	4.86	-0.71	4.40	-1.41	4.39	-1.50	4.70	-1.26	4.29	-1.17
15	4.14	-1.69	4.77	-0.93	4.73	-1.27	4.62	-1.57	4.62	-1.44	4.85	-2.01
16	4.18	-1.54	4.67	-0.76	4.55	-0.94	4.67	-1.55	3.60	-1.88	4.28	-1.90
17	4.50	-1.53	4.96	-1.24	3.50	-1.56	3.44	-1.56	4.40	-1.78	4.39	-1.61
18	4.61	-1.18	4.97	-1.05	4.52	-1.28	4.61	-1.67	4.51	-1.53	4.43	-1.53
19	4.20	-1.25	3.79	-1.77	4.76	-1.35	4.48	-1.60	4.40	-1.94	5.04	-0.98
20	4.76	-0.86	4.51	-1.05	4.91	-1.14	4.45	-1.52	4.34	-1.50	4.80	-0.69
21	4.95	-0.58	4.92	-0.95	4.67	-1.17	4.60	-1.65	4.15	-1.67	4.49	-1.24
22	4.73	-0.94	4.79	-1.90	4.62	-1.06	4.54	-1.39	4.34	-1.79	4.48	-1.56
23	4.51	-1.26	4.41	-1.77	4.58	-1.15	4.39	-1.27	4.31	-1.81	4.84	-0.79
24	4.42	-1.68	4.60	-1.48	4.29	-1.77	4.42	-1.40	4.55	-1.62	5.00	-0.30
25	4.37	-1.30	4.56	-1.37	4.01	-1.82	4.30	-1.77	4.40	-1.57	5.13	-0.02
26	4.58	-0.75	4.50	-1.15	3.96	-1.65	4.59	-1.64	4.70	-1.53	4.96	-0.44
27	4.65	-0.30	4.00	-1.92	4.43	-1.60	4.63	-1.32	4.98	-1.35	4.83	-0.88
28	4.67	-0.10	4.02	-1.96	4.68	-1.33	4.78	-1.56	5.00	-1.06	4.71	-0.65
29	4.26	-1.42	4.05	-1.81	4.77	-1.57	4.91	-1.89	5.09	-0.77	4.66	-1.12
30	4.34	-1.59	4.34	-2.01	4.96	-2.08	5.13	-1.72	4.28	-1.62	4.67	-1.18
31	---	---	4.42	-1.66	---	---	4.00	-1.79	4.50	-1.67	---	---
Max	5.79	-0.10	6.66	1.26	5.43	-0.94	5.13	-0.66	5.09	-0.77	5.83	-0.02
Min	3.20	-2.88	3.79	-2.01	3.50	-2.24	3.44	-2.19	3.60	-1.94	4.05	-2.01

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued



01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2006 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 2006 to current year.
WATER TEMPERATURE: October 2006 to current year.
pH: October 2006 to current year.
DISSOLVED OXYGEN: October 2006 to current year.

INSTRUMENTATION.--Multi-parameter water-quality monitor, October 2006 to current year.

REMARKS.--
SPECIFIC CONDUCTANCE: Records excellent except for May 20 to June 15, Aug. 4-12 and Sept. 9-30, which are good; and June 16 to July 4, and Aug. 13-18, which are fair; and July 5-9, and Aug. 19-25, which are poor.
WATER TEMPERATURE: Records excellent.
pH: Records excellent except for Oct. 8-17, Nov. 18 to Dec. 4, May 4-8, July 2-9, Aug. 15-25, and Aug. 30 to Sept. 5, which are good; and Sept. 6-12, which are fair; and Sept. 13-30, which are poor.
DISSOLVED OXYGEN: Records excellent except for April 29 to May 8, June 9 to July 9, July 13-17, Aug 5-10, and Sept 5-15, which are good; and July 18-21, Aug 11-15,and Sept. 16-26, which are fair; and July 22-25, Aug.16-21, and Sept. 27-30, which are poor.
Some missing record during the period due to instrument malfunction or because data was deleted as a result of it exceeding maximum allowable limits.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 4,910 microsiemens/cm, Sept. 6, 2008; minimum, 130 microsiemens/cm, April 15, 2007.
WATER TEMPERATURE: Maximum, 30.1 °C, July 20, 2008; minimum, -0.1 °C, Feb. 5, 13-20, 2007.
pH: Maximum, 9.3 standard units, May 21-23, 2007; minimum, 6.4 standard units, Sept. 8, 2008.
DISSOLVED OXYGEN: Maximum, 16.6 mg/l, May 21, 2007; minimum, 1.8 mg/l, Aug. 5, 2007.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 4,910 microsiemens/cm, Sept. 6, 2008; minimum, 196 microsiemens/cm, Sept. 7, 2008.
WATER TEMPERATURE: Maximum, 30.1 °C, July 20, 2008; minimum, 0.0 °C, Jan. 22-26, 2008.
pH: Maximum, 8.5 standard units, June 3, 2008; minimum, 6.4 standard units, Sept. 8, 2008.
DISSOLVED OXYGEN: Maximum, 14.1 mg/l, June 3, 2008; minimum, 2.9 mg/l, Sept. 9, 2008.

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	4,740	2,490	3,240	455	347	372	415	367	390	317	299	308
2	4,600	2,590	3,280	506	357	396	420	369	397	316	297	309
3	4,330	2,670	3,260	486	381	404	382	238	304	327	309	320
4	4,290	2,760	3,300	---	---	---	273	231	254	339	310	329
5	4,200	2,800	3,280	553	402	447	324	258	278	350	328	339
6	4,280	2,600	3,270	576	407	448	369	279	307	352	328	342
7	4,730	2,790	3,320	499	409	441	420	308	349	348	321	341
8	4,680	2,940	3,540	547	415	456	566	340	409	352	325	342
9	4,850	2,970	3,610	628	427	481	617	382	499	352	328	343
10	4,850	1,310	2,300	651	432	494	570	409	519	354	333	346
11	3,120	885	1,770	722	439	510	594	445	542	351	321	341
12	1,800	682	1,110	772	447	524	618	516	564	346	323	336
13	2,430	782	1,270	722	435	507	604	479	569	344	327	338
14	2,250	848	1,260	754	418	510	589	530	558	342	331	338
15	2,670	931	1,370	604	373	469	577	538	558	346	334	340
16	2,610	940	1,390	460	341	394	569	365	470	350	337	344
17	2,800	1,060	1,520	517	350	403	380	301	347	388	336	350
18	2,900	1,060	1,600	597	365	429	378	339	358	613	349	454
19	3,210	1,170	1,760	556	332	410	380	351	366	630	486	538
20	1,920	751	1,210	512	327	379	377	364	371	628	533	589
21	1,820	711	1,080	459	323	369	383	350	372	603	527	571
22	2,040	764	1,160	574	333	381	379	353	373	589	481	546
23	2,450	840	1,310	439	328	364	381	359	373	569	472	522
24	2,180	863	1,300	612	349	395	375	320	340	546	461	502
25	2,880	766	1,420	600	363	413	348	317	337	524	380	471
26	3,490	763	1,710	591	371	422	348	333	341	512	437	478
27	1,720	244	536	503	366	407	347	328	339	496	428	465
28	310	231	274	447	358	394	345	336	340	478	423	455
29	466	283	315	456	373	406	344	297	322	464	414	441
30	440	309	334	436	368	396	322	301	313	449	407	427
31	506	331	363	---	---	---	323	288	307	443	414	430
Month	4,850	231	1,820	772	323	428	618	231	392	630	297	406

