

Water-Data Report 2008

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC

Roanoke Basin
Lower Roanoke Subbasin

LOCATION.--Lat 35°54'54", long 76°43'22" referenced to North American Datum of 1983, Washington County, NC, Hydrologic Unit 03010107, elevation gage on right bank 10 ft upstream from North Carolina Highway 45 bridge. Water quality monitor located near center of river on south-bridge fender of shipping channel, 10 ft upstream from North Carolina Highway 45 bridge, approximately 1.6 mi upstream from mouth, and 2.7 mi northwest of Westover.

DRAINAGE AREA.--9,660 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1990 to September 1993. August 1996 to current year. Records from August 1996 to September 1997 are unpublished and available from the USGS Water Science Center, Raleigh, NC.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. Satellite telemetry at stations.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 4.68 ft, September 16, 1999; minimum elevation, -1.20 ft, September 1, 1993.

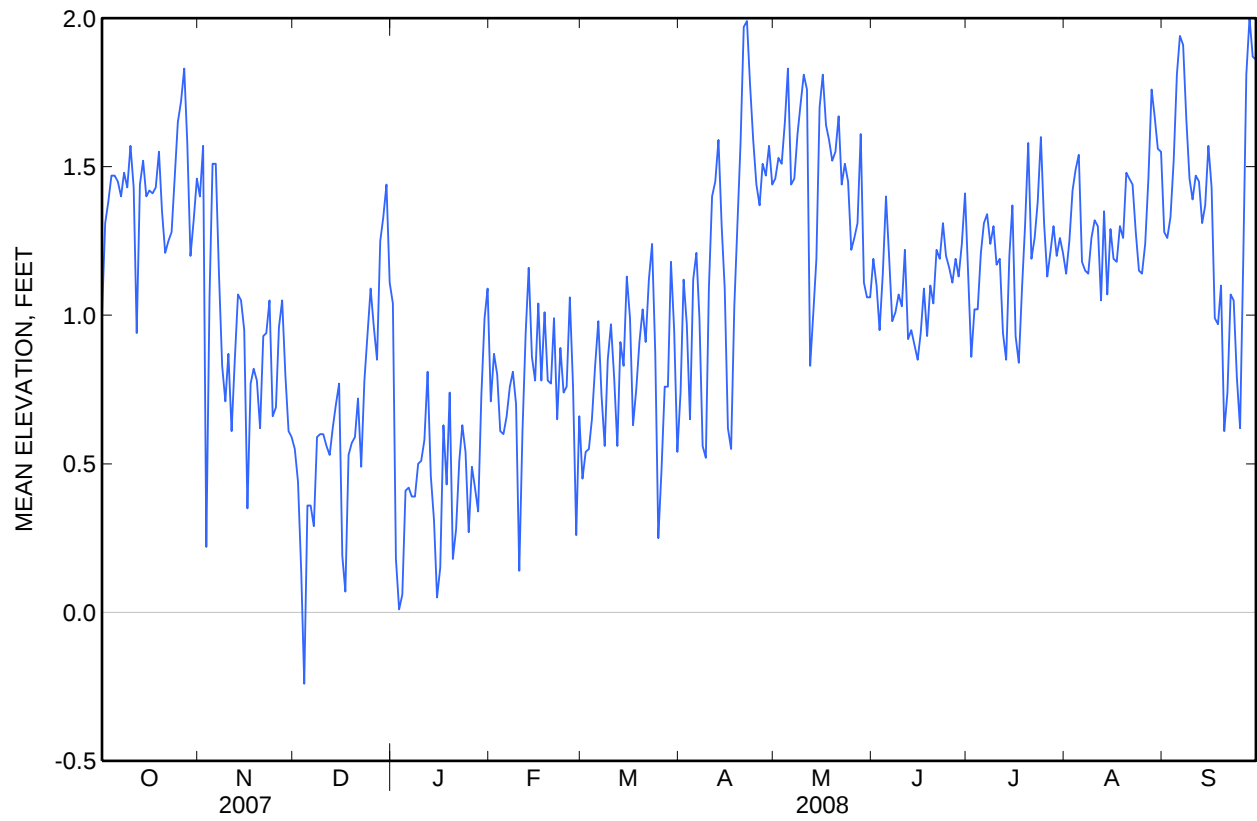
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2.61 ft, September 6; minimum elevation, -0.71 ft, February 10.

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

ELEVATION, FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.00	1.40	0.55	1.04	0.71	0.45	0.74	1.46	1.19	1.13	1.14	1.28
2	1.31	1.57	0.44	0.18	0.87	0.54	1.12	1.53	1.10	0.86	1.25	1.26
3	1.38	0.22	0.14	0.01	0.80	0.55	0.97	1.51	0.95	1.02	1.42	1.33
4	1.47	1.06	-0.24	0.06	0.61	0.65	0.65	1.65	1.14	1.02	1.49	1.52
5	1.47	1.51	0.36	0.41	0.60	0.83	1.12	1.83	1.40	1.21	1.54	1.81
6	1.45	1.51	0.36	0.42	0.66	0.98	1.21	1.44	1.19	1.31	1.18	1.94
7	1.40	1.14	0.29	0.39	0.76	0.73	0.99	1.46	0.98	1.34	1.15	1.91
8	1.48	0.83	0.59	0.39	0.81	0.56	0.56	1.61	1.01	1.24	1.14	1.66
9	1.43	0.71	0.60	0.50	0.70	0.85	0.52	1.71	1.07	1.30	1.26	1.46
10	1.57	0.87	0.60	0.51	0.14	0.97	1.09	1.81	1.03	1.17	1.32	1.39
11	1.43	0.61	0.56	0.58	0.61	0.79	1.40	1.76	1.22	1.19	1.30	1.47
12	0.94	0.85	0.53	0.81	0.94	0.56	1.45	0.83	0.92	0.94	1.05	1.45
13	1.44	1.07	0.62	0.46	1.16	0.91	1.59	1.01	0.95	0.85	1.35	1.31
14	1.52	1.05	0.70	0.31	0.86	0.83	1.30	1.19	0.90	1.20	1.07	1.37
15	1.40	0.95	0.77	0.05	0.78	1.13	1.09	1.70	0.85	1.37	1.29	1.57
16	1.42	0.35	0.19	0.15	1.04	0.99	0.62	1.81	0.94	0.93	1.19	1.43
17	1.41	0.77	0.07	0.63	0.78	0.63	0.55	1.64	1.09	0.84	1.18	0.99
18	1.43	0.82	0.53	0.43	1.01	0.75	1.03	1.59	0.93	1.09	1.30	0.97
19	1.55	0.78	0.57	0.74	0.78	0.91	1.30	1.52	1.10	1.30	1.26	1.10
20	1.35	0.62	0.59	0.18	0.77	1.02	1.58	1.55	1.04	1.58	1.48	0.61
21	1.21	0.93	0.72	0.28	0.99	0.91	1.97	1.67	1.22	1.19	1.46	0.74
22	1.25	0.94	0.49	0.51	0.65	1.12	1.99	1.44	1.19	1.26	1.44	1.07
23	1.28	1.05	0.78	0.63	0.89	1.24	1.78	1.51	1.31	1.38	1.28	1.05
24	1.46	0.66	0.94	0.54	0.74	0.87	1.59	1.45	1.20	1.60	1.15	0.79
25	1.65	0.69	1.09	0.27	0.76	0.25	1.44	1.22	1.16	1.31	1.14	0.62
26	1.72	0.96	0.96	0.49	1.06	0.48	1.37	1.26	1.11	1.13	1.24	1.19
27	1.83	1.05	0.85	0.42	0.76	0.76	1.51	1.31	1.19	1.21	1.46	1.81
28	1.58	0.80	1.25	0.34	0.26	0.76	1.47	1.61	1.13	1.30	1.76	2.00
29	1.20	0.61	1.33	0.73	0.66	1.18	1.57	1.11	1.24	1.20	1.67	1.87
30	1.32	0.59	1.44	0.99	---	0.95	1.44	1.06	1.41	1.26	1.56	1.86
31	1.46	---	1.11	1.09	---	0.54	---	1.06	---	1.21	1.55	---
Total	43.81	26.97	19.78	14.54	22.16	24.69	37.01	45.31	33.16	36.94	41.07	40.83
Mean	1.41	0.90	0.64	0.47	0.76	0.80	1.23	1.46	1.11	1.19	1.32	1.36
Max	1.83	1.57	1.44	1.09	1.16	1.24	1.99	1.83	1.41	1.60	1.76	2.00
Min	0.94	0.22	-0.24	0.01	0.14	0.25	0.52	0.83	0.85	0.84	1.05	0.61

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued



0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (TOP): May 2000 to current year.

SPECIFIC CONDUCTANCE (BOTTOM): November 1997 to current year

pH (TOP): May 2000 to current year.

pH (BOTTOM): November 1997 to current year.

WATER TEMPERATURE (TOP): May 2000 to current year.

WATER TEMPERATURE (BOTTOM): November 1997 to current year.

DISSOLVED OXYGEN (TOP): May 2000 to current year.

DISSOLVED OXYGEN (BOTTOM): November 1997 to current year.

DISSOLVED OXYGEN, PERCENT SATURATION (TOP): May 2000 to current year.

DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM): November 1997 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry from March 1998 to current year.

REMARKS.--Station operated to define water-quality characteristics in the Roanoke River Basin below Roanoke Rapids Dam. Top constituents were monitored at approximately 18 ft above the streambed and bottom constituents, 2 ft above the streambed. Dissolved oxygen, percent saturation is computed using a barometric pressure of 760 mm Hg beginning October 1, 2000. Water-quality measurements and samples for water years 2006 to 2008 were collected by the U.S. Geological Survey and the North Carolina Department of Environment and Natural Resources, Division of Water Quality.

COOPERATION.--Station operated in cooperation with North Carolina Department of Environment and Natural Resources (NCDENR), Division of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (TOP): Maximum recorded, 9,880 microsiemens, February 2, 2002; minimum recorded, 66 microsiemens, June 19, 2006.

SPECIFIC CONDUCTANCE (BOTTOM): Maximum recorded, 11,700 February 2, 2002; minimum recorded, 48 microsiemens, September 21, 1999.

pH (TOP): Maximum recorded, 8.0 standard units, August 19, 2002, June 18, 2007, August 6, 2008; minimum recorded, 6.0 standard units, June 19, 21, 22, 2001.

pH (BOTTOM): Maximum recorded, 7.7 standard units, June 17, 2000; minimum recorded, 5.8 standard units, March 4, 1998, September 18-22, 1999.

WATER TEMPERATURE (TOP): Maximum recorded, 32.5°C, August 6, 2008; minimum recorded, 2.5°C, January 24, 2003.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 31.3°C, August 8, 9, 2006; minimum recorded, 2.5°C, January 24, 2003.

DISSOLVED OXYGEN (TOP): Maximum recorded, 13.0 mg/L, February 3, 2008; minimum recorded, <1.0 mg/L, on many days during the period.

DISSOLVED OXYGEN (BOTTOM): Maximum recorded, 14.0 mg/L, January 6, 7, 2001, January 11, 2002; minimum recorded, <1.0 mg/L, on many days during the period.

DISSOLVED OXYGEN, PERCENT SATURATION (TOP): Maximum recorded, 130%, August 6, 2008; minimum recorded, <10%, on many days during the period.

DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM): Maximum recorded, 123%, September 15, 2005; minimum recorded, <10%, on many days during the period.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE (TOP): Maximum recorded, 9,150 microsiemens, October 25; minimum recorded, 120 microsiemens, April 25.

SPECIFIC CONDUCTANCE (BOTTOM): Maximum recorded, 9,850 microsiemens, January 11; minimum recorded, 120 microsiemens, April 25.

pH (TOP): Maximum recorded, 8.0 standard units, August 6; minimum recorded, 6.3 standard units, on several days during the year.

pH (BOTTOM): Maximum recorded, 7.5 standard units, December 3, 20, April 2; minimum recorded, 5.9 standard units, May 3, 4, 5.