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

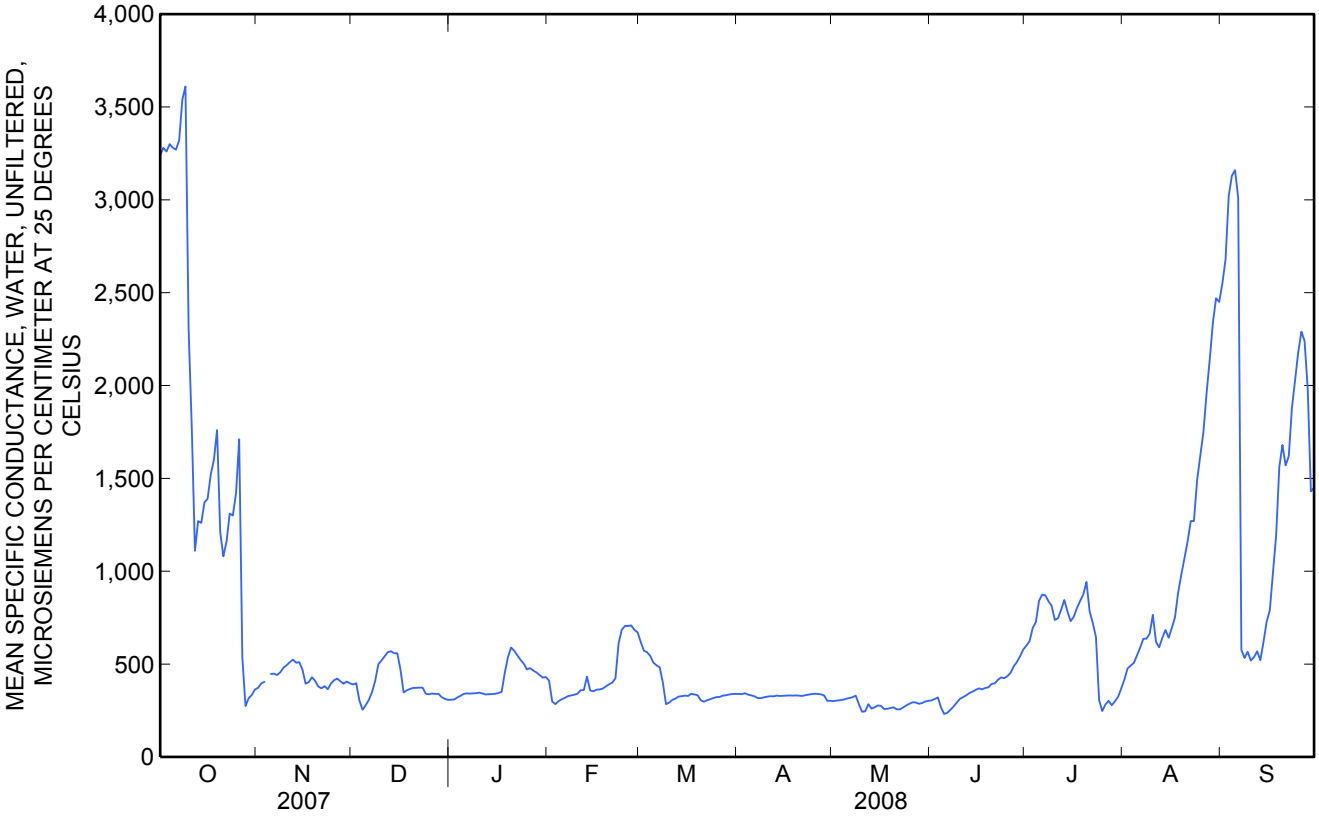
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	446	285	411	709	532	619	345	333	339	309	284	300
2	342	261	298	640	515	572	349	331	338	310	286	303
3	305	262	284	643	501	564	348	333	343	312	290	305
4	308	288	300	617	489	544	347	319	335	317	290	308
5	320	300	310	582	457	508	345	323	331	321	302	313
6	328	302	318	532	467	493	335	306	326	326	310	317
7	337	316	327	506	442	483	325	282	317	328	315	321
8	341	311	331	510	282	400	325	283	316	362	322	330
9	343	317	335	312	253	284	331	294	321	398	222	285
10	353	326	340	302	280	292	334	298	324	289	223	243
11	368	343	359	317	298	307	334	305	327	281	227	245
12	442	350	360	323	281	314	332	304	326	381	241	284
13	980	329	432	337	313	325	335	323	330	295	245	260
14	409	325	358	334	297	327	335	317	328	287	259	267
15	376	336	353	336	302	330	335	321	329	306	266	277
16	382	351	362	337	274	328	336	318	330	293	241	275
17	375	335	363	355	335	340	337	307	331	277	239	258
18	387	333	368	353	293	336	336	307	330	276	245	259
19	395	370	380	343	292	332	339	305	331	276	247	263
20	411	382	391	337	280	305	338	299	330	281	237	267
21	410	392	400	313	284	297	337	297	328	267	242	256
22	593	390	423	311	298	305	341	308	332	266	244	256
23	769	426	611	320	300	311	345	317	335	278	250	266
24	756	589	685	326	295	317	349	319	338	292	266	277
25	815	617	705	331	306	322	344	321	340	300	275	286
26	762	622	705	336	294	323	344	314	339	307	284	294
27	805	657	708	338	324	330	344	315	337	310	272	293
28	791	604	684	336	322	332	342	288	331	300	276	286
29	731	586	671	346	331	336	323	280	302	303	278	290
30	---	---	---	344	333	339	310	289	302	315	288	298
31	---	---	---	345	333	339	---	---	---	305	298	302
Month	980	261	434	709	253	373	349	280	329	398	222	283

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	334	288	304	1,260	444	599	745	317	417	3,720	1,860	2,550
2	373	300	312	1,260	456	623	889	346	476	3,900	1,990	2,680
3	377	305	320	1,500	472	694	851	366	492	4,760	2,200	3,020
4	399	214	266	1,530	500	726	781	388	506	4,570	2,360	3,130
5	303	203	231	1,660	549	841	842	411	547	4,630	2,510	3,160
6	287	221	238	1,560	570	874	901	447	589	4,910	899	3,010
7	287	236	254	1,410	596	870	1,070	471	636	930	196	577
8	299	254	272	1,240	607	838	1,030	482	637	663	448	533
9	316	274	293	1,140	596	813	1,160	499	663	748	462	566
10	343	295	313	1,060	501	737	1,500	524	765	911	375	519
11	346	311	322	1,150	510	747	910	448	619	1,060	401	537
12	379	319	332	1,310	566	792	939	444	590	1,200	419	569
13	415	326	344	1,510	612	845	1,330	451	641	1,010	374	521
14	415	333	352	1,190	566	782	1,260	497	683	1,520	408	618
15	449	340	361	1,310	520	731	1,260	376	642	1,910	468	728
16	445	343	369	1,330	536	755	1,350	497	694	1,760	483	790
17	444	342	364	1,370	589	802	1,440	519	751	2,280	534	992
18	461	337	371	1,400	633	839	1,820	578	885	2,540	618	1,190
19	503	333	375	1,420	658	875	1,830	633	981	3,620	737	1,560
20	565	346	393	1,520	705	942	2,060	675	1,070	3,100	910	1,680
21	524	349	396	1,580	394	785	1,990	747	1,160	2,810	970	1,570
22	537	370	415	1,270	441	721	2,300	823	1,270	2,920	1,050	1,620
23	551	379	428	1,220	298	645	2,360	655	1,270	3,460	1,220	1,880
24	536	386	424	549	219	306	2,740	995	1,490	3,670	1,340	2,030
25	541	390	435	307	197	247	2,840	1,070	1,620	3,880	1,470	2,180
26	585	396	453	555	227	282	3,440	1,180	1,750	3,650	1,540	2,290
27	699	408	488	486	253	302	3,970	1,300	1,960	3,450	1,480	2,240
28	816	414	511	501	198	278	3,860	1,470	2,140	3,400	1,070	1,980
29	1,040	425	542	591	222	299	3,880	1,650	2,340	2,740	861	1,430
30	1,310	433	578	654	219	323	4,050	1,820	2,470	2,790	706	1,450
31	---	---	---	662	213	368	3,560	1,810	2,450	---	---	---
Month	1,310	203	369	1,660	197	654	4,050	317	1,070	4,910	196	1,590
Year	4,910	196	681									