WATER TEMPERATURE (TOP): Maximum recorded, 32.5°C, August 6; minimum recorded, 5.5°C, January 28.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 30.8°C, August 6, 7, 8; minimum recorded, 5.6°C, January 29, 30.

DISSOLVED OXYGEN (TOP): Maximum recorded, 13.0 mg/L, February 3; minimum recorded, 1.6 mg/L, October 25.

DISSOLVED OXYGEN (BOTTOM): Maximum recorded, 12.2 mg/L, January 30; minimum recorded, 0.6 mg/L, October 26, 27.

DISSOLVED OXYGEN, PERCENT SATURATION (TOP): Maximum recorded, 130%, August 6; minimum recorded, 19%, October 25.

DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM): Maximum recorded, 100%, January 30, February 1, March 7; minimum recorded, 7%, October 26, 27.

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, TOP
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	242	161	203	314	203	247	5,310	343	1,060	381	210	239
2	238	178	216	3,230	197	638	506	280	383	412	169	227
3	228	188	221	305	169	199	5,480	288	1,250	393	168	195
4	238	192	222	954	172	346	1,830	296	664	524	180	220
5	286	203	237	3,020	228	1,520	5,100	342	1,200	649	200	301
6	232	184	204	5,110	387	2,590	6,760	432	1,770	581	214	331
7	226	200	209	2,370	473	718	587	294	407	361	175	220
8	549	214	257	598	333	408	6,430	293	1,900	1,120	170	267
9	2,270	219	762	457	328	363	3,160	337	602	8,530	254	1,280
10	3,530	334	2,260	3,470	304	968	7,120	449	1,540	656	246	396
11	3,340	407	1,400	451	315	358	6,180	569	1,900	5,190	291	1,730
12	1,460	507	980	3,810	310	1,530	6,630	452	2,270	8,000	798	2,290
13	2,160	1,120	1,580	5,800	474	3,080	5,690	887	1,990	1,870	440	849
14	2,080	559	1,240	6,600	421	1,770	3,850	857	1,820	3,510	378	980
15	1,020	515	729	6,630	821	2,330	1,560	426	912	2,010	336	620
16	645	325	479	3,750	1,040	2,190	587	167	375	2,940	421	843
17	390	234	302	5,040	749	2,360	284	169	202	1,300	313	538
18	2,350	238	734	4,560	956	2,110	1,500	163	358	484	216	292
19	3,640	586	1,870	5,970	1,130	2,030	433	183	252	1,050	178	259
20	4,490	461	2,160	7,010	647	1,900	209	173	187	208	156	175
21	3,720	424	1,040	7,140	462	2,800	713	168	198	189	159	170
22	3,940	585	1,390	6,120	882	2,560	217	158	175	209	163	195
23	4,800	619	2,220	7,550	1,540	3,420	961	178	358	242	178	207
24	8,330	1,110	5,140	1,640	793	1,110	4,490	266	1,570	630	168	206
25	9,150	1,580	4,210	1,710	448	822	5,120	259	1,080	235	171	184
26	3,160	509	1,260	4,650	467	1,820	2,370	341	706	5,040	176	855
27	4,620	492	1,850	7,840	562	2,640	689	275	531	1,350	209	314
28	2,520	563	1,310	2,370	520	1,300	2,610	195	454	745	216	270
29	1,020	577	812	2,820	352	862	4,990	207	1,350	7,000	218	1,970
30	641	488	548	3,890	349	865	3,740	225	800	4,940	828	2,140
31	495	242	388	---	---	---	467	221	286	5,370	562	1,020
Month	9,150	161	1,180	7,840	169	1,530	7,120	158	921	8,530	156	638

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, TOP
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	665	367	455	456	197	244	704	172	280	143	136	139
2	675	222	326	272	177	209	4,580	195	778	142	133	137
3	481	217	263	209	178	195	459	148	190	146	133	137
4	230	190	212	395	204	233	192	156	169	143	134	138
5	2,960	190	545	333	190	221	339	162	183	166	137	146
6	3,180	363	1,180	191	160	174	189	153	173	146	137	141
7	4,760	667	1,870	168	157	162	169	151	161	151	138	143
8	2,000	401	853	176	152	163	165	151	157	152	140	146
9	3,290	360	1,030	751	148	186	168	155	159	163	142	147
10	1,660	511	797	177	137	147	171	152	159	193	141	147
11	2,410	567	1,470	158	146	151	170	143	154	195	138	144
12	820	228	395	160	144	147	150	140	145	189	136	140
13	680	173	290	158	136	149	170	140	148	153	135	142
14	374	160	194	152	132	141	156	140	144	140	132	137
15	360	158	215	148	125	141	159	139	143	150	138	143
16	930	184	282	209	128	152	149	139	141	148	139	144
17	212	155	172	188	134	149	145	138	141	160	137	143
18	413	162	191	166	138	155	145	137	142	149	136	141
19	313	168	204	166	152	159	145	138	141	155	136	141
20	282	170	196	167	153	160	145	139	141	151	135	140
21	572	166	237	167	151	160	158	137	145	173	135	140
22	199	162	174	476	157	172	154	137	143	145	135	139
23	208	162	171	548	140	191	147	133	138	163	135	141
24	208	168	180	175	155	163	133	121	125	145	137	141
25	191	170	179	182	157	168	126	120	122	147	137	140
26	204	178	188	180	159	169	131	125	129	157	137	140
27	197	168	182	247	175	195	137	130	133	145	136	140
28	199	168	180	249	181	212	137	132	134	202	138	144
29	211	168	192	277	180	206	142	133	136	140	135	138
30	---	---	---	251	136	182	142	135	138	144	137	141
31	---	---	---	217	172	189	---	---	---	144	137	141
Month	4,760	155	442	751	125	176	4,580	120	173	202	132	141

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, TOP
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	146	138	142	448	195	261	230	166	200	224	163	202
2	151	137	144	314	193	224	175	148	163	210	170	189
3	153	140	146	805	210	350	180	148	162	513	190	236
4	154	146	149	905	313	460	191	155	173	965	211	384
5	161	139	152	487	228	332	211	172	186	638	226	292
6	189	141	155	513	193	283	234	194	210	1,630	182	473
7	152	141	145	195	155	170	204	190	197	2,010	159	425
8	153	141	145	192	157	173	202	169	186	176	155	169
9	163	140	148	278	172	194	195	153	176	183	173	179
10	164	149	156	210	159	182	174	151	163	213	179	185
11	190	154	164	181	153	167	199	158	172	255	172	204
12	196	151	161	181	146	158	220	179	197	222	163	199
13	179	135	159	157	147	151	217	200	209	268	181	197
14	182	145	163	178	156	167	261	196	229	1,930	180	605
15	170	145	157	198	171	179	244	178	209	3,520	554	1,580
16	167	151	157	195	161	179	211	148	179	755	295	461
17	187	156	175	195	158	178	160	140	150	623	161	257
18	216	165	184	---	---	---	173	153	162	184	166	178
19	190	146	165	---	---	---	207	161	185	206	150	182
20	217	171	189	---	---	---	216	162	192	227	183	213
21	199	177	187	---	---	---	235	137	200	192	163	179
22	195	169	185	---	---	---	178	134	160	203	161	183
23	200	160	168	---	---	---	177	130	157	245	181	217
24	245	166	198	195	145	165	168	147	159	238	151	199
25	210	151	188	155	143	151	166	155	160	190	147	165
26	196	173	183	144	135	139	1,550	163	321	187	136	160
27	1,110	175	281	154	143	147	839	235	376	1,420	153	597
28	521	208	287	172	142	155	1,360	222	512	2,050	781	1,560
29	937	280	427	193	161	180	---	---	---	1,650	254	605
30	1,070	237	517	209	189	197	1,800	207	466	2,370	251	764
31	---	---	---	323	200	228	486	196	265	---	---	---
Month	1,110	135	193	---	---	---	---	---	---	3,520	136	381

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, BOTTOM
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	242	162	198	4,460	3,950	4,240	5,930	2,730	5,700	4,540	3,490	4,120
2	234	166	200	3,980	207	2,460	5,740	1,260	4,800	4,900	801	3,830
3	234	176	217	296	170	209	5,950	2,980	5,480	4,460	222	2,770
4	249	187	221	2,890	195	1,120	5,590	4,760	5,380	4,680	2,320	3,700
5	316	163	238	4,560	2,830	3,460	7,180	4,820	5,540	6,280	4,680	5,830
6	249	184	209	5,540	4,550	5,060	7,450	5,580	6,960	7,670	6,260	6,620
7	222	203	209	5,510	4,550	5,360	7,060	6,840	6,950	8,460	7,460	8,030
8	2,460	218	1,160	5,460	5,050	5,370	6,970	6,420	6,750	8,750	8,460	8,570
9	3,150	2,060	2,740	5,540	5,370	5,460	7,660	6,930	7,350	8,840	8,680	8,790
10	4,050	3,050	3,620	5,460	4,840	5,190	7,680	7,590	7,630	9,810	8,610	8,900
11	3,940	2,200	3,660	5,080	4,780	4,930	7,630	7,510	7,570	9,850	9,010	9,600
12	3,400	1,900	2,890	4,980	3,930	4,490	7,820	7,560	7,720	9,380	5,990	8,260
13	3,200	1,780	2,220	6,360	4,500	5,640	7,770	4,080	6,720	8,800	1,620	6,430
14	2,640	1,840	2,180	6,750	6,230	6,410	7,110	6,250	6,850	7,550	5,920	6,590
15	2,130	718	1,660	7,260	5,380	6,880	7,090	1,140	3,580	6,520	2,510	6,080
16	1,950	615	1,710	6,340	4,520	5,560	1,140	172	456	6,010	4,090	5,460
17	2,140	1,400	2,060	5,940	5,140	5,410	1,120	175	370	5,360	394	3,330
18	2,800	2,110	2,360	7,420	5,500	6,430	4,780	348	2,780	3,170	291	1,510
19	4,330	2,730	3,380	7,930	7,420	7,740	6,130	4,600	5,300	5,000	716	3,390
20	5,450	4,330	5,000	7,920	7,580	7,800	7,380	6,130	6,810	5,020	159	2,030
21	5,540	5,350	5,490	7,780	7,560	7,650	7,830	185	6,000	2,910	160	817
22	5,530	5,400	5,470	7,670	7,380	7,500	325	160	191	3,640	174	1,310
23	5,750	5,210	5,390	8,580	4,780	5,990	5,850	185	3,180	4,590	3,640	4,400
24	9,210	5,750	7,650	5,410	1,210	3,910	6,250	5,800	6,050	6,290	4,430	5,740
25	9,540	6,860	9,000	7,840	3,290	6,870	6,560	5,890	6,300	6,120	2,540	5,760
26	8,850	6,400	8,480	7,900	7,160	7,550	6,470	528	3,390	6,310	5,490	5,960
27	8,790	6,640	8,100	8,200	7,380	8,040	4,170	588	1,680	6,820	5,960	6,550
28	7,750	2,850	5,880	8,000	2,440	6,800	5,580	4,170	5,100	7,150	6,630	6,980
29	4,240	645	1,390	6,490	2,460	5,220	5,800	5,430	5,670	7,260	6,980	7,100
30	5,270	578	3,480	6,300	4,740	5,860	5,980	786	3,740	7,270	6,840	7,070
31	4,710	4,030	4,340	---	---	---	3,860	410	1,440	6,950	2,210	4,930
Month	9,540	162	3,250	8,580	170	5,490	7,830	160	4,950	9,850	159	5,500