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued



01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	22.7	20.8	21.8	14.2	12.7	13.4	6.1	4.3	5.2	5.3	4.8	5.0
2	22.4	20.5	21.4	13.8	12.5	13.1	5.6	3.8	4.8	4.8	2.2	4.0
3	22.5	21.3	21.8	13.2	12.2	12.5	5.2	3.7	4.7	3.0	1.0	1.9
4	22.8	22.1	22.4	---	---	---	4.7	3.2	3.8	2.5	0.3	1.3
5	22.8	22.4	22.7	12.2	11.1	11.5	3.7	2.1	2.8	1.8	0.1	0.8
6	23.3	22.0	22.6	12.2	10.9	11.4	3.0	1.3	2.1	2.1	0.7	1.4
7	24.0	22.5	23.2	11.3	9.4	10.4	2.7	0.7	1.5	3.5	1.8	2.5
8	24.6	23.1	23.7	10.9	8.4	9.8	2.6	1.1	1.9	5.3	2.8	3.8
9	24.4	23.7	24.0	10.7	8.0	9.3	2.8	2.3	2.5	7.4	4.1	5.8
10	23.7	22.0	22.9	10.4	7.9	9.1	4.0	2.6	3.2	6.7	5.6	6.3
11	23.3	19.1	21.2	10.1	7.3	8.8	4.9	3.3	4.1	7.2	5.8	6.5
12	20.5	17.3	18.5	10.0	7.9	8.9	6.3	4.1	5.2	7.0	6.4	6.7
13	19.4	16.0	17.8	10.0	8.5	9.2	5.9	4.7	5.2	6.8	5.7	6.3
14	18.6	15.5	17.2	10.0	8.9	9.4	5.0	4.7	4.9	6.3	5.3	6.0
15	18.6	15.6	17.2	9.8	9.3	9.7	4.8	3.7	4.3	5.6	3.5	4.8
16	18.6	16.2	17.4	9.3	7.4	8.5	4.4	3.7	4.1	4.3	2.8	3.5
17	19.0	17.2	18.0	8.5	6.8	7.6	3.9	2.8	3.3	4.0	2.5	3.2
18	19.3	18.1	18.6	8.3	7.1	7.5	2.9	2.2	2.7	3.6	2.0	2.9
19	20.0	19.0	19.4	8.0	7.0	7.3	2.9	2.2	2.6	3.4	2.9	3.2
20	19.9	18.6	19.4	7.6	7.0	7.3	3.3	2.6	2.9	3.2	1.7	2.4
21	19.3	18.0	18.7	9.0	7.4	8.0	3.3	2.7	3.0	1.8	0.1	0.7
22	19.3	17.7	18.7	10.2	8.3	9.1	3.9	3.1	3.5	1.3	0.0	0.4
23	19.8	18.3	19.2	9.5	8.1	8.7	6.0	3.7	4.5	1.2	0.0	0.5
24	19.8	19.4	19.6	8.7	6.4	7.5	7.2	5.2	6.3	1.1	0.0	0.4
25	19.6	16.8	18.3	8.3	5.7	7.1	6.2	5.4	5.9	0.6	0.0	0.2
26	18.6	15.8	17.0	8.1	6.5	7.3	5.8	4.2	5.0	0.6	0.0	0.2
27	17.1	15.9	16.6	8.5	7.7	8.2	5.2	4.1	4.7	0.9	0.1	0.4
28	16.9	14.8	15.9	8.2	6.7	7.6	4.8	3.9	4.5	1.0	0.2	0.7
29	15.6	12.9	14.4	7.7	6.3	7.1	6.3	4.7	5.5	1.1	0.6	0.8
30	14.6	11.9	13.5	7.0	5.3	6.2	6.1	5.3	5.6	2.8	1.0	1.8
31	14.4	11.9	13.2	---	---	---	5.5	4.9	5.3	2.6	1.5	2.1
Month	24.6	11.9	19.2	14.2	5.3	9.0	7.2	0.7	4.1	7.4	0.0	2.8