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, BOTTOM
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	3,040	450	1,550	3,040	197	1,440	4,440	170	2,760	146	138	141
2	5,660	2,600	5,190	2,780	184	534	5,010	194	2,730	146	136	140
3	6,570	5,660	6,130	210	179	195	432	155	196	150	135	140
4	7,090	6,390	6,700	3,620	208	2,030	194	155	168	147	138	142
5	7,120	6,930	7,050	3,620	332	1,780	3,900	165	1,950	171	140	150
6	7,520	6,770	7,300	3,230	161	651	257	157	174	151	141	145
7	7,640	6,950	7,390	167	157	161	169	151	161	157	143	147
8	7,590	6,660	7,470	176	152	162	165	152	158	156	141	148
9	7,400	6,780	7,170	3,250	157	1,510	169	155	159	164	141	146
10	7,050	826	4,280	178	137	148	172	152	160	194	140	146
11	2,620	1,050	1,830	158	146	150	172	143	155	193	136	143
12	1,790	233	879	161	143	147	151	141	145	189	135	139
13	1,820	183	1,150	157	142	149	171	141	148	151	134	142
14	1,260	161	243	152	131	140	159	138	144	139	133	137
15	4,840	158	1,800	148	127	141	162	138	143	147	137	142
16	5,710	180	2,880	202	128	152	150	138	141	148	139	144
17	212	156	173	195	133	150	144	138	141	160	135	142
18	3,130	162	1,270	165	137	155	145	137	141	146	136	140
19	2,790	168	829	168	151	158	145	139	141	151	136	140
20	2,210	170	362	166	152	159	146	139	141	150	134	139
21	1,810	167	398	165	150	158	160	138	146	179	134	140
22	197	162	175	526	156	174	157	138	143	144	134	138
23	208	163	173	587	137	196	150	134	139	162	133	139
24	199	169	179	177	154	162	136	122	126	144	135	140
25	191	171	179	181	157	168	126	120	123	148	135	139
26	204	176	187	235	157	172	133	126	130	157	136	140
27	1,490	169	236	637	175	291	140	131	135	145	135	140
28	196	167	180	303	180	223	140	135	137	201	136	144
29	211	166	190	358	178	221	143	136	139	140	133	137
30	---	---	---	241	135	177	144	138	142	143	137	140
31	---	---	---	214	169	188	---	---	---	143	137	140
Month	7,640	156	2,540	3,620	127	395	5,010	120	381	201	133	142

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, BOTTOM
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	146	137	141	2,960	1,330	2,720	1,970	174	1,220	224	161	204
2	151	136	143	3,060	2,680	2,940	---	---	---	202	165	186
3	153	138	145	3,060	2,720	2,950	173	144	159	1,440	196	449
4	154	144	148	2,920	2,420	2,770	182	152	166	1,790	368	1,300
5	161	144	152	2,700	368	1,960	515	165	186	1,820	241	973
6	188	140	156	2,080	292	1,250	222	192	208	1,840	179	495
7	154	139	145	2,020	153	449	219	184	196	2,120	158	564
8	154	140	145	2,100	156	320	193	163	180	175	158	168
9	163	140	148	2,530	172	1,560	187	147	170	188	174	181
10	164	150	157	2,500	158	698	166	146	155	2,840	179	898
11	192	150	162	183	154	166	---	---	---	1,870	160	708
12	197	149	160	182	147	159	---	---	---	214	155	191
13	178	135	158	159	147	152	201	190	198	2,100	188	971
14	180	144	165	179	155	166	237	187	213	3,380	2,090	2,580
15	167	144	158	201	171	180	446	184	260	3,740	3,380	3,630
16	161	151	156	195	159	179	211	147	180	3,660	796	2,400
17	186	157	175	194	163	179	159	139	150	877	161	278
18	224	164	186	---	---	---	172	155	162	183	162	177
19	198	145	164	---	---	---	198	160	181	203	151	182
20	203	170	184	---	---	---	213	181	195	226	183	212
21	198	175	185	---	---	---	234	133	196	196	171	180
22	193	172	185	---	---	---	178	131	160	198	154	180
23	230	163	171	---	---	---	175	127	153	242	180	215
24	245	165	201	188	139	161	162	130	155	237	151	199
25	226	179	199	151	139	147	2,860	154	407	190	148	165
26	1,070	182	226	140	133	136	4,070	2,860	3,690	192	128	148
27	1,980	1,070	1,630	148	138	143	3,940	348	1,190	1,840	147	1,110
28	2,070	996	1,920	167	138	149	2,240	637	1,460	2,210	1,740	1,890
29	2,520	839	2,250	188	166	181	2,220	762	1,770	2,090	1,010	1,680
30	2,420	1,220	2,130	1,130	184	432	2,460	1,300	1,980	3,020	1,060	2,140
31	---	---	---	1,970	885	1,720	2,250	213	1,560	---	---	---
Month	2,520	135	408	---	---	---	---	---	---	3,740	128	822

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP
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	7.2	7.0	7.1	7.1	7.0	7.1	7.4	7.1	7.3	7.2	7.1	7.1
2	7.2	7.0	7.2	7.3	6.9	7.1	7.4	7.3	7.3	7.2	7.1	7.1
3	7.1	7.0	7.0	7.3	7.1	7.1	7.5	7.2	7.3	7.2	7.1	7.1
4	7.2	6.9	7.0	7.2	7.1	7.1	7.5	7.3	7.4	7.2	7.0	7.1
5	7.2	7.0	7.1	7.2	7.0	7.2	7.5	7.2	7.4	7.2	7.0	7.1
6	7.5	7.0	7.0	7.3	7.1	7.2	7.5	7.2	7.4	7.1	7.1	7.1
7	7.3	6.9	7.0	7.3	7.1	7.3	7.4	7.3	7.4	7.1	7.0	7.1
8	7.3	6.8	6.9	7.3	7.2	7.2	7.6	7.2	7.4	7.2	7.0	7.1
9	7.4	6.9	7.1	7.3	7.2	7.2	7.5	7.3	7.4	7.5	7.0	7.1
10	7.4	6.9	7.0	7.4	7.0	7.2	7.4	7.2	7.4	7.4	7.1	7.2
11	7.2	6.8	7.0	7.3	7.2	7.3	7.4	7.2	7.3	7.4	7.2	7.2
12	7.2	6.9	7.0	7.4	7.1	7.3	7.4	7.0	7.3	7.5	7.2	7.3
13	7.0	6.8	7.0	7.5	7.2	7.3	7.4	7.2	7.3	7.3	7.1	7.2
14	7.1	6.9	7.0	7.5	7.2	7.4	7.4	7.1	7.3	7.3	7.0	7.2
15	7.0	6.8	6.9	7.4	7.0	7.3	7.4	7.3	7.4	7.3	7.1	7.2
16	7.0	6.9	7.0	7.3	7.1	7.2	7.4	7.3	7.3	7.3	7.1	7.2
17	7.0	6.8	6.9	7.3	7.0	7.2	7.3	7.2	7.3	7.3	7.0	7.2
18	7.0	6.8	6.9	7.3	7.0	7.2	7.3	7.2	7.2	7.3	7.0	7.0
19	7.2	7.0	7.0	7.2	7.0	7.2	7.4	7.2	7.3	7.1	7.0	7.0
20	7.1	6.8	6.9	7.2	7.0	7.2	7.3	7.2	7.3	7.1	7.0	7.0
21	7.2	6.8	7.1	7.4	7.1	7.2	7.3	7.2	7.3	7.1	7.0	7.0
22	7.2	7.0	7.1	7.4	7.2	7.3	7.4	7.3	7.3	7.2	7.0	7.1
23	7.2	6.9	7.1	7.4	7.2	7.4	7.4	7.3	7.3	7.2	7.1	7.1
24	7.1	6.8	6.9	7.4	7.3	7.4	7.5	7.2	7.4	7.2	7.1	7.1
25	7.1	6.8	7.0	7.3	7.2	7.3	7.5	7.2	7.4	7.2	7.1	7.2
26	7.1	7.0	7.0	7.4	7.1	7.3	7.4	7.2	7.4	7.4	7.0	7.1
27	7.1	6.9	7.0	7.5	7.2	7.3	7.4	7.3	7.3	7.3	7.1	7.2
28	7.0	6.9	7.0	7.4	7.2	7.3	7.4	7.1	7.3	7.2	7.1	7.2
29	7.0	6.9	6.9	7.4	7.2	7.3	7.3	7.1	7.2	7.5	7.0	7.2
30	7.1	6.8	7.0	7.4	7.2	7.3	7.4	7.1	7.2	7.5	7.2	7.3
31	7.2	7.1	7.1	---	---	---	7.2	7.1	7.1	7.4	7.1	7.4
Max	7.5	7.1	7.2	7.5	7.3	7.4	7.6	7.3	7.4	7.5	7.2	7.4
Min	7.0	6.8	6.9	7.1	6.9	7.1	7.2	7.0	7.1	7.1	7.0	7.0

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP
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	7.4	7.3	7.3	7.0	7.0	7.0	6.9	6.8	6.8	6.4	6.4	6.4
2	7.3	7.2	7.3	7.0	6.9	6.9	7.1	6.7	6.9	6.5	6.4	6.4
3	7.3	7.2	7.2	6.9	6.9	6.9	6.8	6.7	6.7	6.5	6.4	6.4
4	7.2	7.2	7.2	7.0	6.9	6.9	7.0	6.7	6.8	6.4	6.4	6.4
5	7.4	7.0	7.2	7.0	6.9	7.0	7.0	6.9	6.9	6.6	6.4	6.5
6	7.3	7.1	7.3	7.0	6.9	6.9	7.0	6.8	6.9	6.5	6.5	6.5
7	7.4	7.1	7.3	6.9	6.8	6.9	6.9	6.8	6.8	6.5	6.4	6.5
8	7.4	7.1	7.3	6.9	6.8	6.8	6.8	6.7	6.8	6.7	6.5	6.6
9	7.4	7.1	7.3	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.7	6.7
10	7.4	7.1	7.2	6.9	6.7	6.8	6.8	6.8	6.8	6.8	6.7	6.7
11	7.3	7.1	7.2	6.8	6.7	6.7	6.8	6.7	6.8	6.8	6.6	6.7
12	7.2	7.0	7.1	6.7	6.7	6.7	6.8	6.6	6.7	6.8	6.6	6.6
13	7.2	7.1	7.2	6.7	6.6	6.7	6.8	6.7	6.7	6.7	6.6	6.6
14	7.2	7.1	7.2	6.7	6.6	6.6	6.8	6.7	6.8	6.6	6.6	6.6
15	7.1	7.1	7.1	6.6	6.5	6.6	6.9	6.8	6.8	6.7	6.6	6.7
16	7.2	7.0	7.1	6.7	6.4	6.5	6.8	6.8	6.8	6.7	6.7	6.7
17	7.2	7.0	7.1	6.7	6.4	6.5	6.8	6.8	6.8	6.8	6.7	6.7
18	7.1	7.0	7.1	6.6	6.5	6.6	6.8	6.8	6.8	6.7	6.6	6.7
19	7.2	7.0	7.1	6.7	6.5	6.6	6.8	6.8	6.8	6.8	6.7	6.7
20	7.2	7.0	7.1	6.8	6.7	6.7	6.9	6.8	6.8	6.8	6.7	6.7
21	7.2	7.0	7.1	6.8	6.7	6.7	6.9	6.8	6.8	6.8	6.7	6.7
22	7.0	7.0	7.0	6.9	6.7	6.8	6.8	6.7	6.8	6.7	6.7	6.7
23	7.0	6.9	6.9	6.9	6.7	6.8	6.7	6.5	6.6	6.7	6.6	6.7
24	7.0	6.9	6.9	6.8	6.7	6.7	6.5	6.3	6.4	6.7	6.6	6.7
25	6.9	6.9	6.9	6.8	6.7	6.7	6.3	6.3	6.3	6.7	6.6	6.7
26	6.9	6.9	6.9	6.8	6.7	6.7	6.4	6.3	6.3	6.7	6.6	6.7
27	7.0	6.9	6.9	6.8	6.7	6.8	6.4	6.3	6.3	6.7	6.7	6.7
28	7.0	6.9	6.9	6.9	6.8	6.8	6.4	6.4	6.4	6.8	6.7	6.7
29	7.0	6.9	7.0	6.9	6.8	6.9	6.4	6.3	6.4	6.7	6.6	6.6
30	---	---	---	6.9	6.8	6.8	6.4	6.3	6.4	6.6	6.6	6.6
31	---	---	---	6.9	6.8	6.8	---	---	---	6.6	6.6	6.6
Max	7.4	7.3	7.3	7.0	7.0	7.0	7.1	6.9	6.9	6.8	6.7	6.7
Min	6.9	6.9	6.9	6.6	6.4	6.5	6.3	6.3	6.3	6.4	6.4	6.4