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

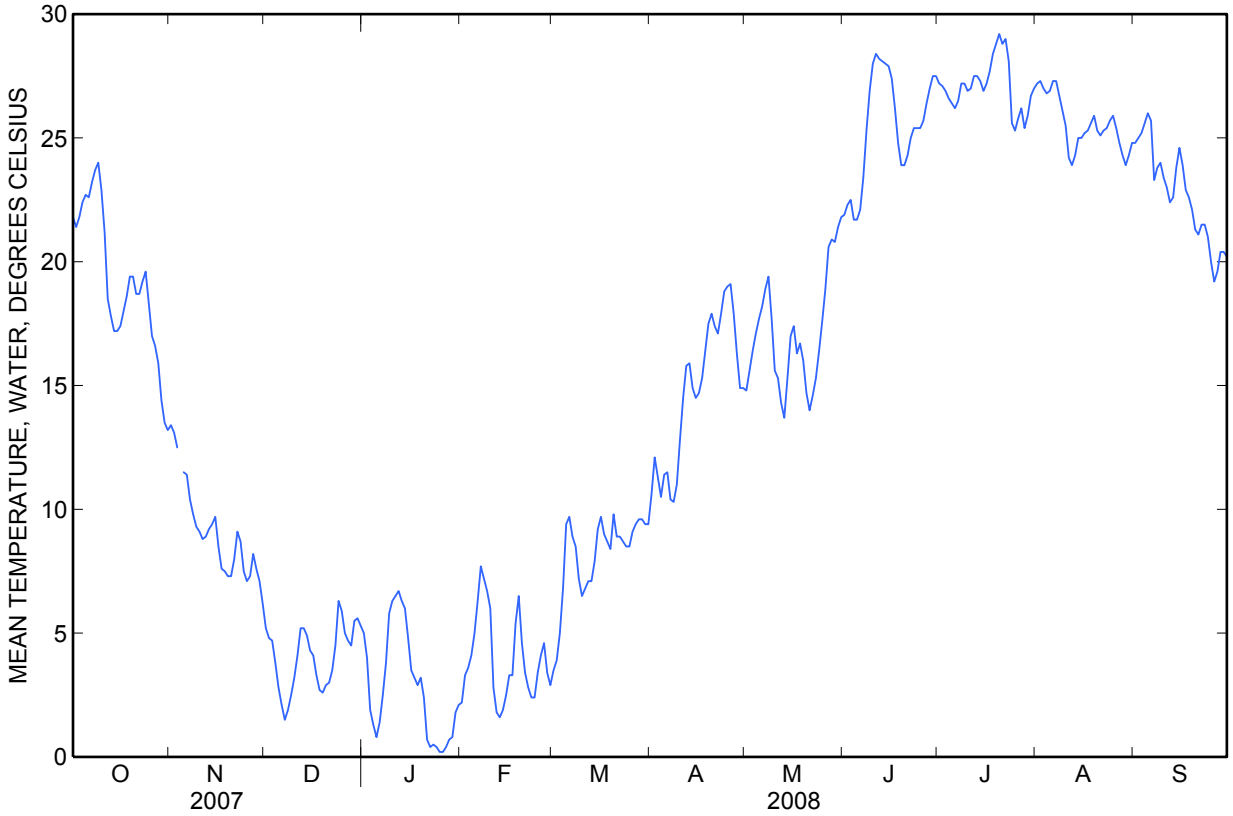
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	3.5	1.6	2.2	4.4	2.9	3.5	12.3	9.4	10.6	15.3	14.2	14.8
2	4.1	2.8	3.3	4.8	3.2	3.9	13.1	11.6	12.1	17.4	14.1	15.6
3	4.4	3.0	3.6	6.8	3.7	5.0	12.1	10.7	11.3	17.4	15.5	16.4
4	4.6	3.7	4.1	8.5	5.3	6.8	11.3	9.5	10.5	19.0	15.8	17.1
5	5.9	4.2	5.0	11.0	6.9	9.4	13.0	10.1	11.4	18.8	16.8	17.7
6	8.1	5.1	6.3	10.3	8.6	9.7	12.0	11.1	11.5	19.8	16.9	18.2
7	8.4	6.5	7.7	9.8	8.2	8.9	11.2	10.0	10.4	20.5	17.7	18.9
8	7.6	6.7	7.2	9.2	7.8	8.5	11.2	9.5	10.3	20.1	18.3	19.4
9	7.2	6.2	6.7	8.7	6.3	7.2	12.2	10.3	11.0	19.9	15.5	17.7
10	6.8	4.0	6.0	7.4	5.2	6.5	15.3	10.9	12.8	16.9	14.8	15.6
11	4.4	1.1	2.8	7.5	6.0	6.8	16.4	12.6	14.5	15.8	14.7	15.3
12	3.4	0.5	1.8	7.7	6.7	7.1	17.0	13.8	15.8	15.6	12.9	14.3
13	2.9	0.7	1.6	7.9	6.3	7.1	16.8	15.1	15.9	15.0	12.4	13.7
14	2.6	1.2	1.9	9.2	7.1	7.9	15.7	14.4	14.9	16.8	14.2	15.3
15	3.5	1.8	2.5	10.7	7.8	9.2	15.3	13.5	14.5	18.7	15.9	17.0
16	4.3	2.5	3.3	10.8	8.4	9.7	16.1	13.4	14.7	18.1	16.9	17.4
17	3.6	2.9	3.3	9.9	8.2	9.0	16.9	13.7	15.3	17.3	14.9	16.3
18	7.8	3.6	5.4	9.3	8.3	8.7	18.3	15.0	16.4	16.9	16.1	16.7
19	7.5	6.0	6.5	8.9	7.7	8.4	19.1	16.1	17.5	16.8	15.2	16.0
20	6.0	3.9	4.6	10.9	8.6	9.8	19.0	16.7	17.9	16.2	13.3	14.7
21	4.7	1.9	3.4	9.8	7.4	8.9	17.8	16.9	17.4	15.0	12.6	14.0
22	4.2	1.9	2.8	9.4	7.9	8.9	18.3	15.9	17.1	15.6	13.8	14.6
23	3.2	1.9	2.4	9.4	7.2	8.7	19.2	17.0	17.9	16.9	14.0	15.3
24	3.3	1.4	2.4	9.0	7.2	8.5	20.4	17.8	18.8	18.1	15.2	16.4
25	4.8	2.6	3.4	9.3	7.2	8.5	19.7	18.3	19.0	19.4	16.1	17.6
26	4.7	3.5	4.1	10.4	8.2	9.1	19.6	18.3	19.1	20.9	17.3	18.9
27	4.9	4.0	4.6	10.2	9.1	9.4	19.3	16.4	17.9	21.9	19.0	20.6
28	4.2	2.4	3.4	10.1	9.1	9.6	17.2	15.0	16.3	21.8	20.1	20.9
29	3.5	2.0	2.9	10.1	8.7	9.6	15.4	13.8	14.9	21.7	20.1	20.8
30	---	---	---	9.9	8.7	9.4	15.7	14.3	14.9	22.9	20.4	21.4
31	---	---	---	9.8	9.0	9.4	---	---	---	22.2	21.3	21.8
Month	8.4	0.5	4.0	11.0	2.9	8.2	20.4	9.4	14.8	22.9	12.4	17.1

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	23.0	20.6	21.9	28.0	26.0	27.2	28.1	26.1	27.2	25.5	23.6	24.8
2	23.5	20.9	22.3	27.9	25.8	27.1	27.8	26.5	27.3	25.7	23.8	25.0
3	23.5	21.2	22.5	27.7	25.6	26.9	27.6	26.0	27.0	25.8	24.3	25.2
4	22.4	21.0	21.7	27.1	25.7	26.6	27.3	25.9	26.8	26.1	24.8	25.6
5	22.4	20.8	21.7	26.8	25.6	26.4	27.3	26.1	26.9	26.4	25.4	26.0
6	23.0	21.2	22.1	26.6	25.4	26.2	27.8	26.6	27.3	26.3	23.4	25.7
7	25.5	22.2	23.4	27.1	25.7	26.5	27.7	26.8	27.3	24.2	21.8	23.3
8	27.3	23.6	25.3	27.9	26.5	27.2	27.1	26.1	26.7	24.6	23.3	23.8
9	28.4	25.0	26.9	27.9	26.8	27.2	26.7	25.6	26.1	24.1	23.7	24.0
10	29.6	26.2	28.0	27.4	26.5	26.9	25.8	24.6	25.5	24.2	22.5	23.4
11	29.4	27.3	28.4	27.9	26.2	27.0	24.9	23.3	24.2	23.5	22.1	23.0
12	29.2	27.5	28.2	28.4	26.9	27.5	24.8	22.9	23.9	23.3	21.7	22.4
13	29.0	27.4	28.1	28.4	26.8	27.5	25.1	23.3	24.3	23.4	21.4	22.6
14	29.0	27.1	28.0	27.7	26.9	27.3	25.8	24.0	25.0	24.9	22.6	23.8
15	28.6	27.1	27.9	27.8	25.6	26.9	25.6	23.9	25.0	25.3	24.0	24.6
16	28.0	26.4	27.4	28.2	25.7	27.2	25.9	23.9	25.2	24.6	23.2	23.9
17	27.1	25.1	26.2	28.8	26.5	27.7	26.0	23.9	25.3	23.7	21.5	22.9
18	25.9	23.4	24.8	29.6	27.5	28.4	26.4	24.4	25.6	23.4	21.1	22.6
19	25.0	22.2	23.9	29.8	27.9	28.8	26.6	25.1	25.9	23.3	21.0	22.1
20	24.6	22.5	23.9	30.1	28.6	29.2	26.0	24.2	25.3	22.4	20.1	21.3
21	25.3	23.0	24.3	29.6	27.7	28.8	25.8	23.9	25.1	22.1	20.1	21.1
22	25.7	24.2	25.0	29.5	28.0	29.0	25.9	24.4	25.3	22.2	20.9	21.5
23	26.0	24.6	25.4	29.1	25.9	28.1	25.9	24.6	25.4	22.1	21.0	21.5
24	25.9	24.7	25.4	27.3	24.6	25.6	26.4	25.2	25.7	21.7	20.4	21.0
25	26.0	24.9	25.4	26.0	24.3	25.3	26.5	25.6	25.9	20.8	19.2	20.0
26	26.1	25.2	25.7	26.4	25.3	25.8	25.9	25.0	25.4	20.3	18.4	19.2
27	27.5	25.6	26.4	26.8	25.6	26.2	25.4	23.9	24.8	20.3	18.9	19.6
28	27.9	26.2	27.0	26.3	24.5	25.4	25.1	23.6	24.3	20.9	19.8	20.4
29	28.4	26.8	27.5	26.9	24.6	25.9	24.8	23.2	23.9	20.8	19.7	20.4
30	28.1	26.9	27.5	27.5	25.8	26.7	24.9	23.3	24.3	20.7	19.0	20.2
31	---	---	---	27.3	26.3	27.0	25.6	23.8	24.8	---	---	---
Month	29.6	20.6	25.4	30.1	24.3	27.1	28.1	22.9	25.6	26.4	18.4	22.7
Year	30.1	0.0	15.0									