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP
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	6.6	6.6	6.6	7.2	6.9	7.0	6.9	6.7	6.7	6.9	6.6	6.8
2	6.6	6.6	6.6	7.1	6.9	7.0	6.9	6.6	6.7	6.9	6.6	6.6
3	6.6	6.5	6.6	7.6	6.9	7.1	6.9	6.6	6.7	6.9	6.6	6.6
4	6.6	6.6	6.6	7.6	7.0	7.2	7.3	6.7	6.7	6.9	6.5	6.7
5	6.7	6.6	6.6	7.3	7.1	7.2	7.2	6.7	6.8	6.9	6.6	6.7
6	6.7	6.6	6.6	7.2	7.0	7.0	8.0	6.8	6.8	6.8	6.6	6.7
7	6.7	6.6	6.6	7.2	7.0	7.0	7.6	6.7	6.9	6.7	6.5	6.6
8	6.7	6.6	6.7	7.2	7.0	7.1	7.0	6.8	6.8	6.6	6.4	6.5
9	6.7	6.5	6.6	7.1	7.0	7.0	7.0	6.8	6.8	6.6	6.5	6.5
10	6.7	6.6	6.6	7.1	7.0	7.0	6.9	6.8	6.8	6.6	6.5	6.5
11	6.9	6.6	6.7	7.1	6.9	7.0	7.0	6.8	6.8	6.6	6.4	6.5
12	7.0	6.6	6.7	7.0	6.9	6.9	7.1	6.7	6.8	6.6	6.4	6.5
13	6.9	6.6	6.7	7.1	6.8	6.9	6.9	6.7	6.8	6.7	6.5	6.5
14	6.8	6.6	6.7	7.1	6.8	6.9	6.9	6.7	6.8	7.0	6.5	6.6
15	6.9	6.6	6.7	7.3	6.9	7.0	7.2	6.7	6.8	6.8	6.4	6.7
16	7.0	6.7	6.7	7.2	6.9	7.0	6.8	6.7	6.7	7.0	6.7	6.8
17	6.9	6.7	6.8	7.3	6.9	7.0	6.8	6.6	6.7	6.7	6.6	6.6
18	6.9	6.7	6.8	---	---	---	6.8	6.6	6.7	6.7	6.6	6.6
19	7.2	6.6	6.7	---	---	---	7.0	6.7	6.7	6.8	6.6	6.7
20	7.5	6.7	6.8	---	---	---	6.9	6.7	6.7	6.8	6.8	6.8
21	7.1	6.8	6.9	---	---	---	7.0	6.6	6.8	6.8	6.7	6.8
22	7.4	6.8	6.9	---	---	---	6.9	6.7	6.8	6.8	6.7	6.8
23	7.1	6.8	6.8	---	---	---	6.9	6.6	6.8	6.9	6.8	6.8
24	7.0	6.8	6.9	6.9	6.8	6.8	6.9	6.6	6.7	6.9	6.8	6.8
25	7.6	6.9	7.0	6.9	6.8	6.8	6.9	6.7	6.7	6.9	6.8	6.9
26	7.5	6.8	7.0	6.8	6.6	6.7	6.9	6.5	6.8	7.0	6.8	6.9
27	7.4	6.8	7.0	6.8	6.6	6.7	6.9	6.6	6.8	7.1	6.8	7.0
28	7.4	6.9	7.1	7.0	6.6	6.7	6.9	6.5	6.8	7.2	7.0	7.2
29	7.4	6.9	7.0	7.2	6.7	6.9	---	---	---	7.3	7.0	7.1
30	7.2	6.9	7.0	7.1	6.7	6.8	7.0	6.6	6.7	7.2	6.9	7.0
31	---	---	---	6.9	6.7	6.8	6.9	6.6	6.7	---	---	---
Max	7.6	6.9	7.1	---	---	---	---	---	---	7.3	7.0	7.2
Min	6.6	6.5	6.6	---	---	---	---	---	---	6.6	6.4	6.5

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM
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	7.1	6.9	7.0	7.0	6.9	6.9	7.2	7.0	7.1	7.0	6.8	6.9
2	7.1	6.9	7.0	7.3	6.9	7.0	7.2	7.0	7.0	7.1	6.9	6.9
3	7.1	6.9	7.0	7.3	7.0	7.1	7.5	7.1	7.2	7.1	6.8	6.9
4	7.1	6.9	7.0	7.2	7.0	7.2	7.3	7.1	7.2	7.2	6.7	6.9
5	7.2	6.9	7.1	7.2	7.2	7.2	7.3	7.1	7.2	7.3	7.1	7.2
6	7.1	6.9	7.0	7.2	7.1	7.2	7.3	7.2	7.2	7.3	7.2	7.2
7	7.0	6.9	7.0	7.2	7.1	7.2	7.2	7.1	7.2	7.2	7.1	7.1
8	7.0	6.8	6.9	7.2	7.1	7.1	7.3	7.1	7.2	7.2	6.9	7.1
9	6.9	6.8	6.9	7.1	7.0	7.0	7.2	7.2	7.2	7.0	6.8	6.9
10	6.8	6.7	6.8	7.0	7.0	7.0	7.2	7.1	7.2	6.9	6.8	6.8
11	6.8	6.7	6.7	7.0	6.9	7.0	7.1	7.1	7.1	6.9	6.8	6.8
12	6.8	6.7	6.7	7.4	6.9	7.1	7.1	6.9	7.0	7.0	6.8	6.8
13	7.0	6.7	6.8	7.3	7.2	7.3	7.1	6.9	6.9	6.8	6.5	6.7
14	7.0	7.0	7.0	7.3	7.2	7.2	7.2	6.9	7.1	7.0	6.5	6.6
15	7.0	6.8	6.9	7.3	7.1	7.2	7.4	7.1	7.3	6.7	6.5	6.6
16	7.0	6.8	6.8	7.2	7.1	7.1	7.4	7.1	7.3	6.8	6.5	6.5
17	6.8	6.8	6.8	7.3	7.0	7.1	7.3	7.0	7.2	6.7	6.5	6.5
18	7.0	6.8	6.9	7.3	7.2	7.3	7.4	7.1	7.3	6.8	6.5	6.7
19	7.0	6.9	7.0	7.2	7.1	7.1	7.4	7.3	7.4	6.9	6.8	6.8
20	6.9	6.8	6.8	7.1	7.0	7.1	7.5	7.4	7.4	6.9	6.7	6.8
21	6.8	6.8	6.8	7.2	7.1	7.1	7.4	7.2	7.3	6.9	6.7	6.8
22	6.8	6.7	6.8	7.2	7.1	7.2	7.4	7.2	7.2	7.0	6.8	6.9
23	6.9	6.8	6.8	7.1	7.0	7.0	7.3	7.1	7.2	7.1	7.0	7.1
24	6.8	6.7	6.8	7.2	7.0	7.0	7.4	7.3	7.3	7.2	7.1	7.1
25	6.7	6.6	6.6	7.2	6.8	7.1	7.3	7.2	7.3	7.1	7.0	7.1
26	6.7	6.6	6.6	7.2	7.1	7.2	7.2	7.0	7.1	7.2	7.0	7.0
27	6.7	6.6	6.6	7.2	7.2	7.2	7.2	7.0	7.0	7.3	7.1	7.2
28	6.8	6.6	6.7	7.2	7.1	7.2	7.2	7.1	7.2	7.2	7.1	7.1
29	7.0	6.7	6.9	7.2	7.1	7.1	7.2	7.1	7.1	7.3	7.1	7.1
30	7.0	6.7	6.9	7.1	7.0	7.1	7.1	6.9	7.1	7.3	7.2	7.3
31	7.0	6.9	7.0	---	---	---	6.9	6.8	6.8	7.3	7.2	7.2
Max	7.2	7.0	7.1	7.4	7.2	7.3	7.5	7.4	7.4	7.3	7.2	7.3
Min	6.7	6.6	6.6	7.0	6.8	6.9	6.9	6.8	6.8	6.7	6.5	6.5

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM
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	7.4	7.1	7.2	7.2	6.9	7.0	7.4	7.0	7.3	6.0	6.0	6.0
2	7.2	7.1	7.1	7.1	6.8	6.9	7.5	7.1	7.4	6.0	6.0	6.0
3	7.1	7.0	7.1	6.9	6.8	6.9	7.2	7.1	7.2	6.1	5.9	6.0
4	7.1	7.0	7.0	7.2	6.9	7.0	7.3	7.1	7.2	6.0	5.9	5.9
5	7.0	7.0	7.0	7.3	6.9	7.0	7.3	7.1	7.2	6.6	5.9	6.3
6	7.0	6.9	7.0	7.0	6.8	6.8	7.2	7.1	7.1	6.6	6.4	6.6
7	7.1	6.9	7.0	6.9	6.8	6.9	7.1	7.0	7.1	6.4	6.4	6.4
8	7.1	7.0	7.0	6.9	6.8	6.8	7.1	7.0	7.0	6.6	6.4	6.6
9	7.0	6.9	7.0	7.2	6.8	7.0	7.0	6.9	7.0	6.8	6.6	6.7
10	7.1	6.9	7.0	6.9	6.8	6.8	7.0	6.9	6.9	6.9	6.7	6.8
11	7.2	7.0	7.1	6.8	6.7	6.7	6.9	6.8	6.9	6.9	6.7	6.7
12	7.0	6.9	7.0	6.7	6.6	6.7	6.9	6.8	6.8	6.9	6.6	6.7
13	7.1	6.8	6.9	6.7	6.7	6.7	7.0	6.8	6.9	6.7	6.6	6.7
14	7.0	6.8	6.9	6.7	6.6	6.7	6.9	6.9	6.9	6.7	6.7	6.7
15	7.1	6.8	6.9	6.7	6.6	6.6	6.9	6.8	6.8	6.7	6.7	6.7
16	7.2	7.0	7.1	6.9	6.6	6.7	6.8	6.8	6.8	6.8	6.7	6.7
17	7.0	6.9	7.0	6.9	6.6	6.7	6.8	6.8	6.8	6.8	6.7	6.8
18	7.1	6.8	7.0	6.8	6.7	6.7	6.8	6.7	6.7	6.8	6.7	6.7
19	7.1	6.9	7.0	6.9	6.7	6.8	6.8	6.7	6.8	6.8	6.7	6.8
20	7.1	6.9	7.0	7.0	6.9	6.9	6.8	6.8	6.8	6.7	6.6	6.7
21	7.0	6.8	7.0	6.9	6.8	6.9	6.8	6.6	6.7	6.8	6.6	6.7
22	6.9	6.8	6.9	7.0	6.9	7.0	6.7	6.5	6.6	6.7	6.6	6.6
23	6.9	6.7	6.8	7.1	6.8	6.9	6.5	6.3	6.4	6.7	6.6	6.6
24	6.9	6.8	6.8	7.0	6.9	6.9	6.3	6.0	6.2	6.6	6.6	6.6
25	6.8	6.8	6.8	7.0	6.9	6.9	6.1	6.0	6.0	6.6	6.6	6.6
26	6.8	6.8	6.8	7.0	6.9	6.9	6.1	6.0	6.1	6.7	6.6	6.6
27	6.9	6.8	6.8	7.2	6.9	7.0	6.1	6.0	6.1	6.6	6.6	6.6
28	6.9	6.8	6.9	7.2	7.0	7.1	6.0	6.0	6.0	6.8	6.6	6.6
29	7.0	6.8	6.9	7.2	7.1	7.2	6.0	6.0	6.0	6.6	6.5	6.5
30	---	---	---	7.2	7.0	7.1	6.1	6.0	6.0	6.5	6.5	6.5
31	---	---	---	7.2	7.1	7.1	---	---	---	6.5	6.5	6.5
Max	7.4	7.1	7.2	7.3	7.1	7.2	7.5	7.1	7.4	6.9	6.7	6.8
Min	6.8	6.7	6.8	6.7	6.6	6.6	6.0	6.0	6.0	6.0	5.9	5.9