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued



01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		October			November			December			January	
1	7.3	7.1	7.2	7.1	6.9	7.0	7.2	7.0	7.1	7.4	7.2	7.3
2	7.3	7.1	7.2	7.2	7.0	7.0	7.1	7.0	7.0	7.5	7.3	7.4
3	7.2	7.1	7.2	7.2	7.1	7.1	7.1	6.9	7.0	7.5	7.4	7.4
4	7.2	7.0	7.1	---	---	---	7.3	6.8	7.2	7.5	7.4	7.4
5	7.2	7.0	7.1	7.3	7.1	7.2	7.4	7.2	7.3	7.5	7.4	7.4
6	7.2	7.0	7.1	7.3	7.1	7.2	7.4	7.2	7.3	7.5	7.4	7.4
7	7.1	6.9	7.0	7.2	7.1	7.2	7.4	7.3	7.3	7.5	7.4	7.4
8	7.1	6.9	7.0	7.3	7.2	7.2	---	7.2	7.3	7.5	7.3	7.4
9	7.1	6.9	7.0	7.3	7.2	7.2	7.3	7.2	7.3	7.5	7.4	7.4
10	7.1	6.8	6.9	7.3	7.2	7.2	7.3	7.2	7.3	7.5	7.4	7.4
11	6.9	6.8	6.9	7.3	7.2	7.2	7.4	7.2	7.3	7.5	7.4	7.4
12	7.0	6.8	6.9	7.3	7.2	7.2	7.3	7.3	7.3	7.4	7.3	7.4
13	7.0	6.9	6.9	7.3	7.2	7.2	7.4	7.3	7.3	7.5	7.4	7.4
14	7.0	6.9	6.9	7.3	7.2	7.2	7.4	7.3	7.3	7.5	7.4	7.4
15	7.0	6.9	6.9	7.2	7.1	7.1	7.4	7.3	7.4	7.5	7.4	7.4
16	7.0	6.9	6.9	7.2	7.0	7.1	7.5	7.3	7.4	7.5	7.4	7.4
17	7.2	6.9	7.0	7.2	7.1	7.2	7.3	7.1	7.3	7.6	7.4	7.5
18	7.2	7.0	7.0	7.3	7.1	7.2	7.3	7.2	7.2	7.6	7.4	7.5
19	7.2	7.0	7.0	7.2	7.1	7.2	7.3	7.2	7.2	7.5	7.3	7.4
20	7.2	7.0	7.1	7.2	7.1	7.1	7.4	7.2	7.3	7.5	7.3	7.4
21	7.2	7.1	7.1	7.2	7.0	7.1	7.4	7.3	7.3	7.5	7.4	7.5
22	7.2	7.0	7.1	7.2	7.0	7.1	7.5	7.3	7.3	7.6	7.4	7.5
23	7.3	7.0	7.2	7.2	7.0	7.1	7.5	7.3	7.4	7.5	7.4	7.5
24	7.2	7.0	7.1	7.1	7.0	7.0	7.4	7.2	7.3	7.5	7.4	7.5
25	7.3	7.1	7.1	7.1	7.0	7.0	7.3	7.2	7.3	7.5	7.4	7.5
26	7.4	7.1	7.2	7.1	7.0	7.0	7.4	7.2	7.3	7.5	7.4	7.5
27	7.2	6.9	7.1	7.1	7.0	7.1	7.5	7.3	7.3	7.5	7.5	7.5
28	7.0	6.8	6.9	7.1	7.0	7.1	7.4	7.3	7.3	7.6	7.5	7.5
29	7.1	6.8	6.9	7.2	7.0	7.1	7.4	7.2	7.3	7.6	7.5	7.5
30	7.1	6.9	6.9	7.1	7.1	7.1	7.3	7.2	7.3	7.6	7.5	7.5
31	7.1	6.9	7.0	---	---	---	7.4	7.2	7.3	7.6	7.5	7.5
Max	7.4	7.1	7.2	7.3	7.2	7.2	7.5	7.3	7.4	7.6	7.5	7.5
Min	6.9	6.8	6.9	7.1	6.9	7.0	7.1	6.8	7.0	7.4	7.2	7.3