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM
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	6.5	6.5	6.5	6.6	6.4	6.4	---	---	---	7.0	6.6	6.9
2	6.5	6.5	6.5	6.4	6.3	6.4	---	---	---	6.8	6.7	6.8
3	6.5	6.4	6.5	6.6	6.3	6.4	7.1	6.9	7.0	6.7	6.6	6.7
4	6.6	6.5	6.5	6.6	6.5	6.5	7.1	7.0	7.1	6.8	6.6	6.6
5	6.6	6.5	6.6	7.0	6.5	6.6	7.1	6.9	7.0	6.9	6.5	6.7
6	6.7	6.5	6.6	7.0	6.6	6.7	7.1	7.0	7.1	7.0	6.7	6.8
7	6.6	6.5	6.6	7.0	6.6	6.9	7.2	6.9	7.1	6.8	6.6	6.7
8	6.6	6.6	6.6	7.0	6.7	6.9	7.2	7.0	7.1	6.7	6.5	6.6
9	6.7	6.5	6.6	7.0	6.6	6.7	7.1	7.0	7.0	6.6	6.5	6.5
10	6.8	6.6	6.7	7.0	6.6	6.9	7.1	7.0	7.0	6.8	6.4	6.5
11	6.9	6.7	6.8	6.9	6.8	6.9	---	---	---	6.8	6.4	6.6
12	6.9	6.7	6.8	6.9	6.8	6.8	---	---	---	6.7	6.6	6.6
13	6.9	6.7	6.8	6.9	6.7	6.8	7.0	6.9	7.0	6.6	6.4	6.6
14	6.8	6.7	6.8	6.8	6.7	6.8	7.1	6.9	7.0	6.6	6.5	6.5
15	6.7	6.6	6.6	7.0	6.7	6.7	7.1	6.6	6.8	6.6	6.4	6.5
16	6.7	6.6	6.6	7.0	6.7	6.8	6.9	6.7	6.8	6.8	6.4	6.5
17	6.7	6.6	6.7	6.8	6.7	6.8	6.8	6.6	6.7	6.8	6.7	6.7
18	6.8	6.6	6.7	---	---	---	6.8	6.7	6.8	6.9	6.6	6.7
19	6.7	6.6	6.7	---	---	---	6.8	6.7	6.8	7.0	6.7	6.8
20	7.0	6.7	6.8	---	---	---	6.9	6.7	6.8	6.8	6.7	6.8
21	6.9	6.8	6.8	---	---	---	7.0	6.7	6.9	6.8	6.7	6.7
22	6.9	6.7	6.8	---	---	---	6.9	6.7	6.8	6.7	6.7	6.7
23	6.9	6.7	6.7	---	---	---	6.9	6.7	6.8	7.2	6.7	6.8
24	6.9	6.7	6.8	7.0	6.9	6.9	6.8	6.6	6.7	7.2	7.0	7.1
25	6.8	6.6	6.7	7.2	6.9	6.9	6.8	6.5	6.7	7.2	7.0	7.1
26	6.7	6.4	6.6	7.2	7.1	7.1	6.5	6.4	6.5	7.1	7.0	7.0
27	6.5	6.4	6.5	7.2	7.0	7.1	7.0	6.4	6.8	7.4	7.0	7.4
28	6.7	6.4	6.5	7.2	7.0	7.1	6.8	6.6	6.7	7.4	7.3	7.4
29	6.9	6.4	6.4	7.1	6.9	7.0	6.8	6.6	6.7	7.3	7.0	7.2
30	6.6	6.4	6.4	7.2	6.7	6.9	6.8	6.6	6.7	7.1	7.0	7.0
31	---	---	---	6.8	6.6	6.7	7.0	6.6	6.7	---	---	---
Max	7.0	6.8	6.8	---	---	---	---	---	---	7.4	7.3	7.4
Min	6.5	6.4	6.4	---	---	---	---	---	---	6.6	6.4	6.5

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP
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	24.8	24.0	24.4	20.1	19.9	20.0	12.4	11.6	11.9	10.9	10.3	10.6
2	25.0	24.0	24.5	20.1	18.7	19.2	11.8	11.2	11.5	10.3	8.3	9.4
3	25.4	24.2	24.9	18.9	18.4	18.6	12.3	10.6	11.7	8.5	7.2	7.6
4	26.0	25.2	25.5	18.5	17.4	17.9	11.6	10.5	10.8	7.4	7.0	7.2
5	26.0	25.4	25.7	17.5	16.8	17.1	10.6	9.8	10.2	7.5	6.6	7.2
6	27.0	25.5	25.8	17.0	16.1	16.7	10.4	9.4	9.7	8.5	7.5	7.9
7	26.5	25.8	25.9	16.4	15.6	15.9	9.9	9.3	9.6	8.2	7.6	7.9
8	26.7	25.6	26.0	15.7	14.8	15.0	10.0	7.8	9.4	8.1	7.3	7.6
9	27.3	25.3	26.3	14.9	14.5	14.7	10.6	9.5	10.1	8.3	7.5	7.8
10	27.1	25.3	25.8	15.1	13.9	14.4	11.3	8.8	10.4	8.6	7.6	8.0
11	26.3	25.4	25.6	13.9	13.2	13.7	11.2	9.2	10.5	9.9	8.3	9.1
12	25.5	24.1	24.5	14.2	12.5	13.5	11.5	9.6	10.8	9.9	9.2	9.6
13	24.6	22.8	23.6	14.4	12.7	13.3	11.9	10.8	11.4	9.6	9.3	9.4
14	23.5	22.2	22.9	15.0	12.8	14.1	12.0	11.0	11.4	10.0	9.5	9.7
15	23.4	22.7	23.0	14.7	13.3	14.0	12.0	10.9	11.3	9.6	8.9	9.3
16	23.3	22.7	23.0	13.4	12.5	13.1	11.7	10.9	11.4	9.3	8.3	8.7
17	23.3	22.8	23.0	12.7	11.9	12.4	11.1	10.2	10.6	8.9	8.3	8.7
18	23.8	22.3	23.1	13.0	12.3	12.7	10.4	9.4	10.1	9.1	8.7	8.9
19	24.0	22.3	23.1	12.9	12.4	12.8	10.7	10.1	10.4	8.9	8.6	8.8
20	23.8	22.8	23.3	13.3	12.2	12.9	10.6	10.2	10.4	8.6	7.6	8.2
21	23.8	22.6	23.2	13.8	12.2	13.0	10.2	9.3	9.9	7.6	6.6	6.9
22	23.4	22.7	23.0	14.2	13.1	13.6	9.7	9.2	9.4	6.9	6.2	6.5
23	23.6	22.5	23.0	13.6	12.8	13.3	10.3	9.4	9.8	7.1	6.4	6.7
24	23.4	22.6	23.0	12.9	12.0	12.3	10.3	9.6	9.9	7.2	6.6	6.9
25	23.6	22.8	23.1	13.0	12.0	12.3	9.9	9.5	9.7	6.8	6.3	6.5
26	23.2	22.7	23.0	12.6	11.8	12.2	9.7	9.3	9.4	6.6	5.9	6.2
27	23.1	22.6	22.8	13.2	11.1	12.3	9.5	8.9	9.2	6.2	5.7	6.0
28	22.8	21.2	22.2	13.1	12.6	12.7	9.8	9.1	9.3	6.3	5.5	5.9
29	21.2	19.8	20.3	12.9	12.4	12.6	10.7	9.5	9.9	6.4	5.7	6.0
30	20.3	19.7	20.0	12.7	12.1	12.4	10.8	9.9	10.4	7.7	6.2	6.7
31	21.2	19.7	20.1	---	---	---	11.0	10.5	10.7	7.2	6.5	6.7
Month	27.3	19.7	23.7	20.1	11.1	14.3	12.4	7.8	10.4	10.9	5.5	7.8

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP
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	8.0	6.7	7.2	10.2	8.7	9.3	15.3	13.9	14.5	19.2	18.8	19.0
2	8.1	7.0	7.4	10.3	9.1	9.6	16.0	12.7	15.1	19.4	18.6	18.9
3	8.0	7.1	7.4	10.8	9.4	10.1	15.3	14.7	15.0	20.1	18.9	19.4
4	8.7	7.6	8.1	11.5	10.0	10.7	16.2	14.7	15.4	20.5	19.6	19.9
5	10.0	8.2	9.0	13.0	11.3	11.8	16.1	15.7	15.9	20.6	19.9	20.1
6	11.5	9.3	10.3	13.0	11.6	12.1	15.8	15.4	15.6	20.7	19.9	20.2
7	11.7	10.7	11.1	12.2	11.8	12.0	15.5	14.7	15.1	21.6	20.5	21.0
8	11.6	10.8	11.0	13.1	12.1	12.6	14.8	14.3	14.5	21.2	20.8	21.1
9	11.4	10.6	11.0	13.2	11.5	12.3	14.6	14.2	14.4	22.1	20.8	21.3
10	11.3	10.3	10.9	13.1	11.9	12.4	15.9	14.4	14.8	21.7	21.1	21.4
11	11.0	9.9	10.4	14.0	12.5	12.9	16.7	15.3	16.0	21.2	20.3	20.7
12	10.9	9.6	10.2	13.7	12.6	13.0	17.1	15.9	16.5	20.5	18.7	19.7
13	12.2	10.7	11.4	13.4	12.4	12.9	17.5	16.6	16.9	19.4	18.4	18.8
14	12.0	11.2	11.6	13.4	12.5	13.0	16.8	15.6	16.2	19.8	18.6	19.3
15	11.8	10.9	11.3	14.4	13.0	13.3	16.1	15.3	15.6	20.3	19.3	19.7
16	11.5	10.8	11.1	13.9	13.3	13.7	15.9	15.2	15.6	20.8	19.8	20.1
17	10.9	10.3	10.6	13.7	12.9	13.2	16.0	15.2	15.5	20.8	20.0	20.3
18	11.7	10.8	11.3	13.7	12.7	13.2	16.7	15.5	15.9	20.8	20.0	20.4
19	11.8	11.1	11.4	14.6	13.1	13.8	17.0	16.2	16.5	21.4	20.4	20.8
20	11.5	10.7	11.1	15.2	14.5	14.8	17.1	16.6	16.8	21.7	20.9	21.2
21	11.2	10.1	10.6	16.0	14.1	14.7	17.1	16.5	16.7	21.6	21.1	21.3
22	10.3	9.9	10.1	15.4	13.9	14.5	17.6	16.7	17.1	21.6	20.8	21.1
23	10.2	9.8	10.0	15.2	14.3	14.6	18.2	17.1	17.5	21.3	20.6	20.9
24	10.5	9.7	10.1	14.8	13.8	14.3	18.6	17.5	18.0	21.0	20.5	20.7
25	11.3	9.9	10.3	14.8	13.0	13.7	19.1	18.1	18.6	21.2	20.2	20.7
26	10.7	10.0	10.3	14.6	13.0	13.6	19.7	18.4	19.0	21.7	20.6	21.1
27	10.5	9.3	10	15.2	13.6	14.3	19.8	19.3	19.5	22.3	21.0	21.6
28	9.5	8.9	9.1	16.1	14.7	15.3	19.7	19.4	19.5	21.9	21.1	21.6
29	9.3	8.3	8.9	16.0	14.5	15.2	19.6	19.3	19.5	21.4	20.3	20.9
30	---	---	---	14.8	13.3	14.0	19.3	18.8	19.0	22.0	21.0	21.5
31	---	---	---	14.2	13.4	13.8	---	---	---	22.8	21.7	22.2
Month	12.2	6.7	10.1	16.1	8.7	13.1	19.8	12.7	16.5	22.8	18.4	20.5