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

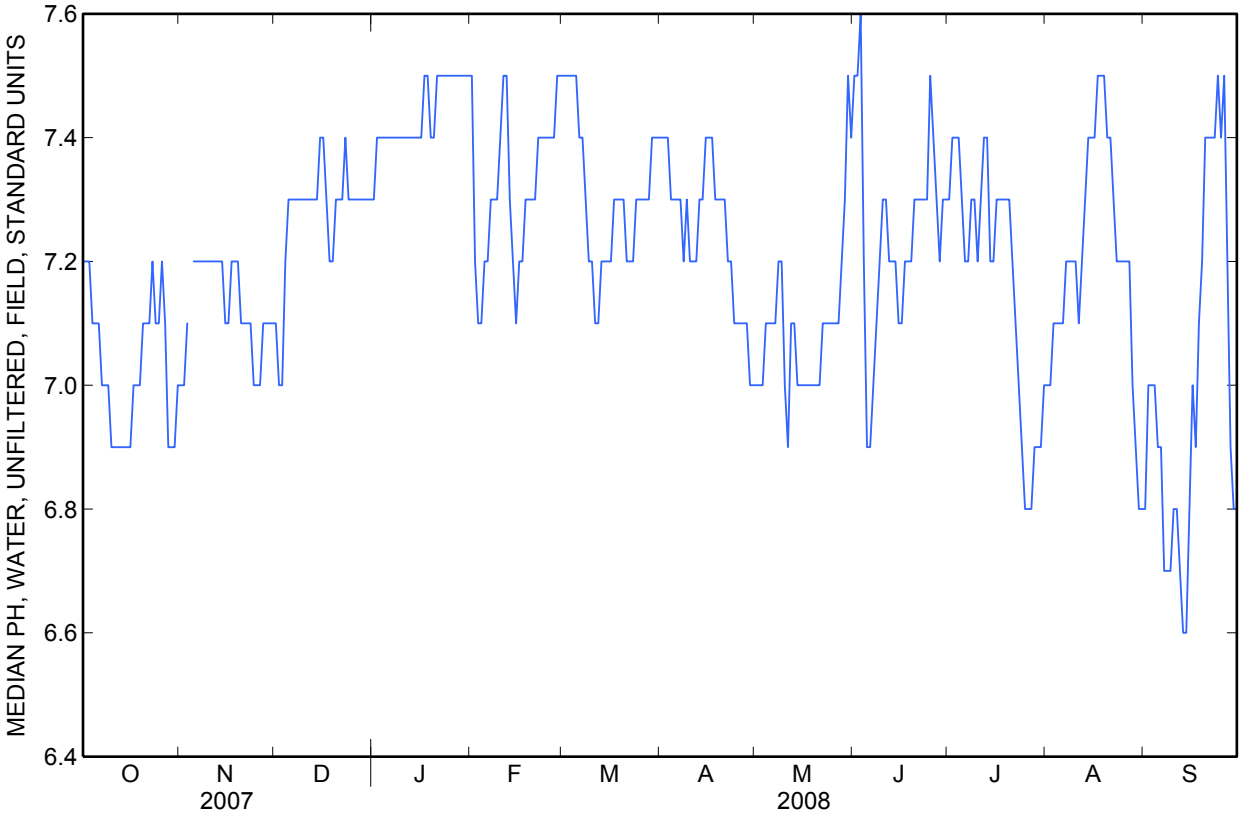
Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		February			March			April			May	
1	7.6	7.4	7.5	7.6	7.5	7.5	7.5	7.3	7.4	7.1	7.0	7.0
2	7.4	7.1	7.2	7.6	7.5	7.5	7.5	7.3	7.4	7.1	7.0	7.0
3	7.2	7.0	7.1	7.6	7.5	7.5	7.5	7.3	7.4	7.2	7.0	7.0
4	7.2	7.1	7.1	7.6	7.5	7.5	7.4	7.3	7.3	7.2	7.0	7.1
5	7.3	7.1	7.2	7.6	7.4	7.5	7.4	7.2	7.3	7.2	7.0	7.1
6	7.3	7.2	7.2	7.5	7.3	7.4	7.4	7.2	7.3	7.2	7.0	7.1
7	7.4	7.2	7.3	7.5	7.3	7.4	7.4	7.2	7.3	7.2	7.0	7.1
8	7.4	7.3	7.3	7.4	7.2	7.3	7.4	7.2	7.2	7.4	7.1	7.2
9	7.4	7.3	7.3	7.3	7.0	7.2	7.4	7.2	7.3	7.3	7.0	7.2
10	7.6	7.3	7.4	7.3	7.0	7.2	7.4	7.2	7.2	7.2	6.9	7.0
11	7.6	7.4	7.5	7.2	7.0	7.1	7.4	7.2	7.2	7.1	6.9	6.9
12	7.5	7.5	7.5	7.3	7.1	7.1	7.4	7.2	7.2	7.3	7.0	7.1
13	7.6	7.2	7.3	7.3	7.1	7.2	7.4	7.2	7.3	7.2	7.0	7.1
14	7.2	7.1	7.2	7.3	7.2	7.2	7.4	7.2	7.3	7.1	7.0	7.0
15	7.2	7.1	7.1	7.3	7.2	7.2	7.6	7.2	7.4	7.1	7.0	7.0
16	7.3	7.1	7.2	7.3	7.2	7.2	7.6	7.3	7.4	7.1	7.0	7.0
17	7.3	7.2	7.2	7.4	7.2	7.3	7.6	7.3	7.4	7.1	6.9	7.0
18	7.4	7.2	7.3	7.4	7.2	7.3	7.5	7.3	7.3	7.1	6.9	7.0
19	7.4	7.1	7.3	7.4	7.3	7.3	7.5	7.2	7.3	7.1	6.9	7.0
20	7.4	7.2	7.3	7.3	7.2	7.3	7.5	7.2	7.3	7.2	7.0	7.0
21	7.4	7.3	7.3	7.3	7.2	7.2	7.4	7.2	7.3	7.2	7.0	7.0
22	7.4	7.3	7.4	7.4	7.2	7.2	7.4	7.2	7.2	7.1	7.0	7.1
23	7.4	7.3	7.4	7.4	7.2	7.2	7.3	7.1	7.2	7.2	7.0	7.1
24	7.4	7.3	7.4	7.4	7.2	7.3	7.2	7.0	7.1	7.2	7.0	7.1
25	7.4	7.3	7.4	7.4	7.2	7.3	7.2	7.1	7.1	7.2	7.0	7.1
26	7.4	7.3	7.4	7.5	7.2	7.3	7.2	7.1	7.1	7.2	7.0	7.1
27	7.6	7.4	7.4	7.4	7.3	7.3	7.2	7.1	7.1	7.1	7.0	7.1
28	7.6	7.4	7.5	7.5	7.3	7.3	7.2	7.1	7.1	7.3	7.1	7.2
29	7.6	7.5	7.5	7.6	7.3	7.4	7.1	7.0	7.0	7.5	7.2	7.3
30	---	---	---	7.6	7.3	7.4	7.1	7.0	7.0	8.0	7.2	7.5
31	---	---	---	7.6	7.3	7.4	---	---	---	7.7	7.3	7.4
Max	7.6	7.5	7.5	7.6	7.5	7.5	7.6	7.3	7.4	8.0	7.3	7.5
Min	7.2	7.0	7.1	7.2	7.0	7.1	7.1	7.0	7.0	7.1	6.9	6.9

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		June			July			August			September	
1	7.9	7.1	7.5	7.6	7.2	7.3	7.2	6.8	7.0	7.0	6.7	6.8
2	8.4	7.2	7.5	7.6	7.2	7.4	7.2	6.9	7.0	7.2	6.8	7.0
3	8.5	7.3	7.6	7.9	7.2	7.4	7.2	6.9	7.1	7.2	6.9	7.0
4	7.5	7.0	7.2	7.5	7.2	7.4	7.2	7.0	7.1	7.2	6.8	7.0
5	7.3	6.8	6.9	7.4	7.2	7.3	7.2	7.0	7.1	7.1	6.8	6.9
6	7.1	6.8	6.9	7.3	7.2	7.2	7.3	7.0	7.1	7.0	6.7	6.9
7	7.1	6.9	7.0	7.3	7.1	7.2	7.3	7.0	7.2	6.8	6.6	6.7
8	7.3	6.9	7.1	7.4	7.2	7.3	7.3	7.0	7.2	6.9	6.4	6.7
9	7.5	7.1	7.2	7.3	7.1	7.3	7.3	7.1	7.2	6.7	6.6	6.7
10	7.8	7.2	7.3	7.4	7.1	7.2	7.3	7.0	7.2	6.9	6.6	6.8
11	7.6	7.1	7.3	7.6	7.1	7.3	7.3	7.0	7.1	6.9	6.6	6.8
12	7.5	7.1	7.2	7.7	7.1	7.4	7.4	7.0	7.2	7.2	6.6	6.7
13	7.3	7.1	7.2	7.6	7.1	7.4	7.5	7.1	7.3	6.9	6.5	6.6
14	7.2	7.0	7.2	7.4	7.1	7.2	7.5	7.1	7.4	6.7	6.5	6.6
15	7.2	7.0	7.1	7.3	7.0	7.2	7.5	7.1	7.4	7.0	6.5	6.8
16	7.2	7.0	7.1	7.4	7.0	7.3	7.6	7.1	7.4	7.1	6.8	7.0
17	7.2	7.0	7.2	7.5	7.0	7.3	7.9	7.1	7.5	7.1	6.8	6.9
18	7.3	7.1	7.2	7.5	7.0	7.3	8.0	7.2	7.5	7.3	6.9	7.1
19	7.4	7.1	7.2	7.5	7.1	7.3	7.8	7.2	7.5	7.4	7.1	7.2
20	7.4	7.1	7.3	7.4	7.1	7.3	7.7	7.2	7.4	7.5	7.2	7.4
21	7.5	7.1	7.3	7.3	6.9	7.2	7.6	7.1	7.4	7.6	7.1	7.4
22	7.6	7.2	7.3	7.3	6.9	7.1	7.5	7.1	7.3	7.5	7.0	7.4
23	7.5	7.1	7.3	7.2	6.8	7.0	7.4	7.1	7.2	7.6	7.1	7.4
24	7.8	7.2	7.3	7.0	6.8	6.9	7.4	7.1	7.2	7.7	7.2	7.5
25	7.8	7.3	7.5	6.9	6.7	6.8	7.3	7.0	7.2	7.7	7.1	7.4
26	7.6	7.3	7.4	7.0	6.8	6.8	7.3	7.0	7.2	7.7	7.0	7.5
27	7.5	7.2	7.3	7.0	6.8	6.8	7.2	7.0	7.2	7.5	6.9	7.2
28	7.3	7.1	7.2	7.0	6.8	6.9	7.1	6.9	7.0	7.3	6.7	6.9
29	7.4	7.1	7.3	7.1	6.8	6.9	7.0	6.8	6.9	7.1	6.6	6.8
30	7.4	7.2	7.3	7.1	6.8	6.9	6.9	6.7	6.8	7.1	6.5	6.8
31	---	---	---	7.1	6.8	7.0	6.9	6.6	6.8	---	---	---
Max	8.5	7.3	7.6	7.9	7.2	7.4	8.0	7.2	7.5	7.7	7.2	7.5
Min	7.1	6.8	6.9	6.9	6.7	6.8	6.9	6.6	6.8	6.7	6.4	6.6
Year	8.5	6.4										