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS, TOP
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	23.7	22.5	23.0	29.8	28.8	29.2	30.7	29.8	30.0	28.8	27.9	28.4
2	24.1	23.2	23.5	30.1	28.8	29.3	31.6	30.0	30.5	29.0	27.6	28.1
3	24.6	23.4	23.9	29.8	28.4	29.1	31.5	30.1	30.6	29.2	27.9	28.2
4	25.8	23.4	24.3	30.3	28.3	28.9	32.4	30.6	30.9	28.9	27.8	28.1
5	26.2	24.5	24.9	29.8	28.6	29.2	32.1	30.6	30.8	28.8	27.8	28.1
6	26.7	25.7	26.0	29.3	28.4	28.9	32.5	30.7	31.3	28.1	26.6	27.4
7	27.5	26.5	26.9	29.3	28.5	29.0	32.0	30.7	31.1	27.5	26.4	27.0
8	28.2	27.0	27.3	29.1	28.2	28.7	31.1	30.4	30.7	28.6	27.4	27.7
9	28.4	27.5	27.7	28.6	27.9	28.2	31.1	30.1	30.5	28.6	27.7	28.0
10	29.8	28.2	28.9	28.3	27.8	28.0	30.4	29.8	30.1	27.9	27.5	27.7
11	30.2	28.8	29.1	28.0	27.4	27.7	30.1	29.4	29.7	27.9	27.2	27.5
12	29.6	28.3	28.8	28.0	27.2	27.5	30.6	29.2	29.6	28.4	27.1	27.4
13	29.4	28.2	28.5	29.3	27.5	28.0	29.6	28.7	29.1	28.6	27.3	27.6
14	30.1	28.4	28.8	28.5	27.6	27.9	29.5	28.2	28.6	29.0	27.0	28.0
15	29.4	28.0	28.5	28.8	27.9	28.3	29.9	28.1	28.4	28.4	27.4	27.8
16	30.5	28.2	28.9	29.3	27.7	28.4	28.6	28.0	28.3	28.5	27.4	27.9
17	29.6	28.2	28.8	29.6	27.7	28.4	28.7	27.9	28.2	27.4	26.6	26.8
18	29.4	28.1	28.7	---	---	---	28.8	27.7	28.1	26.7	26.0	26.3
19	29.4	28.1	28.5	---	---	---	29.3	27.8	28.1	26.2	25.3	25.7
20	29.7	28.1	28.5	---	---	---	28.8	27.9	28.3	25.6	24.5	24.8
21	28.3	27.7	28.0	---	---	---	28.8	28.0	28.3	24.7	24.3	24.5
22	29.4	27.6	28.0	---	---	---	28.5	27.4	27.9	24.6	24.2	24.4
23	29.1	27.7	28.0	---	---	---	28.5	27.4	27.9	24.4	23.6	24.0
24	28.6	27.8	28.1	29.6	28.8	29.1	28.8	27.9	28.2	23.7	22.3	23.1
25	29.8	28.3	28.7	29.5	28.8	29.1	28.9	28.0	28.3	22.3	21.6	21.9
26	30.3	28.2	28.9	29.4	28.1	28.6	28.6	27.7	28.2	23.3	21.8	22.3
27	30.3	28.2	28.9	29.4	28.6	29.0	28.1	27.4	27.9	23.1	21.1	21.8
28	30.7	28.6	29.4	30.1	28.7	28.8	28.2	27.3	27.8	22.1	21.1	21.4
29	30.2	28.7	29.2	30.6	29.1	29.8	---	---	---	24.5	21.5	22.8
30	30.0	28.5	29.2	30.8	29.0	29.8	29.0	27.0	27.9	24.1	21.7	23.1
31	---	---	---	30.6	29.3	29.6	28.8	28.0	28.2	---	---	---
Month	30.7	22.5	27.7	---	---	---	---	---	---	29.2	21.1	25.9

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM
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	24.6	23.9	24.2	20.0	18.8	19.8	12.0	11.6	11.8	10.5	10.4	10.5
2	24.4	23.6	24.0	19.7	18.4	19.1	12.0	11.3	11.9	10.6	9.5	10.3
3	24.7	24.0	24.6	18.8	18.1	18.4	11.6	10.4	10.8	10.5	7.4	9.4
4	25.5	24.7	25.0	18.3	16.8	17.4	11.0	10.6	10.8	10.3	6.6	9.1
5	25.8	25.0	25.4	16.9	16.7	16.8	11.0	9.3	10.4	6.8	6.6	6.7
6	25.8	25.4	25.6	16.9	16.6	16.7	10.2	9.3	9.5	6.9	6.6	6.7
7	25.8	25.5	25.6	16.8	16.6	16.7	9.8	9.6	9.7	7.3	6.8	7.1
8	25.8	24.9	25.4	16.9	16.7	16.8	9.7	7.6	8.6	7.5	7.3	7.4
9	25.1	24.9	25.0	16.8	16.7	16.8	8.0	7.7	7.9	7.7	7.5	7.6
10	25.3	25.0	25.1	16.7	16.1	16.3	8.4	8.0	8.2	8.0	7.7	7.8
11	25.5	25.1	25.2	16.2	16.0	16.1	8.6	8.3	8.5	8.6	8.0	8.2
12	25.5	25.2	25.3	16.2	12.0	14.1	9.1	8.5	8.8	9.2	8.4	8.8
13	25.3	22.0	23.8	12.6	12.0	12.4	10.3	9.1	9.5	9.4	8.9	9.1
14	22.4	21.7	21.9	12.8	12.6	12.7	10.3	9.7	10.1	9.4	9.1	9.2
15	23.1	22.0	22.5	13.4	12.8	13.0	11.1	10.3	10.8	9.5	9.3	9.4
16	23.2	22.3	22.4	13.4	13.3	13.4	11.6	10.9	11.3	9.5	9.4	9.5
17	22.5	22.0	22.0	13.6	12.1	13.2	11.1	10.2	10.5	9.6	8.8	9.3
18	22.1	21.8	21.9	12.2	11.8	12.0	10.2	9.7	9.9	8.9	8.0	8.8
19	22.5	22.0	22.3	11.9	11.8	11.8	9.8	9.4	9.6	8.7	7.5	7.9
20	22.7	22.5	22.6	12.0	11.9	11.9	9.5	9.4	9.4	8.2	7.6	8.0
21	22.7	22.6	22.6	12.2	12.0	12.1	9.7	9.3	9.5	8.0	6.4	7.1
22	22.6	22.6	22.6	12.5	12.2	12.3	9.5	9.1	9.3	7.4	6.1	6.5
23	22.6	22.4	22.5	13.2	12.5	13.0	9.6	9.2	9.4	6.4	5.9	6.0
24	22.6	22.4	22.5	13.2	12.5	13.0	9.8	9.2	9.4	6.0	5.7	5.8
25	22.7	22.6	22.7	13.2	11.5	12.1	10.0	9.7	9.9	6.4	5.9	6.1
26	22.7	22.7	22.7	11.6	11.1	11.4	10.0	9.2	9.6	6.3	5.9	6.1
27	22.9	22.7	22.8	11.2	10.8	10.9	9.3	8.9	9.1	6.0	5.7	5.8
28	22.9	22.4	22.8	12.5	11.0	11.4	9.3	9.2	9.2	5.9	5.8	5.9
29	22.4	19.7	20.5	12.4	11.6	11.9	9.4	9.3	9.3	6.0	5.6	5.9
30	21.4	19.6	20.5	12.1	11.6	11.8	10.6	9.4	9.8	6.0	5.6	5.8
31	20.4	19.7	20.0	---	---	---	10.6	10.3	10.5	6.6	5.9	6.3
Month	25.8	19.6	23.3	20.0	10.8	14.2	12.0	7.6	9.8	10.6	5.6	7.7

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM
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	7.6	6.6	6.9	9.0	8.6	8.8	14.3	12.0	12.7	19.2	18.7	19.0
2	7.7	6.9	7.5	9.9	8.9	9.4	15.7	12.3	13.8	19.1	18.5	18.8
3	8.0	7.7	8.0	10.7	9.3	9.9	15.5	14.9	15.1	19.8	18.8	19.3
4	8.1	8.0	8.1	10.4	9.4	9.8	16.1	14.9	15.4	20.0	19.6	19.7
5	8.3	8.1	8.1	11.7	10.1	10.9	16.1	14.1	15.0	20.3	19.9	20.0
6	8.9	8.3	8.5	12.4	10.4	11.7	15.8	15.4	15.6	20.6	19.8	20.1
7	10.2	8.8	9.7	12.3	11.7	12.0	15.4	14.6	15.0	21.4	20.4	20.9
8	10.5	10.1	10.2	13.2	12.3	12.8	14.7	14.2	14.5	21.1	20.8	21.0
9	10.7	10.2	10.4	12.9	12.2	12.7	14.6	14.1	14.3	21.5	20.8	21.1
10	11.1	10.4	10.7	13.0	12.1	12.5	15.1	14.4	14.6	21.4	21.1	21.2
11	11.0	9.8	10.3	13.3	12.7	12.9	16.4	15.1	15.8	21.2	20.3	20.7
12	10.6	9.7	10.2	13.1	12.8	12.9	17.0	15.9	16.4	20.4	18.6	19.6
13	11.4	10.1	10.6	13.5	12.5	13.0	17.3	16.6	16.8	19.4	18.2	18.6
14	11.6	10.8	11.4	13.5	12.7	13.1	16.8	15.6	16.2	19.6	18.5	19.1
15	11.5	10.4	10.9	14.0	13.1	13.3	16.1	15.2	15.6	19.9	19.2	19.5
16	11.2	10.4	10.7	14.0	13.4	13.8	15.8	15.2	15.5	20.4	19.7	20.0
17	10.8	10.2	10.5	13.6	12.9	13.2	15.8	15.2	15.5	20.6	19.9	20.2
18	11.5	10.4	10.8	13.7	12.8	13.3	16.5	15.5	15.9	20.7	19.8	20.3
19	11.8	10.6	11.2	14.8	13.3	13.9	16.9	16.1	16.5	21.1	20.3	20.7
20	11.5	10.5	11.0	15.3	14.7	15.0	17.1	16.6	16.8	21.5	20.8	21.1
21	11.2	9.9	10.5	15.1	14.2	14.5	17.0	16.4	16.7	21.5	21.0	21.2
22	10.2	9.8	10	15.0	14.1	14.5	17.5	16.7	17.1	21.3	20.6	21.0
23	10.0	9.7	9.9	15.0	14.4	14.6	17.9	17.1	17.5	21.1	20.5	20.8
24	10.3	9.6	10	15.0	14.0	14.4	18.5	17.5	17.9	20.8	20.5	20.6
25	10.4	9.8	10.0	14.4	13.1	13.6	19.0	18.1	18.5	21.1	20.1	20.6
26	10.6	9.9	10.2	14.2	13.0	13.5	19.6	18.4	19.0	21.6	20.4	21.0
27	10.4	9.2	9.9	15.3	12.6	13.9	19.8	19.2	19.5	22.1	20.9	21.4
28	9.2	8.6	9.0	15.8	14.8	15.2	19.7	19.3	19.5	21.9	21.1	21.5
29	9.2	8.3	8.7	15.8	14.7	15.3	19.6	19.2	19.4	21.4	20.1	20.8
30	---	---	---	14.9	13.4	14.1	19.3	18.7	18.9	21.9	20.8	21.3
31	---	---	---	14.3	13.6	13.9	---	---	---	22.6	21.6	22.1
Month	11.8	6.6	9.8	15.8	8.6	13.0	19.8	12.0	16.4	22.6	18.2	20.4

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM
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	23.5	22.5	22.8	28.4	27.7	27.9	29.7	28.2	28.8	28.5	27.7	28.0
2	23.8	23.2	23.4	27.9	27.5	27.7	---	---	---	28.0	27.4	27.6
3	24.3	23.3	23.8	27.6	27.4	27.5	30.4	29.8	30.1	27.9	27.5	27.6
4	24.8	23.4	24.0	27.6	27.3	27.4	30.6	30.3	30.4	28.0	27.2	27.5
5	25.5	24.4	24.7	29.2	27.3	27.8	30.6	30.2	30.4	28.0	27.2	27.6
6	26.3	25.4	25.8	29.3	27.8	28.3	30.8	30.4	30.6	28.0	26.4	27.3
7	27.1	26.2	26.6	29.3	27.8	28.9	30.8	30.4	30.6	27.4	26.3	26.8
8	27.2	26.8	27.0	29.1	27.9	28.6	30.8	30.1	30.3	27.7	27.2	27.4
9	28.0	27.2	27.5	28.7	27.5	28.0	30.4	29.7	30.1	27.9	27.6	27.7
10	29.1	28.0	28.6	28.4	27.5	27.9	30.2	29.4	29.7	27.8	27.4	27.5
11	29.0	28.6	28.8	28.0	27.5	27.7	---	---	---	27.6	26.9	27.3
12	28.8	28.1	28.4	28.1	27.3	27.6	---	---	---	27.3	26.9	27.1
13	28.6	27.9	28.3	28.2	27.6	27.8	29.0	28.5	28.7	27.4	26.5	26.9
14	29.3	28.3	28.5	28.1	27.7	27.9	28.5	27.7	28.0	26.9	26.4	26.6
15	28.7	27.9	28.2	28.8	28.0	28.2	28.2	27.0	27.8	27.2	26.9	27.2
16	28.8	28.1	28.3	28.8	27.8	28.2	28.2	27.7	27.9	27.8	27.2	27.4
17	29.1	28.1	28.5	28.8	27.8	28.2	28.2	27.6	27.8	27.5	26.5	26.8
18	29.1	28.0	28.5	---	---	---	27.9	27.4	27.6	26.5	25.9	26.1
19	28.8	28.0	28.2	---	---	---	27.9	27.5	27.6	26.0	25.3	25.6
20	28.7	27.8	28.2	---	---	---	28.1	27.6	27.7	25.6	24.4	24.8
21	28.2	27.6	27.9	---	---	---	28.3	27.7	27.9	24.6	24.1	24.3
22	28.1	27.4	27.6	---	---	---	28.1	27.1	27.6	24.6	24.1	24.3
23	28.2	27.6	27.8	---	---	---	28.0	27.2	27.6	24.4	23.7	24.0
24	28.2	27.7	27.9	29.4	28.6	28.9	27.9	27.5	27.7	23.7	22.4	23.1
25	28.4	28.0	28.2	29.2	28.6	28.9	28.0	26.9	27.8	22.4	21.6	21.9
26	28.4	27.7	28.2	28.7	27.9	28.3	27.0	26.6	26.7	22.1	21.8	21.9
27	27.7	27.2	27.3	29.1	28.3	28.6	27.8	26.7	27.4	22.1	20.9	21.3
28	28.1	27.3	27.4	28.9	28.4	28.5	27.3	26.7	26.9	21.2	21.1	21.2
29	29.2	27.4	27.7	29.3	28.5	28.7	27.3	26.6	26.8	22.1	21.2	21.5
30	28.7	28.0	28.2	29.0	28.5	28.7	27.0	26.5	26.6	22.1	21.4	21.6
31	---	---	---	28.8	28.2	28.4	28.6	26.6	27.1	---	---	---
Month	29.3	22.5	27.2	---	---	---	---	---	---	28.5	20.9	25.5

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP
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	7.0	5.6	6.1	6.8	6.0	6.3	9.5	8.1	9.0	9.6	9.3	9.5
2	7.2	5.7	6.2	7.9	6.0	7.0	9.5	8.9	9.2	10.2	9.6	9.8
3	6.6	5.3	5.9	7.7	7.1	7.3	11.0	9.2	9.7	10.7	10.0	10.4
4	6.9	5.0	5.9	7.8	7.0	7.3	10.1	9.5	9.8	10.5	10.0	10.2
5	7.0	5.7	6.2	8.2	7.2	7.7	10.6	9.7	10.0	10.2	9.9	10.0
6	8.0	5.8	6.3	8.1	7.4	7.8	10.6	9.2	10.0	10.1	9.7	9.9
7	7.4	5.4	6.0	8.0	7.1	7.5	10.2	9.5	9.8	10.6	10.0	10.2
8	7.4	4.3	5.4	8.6	7.9	8.2	11.3	9.7	10.2	10.9	10.3	10.6
9	7.5	4.0	6.0	8.6	8.0	8.4	10.3	9.6	9.9	11.3	9.4	10.8
10	7.3	3.6	4.9	8.8	7.4	8.3	10.4	9.5	10.0	11.2	10.6	11.0
11	6.3	3.0	4.8	8.7	8.1	8.5	10.2	8.3	9.3	11.0	10.5	10.8
12	6.3	4.2	5.2	9.9	8.0	8.8	10.2	9.1	9.8	10.8	9.5	10.2
13	6.0	3.5	4.8	9.8	8.8	9.4	10.0	8.6	9.5	10.7	9.0	10.1
14	6.8	4.5	5.8	9.6	8.9	9.1	9.8	6.9	8.7	10.6	8.9	10.0
15	6.5	4.1	4.8	9.3	8.7	9.2	9.8	7.8	9.1	10.6	9.3	10.1
16	5.3	4.3	4.6	9.6	8.7	9.1	9.8	9.3	9.5	10.3	9.1	9.8
17	6.1	4.9	5.6	9.8	8.8	9.5	9.6	9.2	9.5	10.1	8.4	9.6
18	6.7	4.4	5.6	9.6	8.3	8.9	9.6	8.8	9.3	10.1	9.3	9.7
19	7.1	5.4	6.2	9.2	8.0	8.4	9.3	8.3	8.8	10.1	9.3	9.9
20	6.5	4.7	5.5	10.0	8.0	8.9	9.4	9.0	9.2	10.6	10.0	10.3
21	7.3	4.8	6.2	10.1	9.2	9.6	10.0	9.3	9.5	10.9	10.5	10.7
22	6.7	5.5	6.3	9.7	9.2	9.5	10.2	9.9	10.1	11.2	10.8	11.1
23	6.5	4.9	5.8	9.9	8.9	9.5	10.3	10.0	10.1	11.4	11.1	11.3
24	6.5	2.0	4.1	10.1	9.4	9.8	10.2	9.9	10.1	11.8	11.3	11.5
25	6.3	1.6	4.0	9.6	8.3	9.3	10.2	9.6	10.0	11.9	11.4	11.7
26	6.8	4.4	5.8	9.8	8.5	9.2	10.3	9.4	10.0	12.1	11.6	11.8
27	6.6	4.4	5.5	10.0	8.8	9.4	10.2	9.7	10	12.3	11.6	11.9
28	6.3	4.0	5.4	9.8	8.4	9.0	10.3	9.6	10	12.5	11.8	12.2
29	6.8	5.8	6.3	9.6	8.7	9.3	10.2	9.6	9.9	12.6	11.5	12.3
30	6.7	5.2	5.9	9.4	8.7	9.1	10.0	9.3	9.7	12.4	12.2	12.3
31	6.9	5.8	6.2	---	---	---	9.8	9.4	9.6	12.8	12.0	12.6
Month	8.0	1.6	5.6	10.1	6.0	8.6	11.3	6.9	9.7	12.8	8.4	10.7

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP
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	12.8	12.4	12.6	11.4	11.0	11.2	8.7	7.9	8.2	6.5	5.7	6.0
2	12.8	12.2	12.5	11.3	10.1	10.8	9.4	7.6	8.1	6.7	6.3	6.5
3	13.0	12.3	12.5	10.8	10.4	10.6	9.2	7.6	8.6	6.7	6.3	6.5
4	12.7	12.3	12.5	10.6	10.3	10.5	9.0	7.6	8.2	6.8	6.2	6.5
5	12.5	11.4	12.0	10.4	9.9	10.2	8.0	7.4	7.8	6.9	6.2	6.6
6	12.0	11.1	11.6	10.7	9.9	10.3	8.0	7.7	7.8	6.9	6.2	6.6
7	11.6	11.0	11.3	10.8	9.8	10.3	7.9	7.3	7.6	6.6	5.8	6.2
8	11.9	10.2	11.0	10.1	9.5	9.8	7.8	7.3	7.5	6.8	6.3	6.6
9	11.9	10.8	11.4	9.9	9.2	9.6	7.8	7.6	7.7	7.1	6.6	6.9
10	11.8	10.5	11.1	9.5	9.2	9.4	7.8	7.3	7.6	7.1	6.7	7.0
11	11.0	10.1	10.5	9.2	8.6	8.9	7.7	7.2	7.5	7.0	6.5	6.7
12	10.6	9.6	10.2	9.0	8.6	8.8	8.0	7.6	7.8	7.0	6.4	6.7
13	10.5	9.9	10.3	8.9	8.6	8.8	7.9	7.6	7.7	7.3	6.4	6.8
14	10.6	10.0	10.3	8.8	8.3	8.6	8.0	7.5	7.8	7.2	6.9	7.0
15	10.4	9.9	10.1	8.4	7.6	8.0	8.1	7.7	7.9	7.1	6.8	7.0
16	10.5	10.0	10.2	8.2	7.5	7.9	8.1	7.7	7.9	7.1	6.8	7.0
17	10.9	10.2	10.7	8.4	7.8	8.1	8.3	7.9	8.1	7.2	6.9	7.1
18	10.8	10.6	10.7	8.3	7.8	8.1	8.2	8.0	8.1	7.2	6.8	7.0
19	11.0	10.4	10.6	8.6	7.9	8.3	8.2	8.0	8.1	7.1	6.8	7.0
20	11.2	10.6	10.9	8.7	8.0	8.4	8.2	7.9	8.1	7.0	6.6	6.8
21	11.4	10.7	11.1	8.6	7.9	8.2	8.1	7.8	7.9	6.8	6.5	6.6
22	11.3	10.8	11.0	8.6	8.2	8.4	7.9	7.2	7.6	6.6	6.3	6.5
23	11.0	10.3	10.8	8.6	7.8	8.2	7.2	6.4	6.9	6.5	6.2	6.3
24	10.8	10.3	10.7	8.5	7.8	8.2	6.5	5.5	5.9	6.4	6.1	6.2
25	10.9	10.4	10.6	8.6	8.0	8.2	5.7	5.4	5.5	6.4	6.1	6.2
26	10.6	10.3	10.5	8.6	8.1	8.4	5.8	5.4	5.6	6.8	6.0	6.4
27	11.0	10.5	10.8	8.4	7.0	7.8	5.7	5.3	5.5	6.8	6.4	6.6
28	11.4	10.9	11.2	8.5	6.7	7.6	5.7	5.3	5.5	6.8	6.3	6.6
29	11.3	11.0	11.1	8.3	6.9	7.9	5.9	5.3	5.5	6.5	6.0	6.2
30	---	---	---	9.2	7.1	8.3	5.9	5.5	5.7	6.0	5.6	5.8
31	---	---	---	8.7	7.8	8.2	---	---	---	5.9	5.6	5.7
Month	13.0	9.6	11.1	11.4	6.7	8.9	9.4	5.3	7.3	7.3	5.6	6.6