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued



01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	7.8	6.5	7.1	7.5	6.9	7.0	11.2	10.2	10.6	11.7	10.9	11.2
2	8.1	6.5	7.1	7.7	7.0	7.3	11.4	10.4	10.9	12.6	11.2	11.7
3	8.0	6.5	7.0	7.6	7.3	7.4	11.9	11.0	11.4	12.9	11.8	12.3
4	7.9	6.0	6.8	---	---	---	12.0	11.1	11.5	13.1	11.9	12.5
5	6.7	5.6	6.2	8.6	7.9	8.2	11.9	11.2	11.5	13.1	12.0	12.7
6	6.7	4.7	5.8	8.9	7.9	8.2	12.0	11.2	11.5	13.0	12.2	12.6
7	6.8	4.8	6.0	9.4	8.3	8.7	12.2	11.3	11.6	12.7	12.3	12.5
8	6.8	4.8	6.0	9.4	8.6	8.9	12.3	11.3	11.8	12.4	12.0	12.2
9	6.2	4.7	5.7	9.6	8.8	9.1	12.1	11.4	11.8	12.2	11.3	11.8
10	6.0	4.5	5.1	9.7	8.9	9.2	12.0	11.5	11.7	11.8	10.9	11.4
11	5.2	4.4	4.8	9.8	9.1	9.4	11.6	11.2	11.5	11.5	10.6	11.1
12	6.7	4.6	5.5	9.8	9.2	9.4	11.4	10.8	11.2	11.0	10.3	10.7
13	6.0	5.1	5.6	9.7	9.3	9.4	11.4	10.7	11.0	11.2	10.5	10.7
14	6.3	5.5	5.8	9.5	9.1	9.3	11.4	10.8	11.1	11.0	10.7	10.8
15	6.4	5.7	6.1	9.4	8.9	9.1	11.6	10.9	11.2	11.9	10.7	11.0
16	6.6	5.7	6.2	10.0	8.9	9.5	11.8	11.2	11.6	12.3	11.0	11.5
17	6.7	5.7	6.3	10.0	9.5	9.7	12.1	11.4	11.8	12.4	11.2	11.7
18	6.8	5.6	6.2	10.2	9.5	9.8	12.3	11.5	11.9	12.5	11.5	12.1
19	6.7	5.5	6.1	10.5	9.8	10.1	12.3	11.5	11.9	12.6	12.0	12.2
20	6.9	5.8	6.4	10.4	9.9	10.0	12.1	11.6	11.9	13.0	12.0	12.5
21	6.9	5.9	6.5	10.0	9.7	9.8	12.2	11.7	11.9	13.3	12.4	12.9
22	7.3	5.8	6.6	9.9	9.5	9.7	12.2	11.8	12.0	13.4	12.6	13.0
23	7.6	5.9	6.9	10.1	9.3	9.7	12.1	11.5	11.8	13.3	12.7	13.0
24	7.1	5.8	6.6	10.3	9.7	9.9	11.6	10.5	10.9	13.4	12.7	13.0
25	7.3	6.1	6.7	10.5	9.8	10.0	10.9	10.2	10.6	13.6	12.9	13.2
26	7.7	6.5	7.1	10.4	9.9	10.0	11.3	10.5	10.8	13.6	13.0	13.2
27	8.3	7.0	7.6	10.2	9.8	10	11.5	10.7	11.1	13.4	13.0	13.2
28	7.5	6.3	7.0	10.3	9.9	10.0	11.5	10.9	11.1	13.3	13.0	13.2
29	7.6	6.5	6.9	10.3	9.9	10.1	11.4	11.0	11.2	13.3	13.0	13.1
30	7.5	6.6	6.9	10.6	10.0	10.2	11.2	10.7	11.0	13.2	12.7	12.9
31	7.6	6.7	7.0	---	---	---	11.5	10.8	11.1	12.9	12.5	12.8
Month	8.3	4.4	6.4	10.6	6.9	9.3	12.3	10.2	11.4	13.6	10.3	12.2

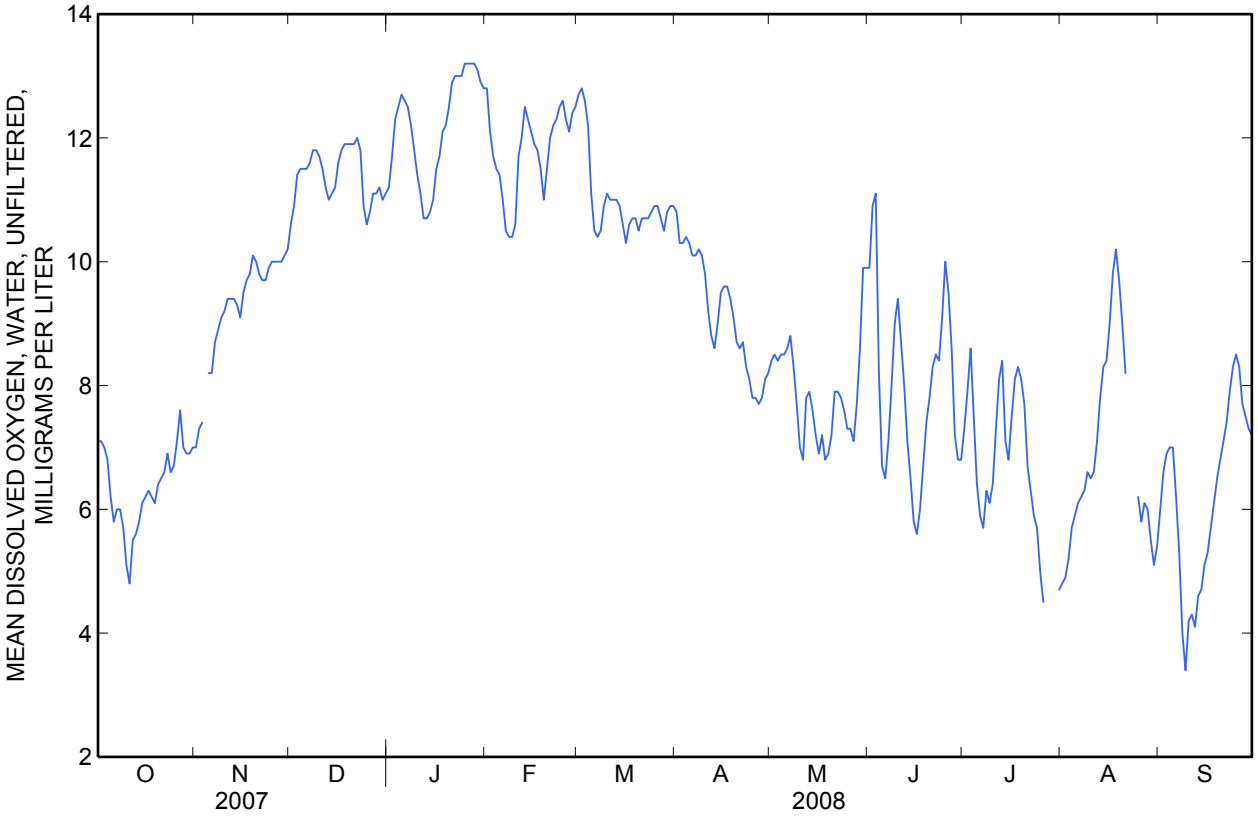
01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	13.1	12.2	12.8	13.1	12.3	12.7	11.2	10.4	10.8	9.4	7.9	8.4
2	12.3	11.8	12.1	13.0	12.6	12.8	10.8	9.8	10.3	9.7	8.0	8.5
3	12.0	11.3	11.7	12.8	12.4	12.6	11.2	9.9	10.3	9.3	7.8	8.4
4	11.8	11.2	11.5	12.4	11.9	12.2	10.9	10.0	10.4	9.7	7.6	8.5
5	11.6	11.1	11.4	12.0	10.5	11.1	11.1	9.9	10.3	9.5	7.6	8.5
6	11.3	10.7	11.0	10.9	9.9	10.5	10.4	9.8	10.1	9.4	7.5	8.6
7	10.8	10.0	10.5	10.8	10.1	10.4	10.7	9.8	10.1	9.6	7.7	8.8
8	11.0	10.1	10.4	10.9	10.1	10.5	11.1	9.9	10.2	9.2	7.7	8.3
9	10.8	10.1	10.4	11.5	10.3	10.9	11.0	9.7	10.1	8.2	7.3	7.7
10	11.5	10.2	10.6	11.6	10.7	11.1	10.5	9.3	9.8	7.4	6.6	7.0
11	12.6	11.0	11.7	11.3	10.7	11.0	10.1	8.8	9.2	7.3	6.4	6.8
12	12.8	11.3	12.0	11.5	10.7	11.0	9.6	8.3	8.8	8.3	7.0	7.8
13	12.9	11.6	12.5	11.3	10.7	11.0	9.3	8.3	8.6	8.6	7.5	7.9
14	12.5	12.1	12.3	11.2	10.7	10.9	10.1	8.4	9.0	8.1	7.3	7.6
15	12.2	11.9	12.1	10.9	10.4	10.6	10.8	8.6	9.5	7.7	6.8	7.2
16	12.1	11.6	11.9	11.1	10.1	10.3	10.9	8.9	9.6	7.3	6.5	6.9
17	12.0	11.6	11.8	11.5	10.0	10.6	11.0	9.0	9.6	7.9	6.7	7.2
18	11.8	10.9	11.5	11.2	10.2	10.7	10.6	8.9	9.4	7.3	6.4	6.8
19	11.4	10.3	11.0	11.2	10.5	10.7	10.2	8.3	9.1	7.9	6.2	6.9
20	12.0	11.0	11.5	10.8	10.1	10.5	9.5	8.0	8.7	8.4	6.6	7.2
21	12.7	11.3	12.0	11.5	10.3	10.7	9.3	7.9	8.6	8.6	6.8	7.9
22	12.8	11.6	12.2	11.4	10.2	10.7	9.7	8.3	8.7	8.5	7.5	7.9
23	12.6	11.8	12.3	11.6	10.2	10.7	9.2	7.7	8.3	8.3	7.4	7.8
24	12.9	12.1	12.5	11.7	10.2	10.8	9.0	7.5	8.1	8.1	7.3	7.6
25	12.9	12.3	12.6	11.7	10.4	10.9	8.7	7.3	7.8	7.8	7.0	7.3
26	12.6	12.1	12.3	11.5	10.6	10.9	8.3	7.3	7.8	7.6	6.9	7.3
27	12.3	11.9	12.1	11.1	10.4	10.7	8.0	7.4	7.7	7.5	6.4	7.1
28	13.0	11.9	12.4	11.2	10.3	10.5	8.5	7.6	7.8	8.8	6.6	7.7
29	13.0	12.2	12.5	11.5	10.2	10.8	8.7	7.4	8.1	10.4	7.1	8.6
30	---	---	---	11.6	10.3	10.9	9.3	7.7	8.2	12.5	7.5	9.9
31	---	---	---	11.7	10.4	10.9	---	---	---	11.3	8.5	9.9
Month	13.1	10.0	11.8	13.1	9.9	11.0	11.2	7.3	9.2	12.5	6.2	7.9

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	12.3	6.6	9.9	9.8	5.1	7.3	5.9	3.5	4.8	7.5	4.7	6.0
2	14.0	7.8	10.9	10.8	5.8	7.9	5.7	4.1	4.9	8.5	5.2	6.6
3	14.1	8.7	11.1	11.9	6.1	8.6	6.5	4.1	5.2	8.4	5.5	6.9
4	9.8	7.3	8.2	9.2	5.9	7.5	7.2	4.7	5.7	8.5	5.5	7.0
5	8.1	5.6	6.7	7.4	5.6	6.4	6.9	5.1	5.9	8.4	5.5	7.0
6	7.5	5.5	6.5	6.7	5.1	5.9	7.3	5.2	6.1	7.2	4.2	6.2
7	8.9	5.9	7.1	6.7	4.8	5.7	7.2	5.4	6.2	6.9	4.4	5.3
8	10.2	6.6	8.0	7.8	5.4	6.3	7.3	5.1	6.3	4.6	3.4	4.0
9	11.3	7.2	9.0	6.8	5.4	6.1	7.8	5.3	6.6	3.7	2.9	3.4
10	12.4	7.3	9.4	8.2	5.2	6.4	7.4	5.4	6.5	5.6	3.1	4.2
11	11.4	6.8	8.7	9.7	5.8	7.3	7.8	5.3	6.6	5.4	3.7	4.3
12	10.4	6.2	8.0	10.5	6.2	8.1	9.0	5.4	7.1	4.8	3.5	4.1
13	8.8	5.6	7.1	10.3	6.6	8.4	9.7	5.6	7.8	5.9	3.7	4.6
14	7.8	5.3	6.5	8.0	6.1	7.1	10.3	6.1	8.3	5.4	3.8	4.7
15	6.9	4.7	5.8	8.1	5.2	6.8	10.4	6.2	8.4	5.8	4.0	5.1
16	6.7	4.1	5.6	9.6	5.4	7.5	11.6	6.2	9.0	6.1	4.3	5.3
17	7.3	4.5	6.0	10.5	5.9	8.1	12.8	6.5	9.8	6.7	4.7	5.7
18	8.3	5.5	6.7	10.6	6.3	8.3	13.3	7.8	10.2	7.0	5.2	6.1
19	9.3	6.1	7.4	10.3	6.4	8.1	11.9	7.6	9.7	7.2	5.8	6.5
20	9.6	6.3	7.8	9.6	6.2	7.7	10.7	7.0	9.0	7.4	6.1	6.8
21	10.6	6.7	8.3	8.1	5.5	6.7	9.3	6.6	8.2	7.9	6.1	7.1
22	10.6	7.2	8.5	7.7	4.7	6.3	---	---	---	8.6	6.6	7.4
23	10.3	7.1	8.4	6.8	4.7	5.9	---	---	---	9.3	6.6	7.9
24	11.7	7.3	9.1	6.5	4.8	5.7	---	---	---	9.9	6.8	8.3
25	12.0	8.1	10.0	5.6	4.5	5.0	7.1	5.3	6.2	9.3	7.6	8.5
26	11.0	8.0	9.5	4.8	4.3	4.5	7.2	4.3	5.8	8.8	7.5	8.3
27	10.2	7.3	8.6	---	---	---	7.4	4.6	6.1	8.3	6.6	7.7
28	8.6	6.3	7.2	---	---	---	6.7	4.8	6.0	8.1	6.0	7.5
29	8.7	5.2	6.8	---	---	---	6.0	4.6	5.5	7.8	6.5	7.3
30	8.7	4.8	6.8	---	---	---	5.8	3.9	5.1	7.9	5.7	7.2
31	---	---	---	5.1	4.3	4.7	6.7	4.1	5.4	---	---	---
Month	14.1	4.1	8.0	11.9	4.3	6.8	13.3	3.5	6.9	9.9	2.9	6.2
Year	14.1	2.9	8.9									

01480065 CHRISTINA RIVER AT NEWPORT, DE—Continued