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP
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	5.7	5.4	5.5	7.5	4.7	5.6	6.6	4.5	5.0	6.7	4.7	5.3
2	5.5	5.1	5.3	7.1	5.0	5.7	6.8	4.6	5.3	7.4	4.8	5.4
3	5.4	5.1	5.2	7.4	5.2	6.2	6.3	4.5	5.0	7.0	4.2	5.3
4	5.7	5.0	5.3	7.5	5.2	6.1	8.1	4.5	5.2	6.6	3.9	5.1
5	5.4	5.1	5.2	7.0	5.4	6.0	7.0	4.2	4.8	6.2	4.3	4.9
6	5.6	4.9	5.0	6.3	5.1	5.6	9.4	4.0	5.5	6.1	4.2	4.8
7	5.4	5.0	5.1	6.5	5.0	5.9	8.5	4.3	5.2	6.0	4.0	4.5
8	5.8	5.0	5.2	6.5	5.7	6.1	5.8	4.2	4.7	5.5	3.7	4.4
9	5.7	4.8	5.2	6.5	5.2	5.9	6.2	4.1	4.9	4.7	4.2	4.4
10	5.5	4.6	5.0	7.0	5.1	5.4	5.5	4.6	4.9	4.3	3.6	4.0
11	6.6	4.6	5.1	7.2	5.3	6.2	5.8	4.5	5.1	4.6	3.6	4.1
12	7.1	4.5	5.4	7.8	5.8	6.6	7.0	4.5	5.0	4.1	3.4	3.8
13	6.6	4.6	5.2	8.1	6.2	6.8	5.8	4.3	4.9	6.0	3.4	3.9
14	6.4	4.8	5.3	8.1	6.3	6.7	5.8	4.1	4.7	6.9	3.8	5.2
15	6.3	4.7	5.3	---	---	---	7.4	3.9	5.0	5.9	4.6	5.2
16	7.0	4.8	5.5	---	---	---	5.8	4.7	5.2	6.1	4.5	5.3
17	6.2	4.5	5.0	---	---	---	6.5	4.9	5.4	5.3	4.5	4.8
18	6.4	4.6	5.2	---	---	---	6.3	5.1	5.5	5.7	4.8	5.1
19	7.3	5.0	5.6	---	---	---	7.0	5.2	5.6	6.5	5.3	5.8
20	8.1	5.1	5.9	---	---	---	6.2	4.8	5.4	6.4	5.7	6.1
21	6.7	5.0	5.6	---	---	---	7.0	4.9	5.7	6.7	6.1	6.3
22	7.9	5.0	5.7	---	---	---	6.6	5.3	5.8	6.6	5.9	6.2
23	7.2	4.9	5.6	---	---	---	6.8	5.4	5.9	7.1	6.0	6.5
24	6.4	4.4	5.2	5.5	5.0	5.2	6.9	5.2	5.7	7.7	6.3	6.9
25	9.4	5.1	6.4	5.8	5.2	5.3	6.9	5.4	6.0	8.5	7.3	7.9
26	9.2	5.2	6.6	5.6	4.8	5.1	6.7	4.4	5.6	8.3	6.8	7.3
27	8.2	5.3	6.4	5.8	5.0	5.3	6.2	5.1	5.7	7.3	6.5	6.9
28	8.4	5.5	6.7	6.7	4.8	5.2	5.9	4.5	5.2	7.5	7.0	7.3
29	8.1	5.7	6.6	7.9	4.8	6.4	---	---	---	7.7	5.7	6.6
30	7.6	5.5	6.2	7.2	4.6	5.9	6.5	3.7	4.6	7.6	5.3	6.3
31	---	---	---	6.5	4.4	5.2	6.0	4.2	4.8	---	---	---
Month	9.4	4.4	5.5	---	---	---	---	---	---	8.5	3.4	5.5

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM
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	7.2	5.8	6.3	5.7	3.6	4.2	---	---	---	7.4	6.2	6.8
2	7.2	5.8	6.4	7.5	4.4	5.8	---	---	---	9.2	6.3	7.1
3	6.7	5.2	5.8	7.4	6.6	6.9	---	---	---	10.2	6.2	7.5
4	6.8	4.7	5.5	7.6	6.6	7.2	---	---	---	9.4	6.0	7.1
5	7.2	5.2	6.3	7.5	7.2	7.4	---	---	---	9.9	8.6	9.2
6	6.7	5.3	6.0	7.7	7.0	7.4	---	---	---	10.4	8.6	9.3
7	6.0	4.8	5.5	7.6	7.1	7.4	---	---	---	9.9	7.8	8.7
8	5.2	3.7	4.3	7.4	6.6	7.0	---	---	---	9.0	7.7	8.2
9	4.0	3.5	3.8	6.9	6.4	6.6	---	---	---	8.9	7.1	7.9
10	3.9	2.8	3.4	6.7	6.2	6.5	---	---	---	8.9	6.9	7.6
11	3.1	2.4	2.7	6.3	5.4	5.9	---	---	---	8.2	6.8	7.4
12	3.4	1.6	2.3	---	---	---	---	---	---	9.5	6.6	7.9
13	6.1	1.6	4.0	---	---	---	---	---	---	9.4	6.5	7.4
14	6.3	5.6	5.9	---	---	---	---	---	---	7.1	5.1	6.3
15	5.6	3.3	4.6	---	---	---	9.3	6.5	7.8	8.5	5.5	6.5
16	4.5	3.5	4.0	---	---	---	9.5	8.2	9.2	7.4	5.2	5.9
17	4.7	3.7	4.4	---	---	---	9.5	9.0	9.3	9.2	5.3	6.6
18	6.0	4.2	5.1	---	---	---	9.7	8.9	9.3	---	---	---
19	6.0	4.7	5.5	---	---	---	9.6	8.8	9.3	9.9	7.5	8.5
20	5.2	4.3	4.8	---	---	---	9.5	9.1	9.3	9.5	7.4	8.4
21	4.8	4.0	4.4	---	---	---	10.1	8.4	9.2	10.3	7.2	9.1
22	4.2	3.5	3.9	---	---	---	10.2	9.9	10.1	10.3	7.6	9.1
23	4.7	3.5	4.1	---	---	---	10.2	8.7	9.5	10.2	8.7	9.5
24	4.3	1.0	2.3	---	---	---	10.0	9.5	9.7	11.1	8.8	9.5
25	1.8	0.9	1.1	---	---	---	9.8	9.3	9.6	10.4	8.4	9.2
26	1.9	0.6	0.8	---	---	---	10.2	9.0	9.6	10.8	8.3	9.2
27	2.5	0.6	1.0	---	---	---	10.1	9.5	9.8	11.1	8.9	9.9
28	3.3	1.2	2.2	---	---	---	10.0	9.6	9.8	11.5	8.9	9.9
29	6.8	2.7	5.5	---	---	---	9.9	9.5	9.7	11.9	9.1	10.6
30	6.7	2.2	4.3	---	---	---	9.7	6.7	9.2	12.2	9.3	10.6
31	5.0	3.9	4.4	---	---	---	9.1	6.0	7.2	11.6	9.8	10.7
Month	7.2	0.6	4.2	---	---	---	---	---	---	---	---	---

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM
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	12.0	9.0	10.1	11.2	8.9	10.0	9.6	8.0	8.9	5.8	5.2	5.4
2	11.1	8.1	9.2	11.0	9.1	10.1	9.8	7.7	8.8	5.9	5.7	5.8
3	10.4	8.3	9.1	10.5	8.1	9.6	8.9	7.9	8.6	5.9	5.3	5.7
4	10.0	7.9	8.7	10.2	8.5	9.4	8.8	7.5	8.3	6.0	5.6	5.8
5	10.1	7.7	8.7	10.9	8.2	9.2	8.1	7.3	7.7	6.0	5.5	5.8
6	10.4	8.3	9.3	10.6	8.2	9.7	8.1	7.8	8.0	6.1	5.4	5.8
7	10.6	7.9	8.9	10.8	9.8	10.0	8.0	7.6	7.8	6.2	5.3	5.7
8	10.1	7.5	8.9	9.8	9.3	9.4	8.0	7.5	7.7	6.5	6.1	6.3
9	9.7	7.2	8.0	9.4	8.8	9.1	8.0	7.8	7.9	6.6	6.3	6.4
10	10.5	7.0	8.6	9.2	9.0	9.1	8.0	7.5	7.8	6.6	6.1	6.4
11	10.4	7.4	8.9	9.0	8.4	8.7	7.8	7.4	7.6	6.5	6.1	6.3
12	9.8	7.3	8.7	8.6	8.4	8.5	8.0	7.8	7.9	6.5	6.0	6.2
13	10.2	7.2	8.2	8.6	8.4	8.5	8.0	7.7	7.9	6.6	6.0	6.3
14	10.5	7.9	9.2	8.6	8.1	8.3	8.1	7.7	7.9	6.5	6.3	6.3
15	10.2	7.8	9.1	8.3	7.4	7.7	8.2	7.8	8.0	6.5	6.3	6.4
16	10.2	8.0	9.4	8.1	7.0	7.8	8.1	7.8	7.9	6.4	6.2	6.3
17	10.4	8.3	9.7	8.2	7.8	8.0	8.3	8.0	8.1	6.6	6.3	6.4
18	10.8	7.8	9.2	8.2	7.8	8.0	8.2	8.1	8.2	6.5	6.2	6.4
19	10.5	7.8	9.4	8.5	8.0	8.2	8.3	8.1	8.2	6.5	6.3	6.3
20	10.8	7.8	9.7	8.8	8.1	8.5	8.3	8.0	8.2	6.3	6.0	6.1
21	11.1	8.5	10.3	8.4	8.1	8.2	8.2	7.8	8.0	6.2	5.9	6.0
22	10.5	8.1	9.9	8.7	8.3	8.5	8.0	7.1	7.6	6.1	5.7	5.9
23	10.4	8.0	9.3	8.8	8.0	8.5	7.2	6.4	6.8	6.0	5.6	5.8
24	10.3	8.7	9.9	8.7	8.1	8.3	6.4	5.4	5.8	5.9	5.6	5.7
25	10.3	8.2	9.6	8.6	8.0	8.3	5.5	5.3	5.4	5.9	5.6	5.7
26	10.1	8.1	9.5	8.6	8.1	8.4	5.5	5.2	5.4	6.1	5.6	5.9
27	10.6	8.1	9.7	9.4	7.2	8.0	5.4	5.0	5.2	6.1	5.8	6.0
28	10.9	7.8	9.4	8.8	6.9	7.7	5.3	5.0	5.2	6.1	5.5	5.9
29	10.8	9.0	9.8	8.5	6.8	7.9	5.3	4.9	5.0	5.8	5.3	5.5
30	---	---	---	9.3	7.3	8.5	5.4	5.0	5.2	5.3	5.0	5.1
31	---	---	---	8.6	7.9	8.3	---	---	---	5.4	5.1	5.3
Month	12.0	7.0	9.3	11.2	6.8	8.7	9.8	4.9	7.4	6.6	5.0	6.0

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM
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	5.4	4.9	5.1	3.8	1.9	3.0	3.4	0.8	1.8	5.0	3.5	4.4
2	5.1	4.8	5.0	2.7	1.8	2.2	---	---	---	---	---	---
3	5.0	4.8	4.9	2.8	1.4	2.0	4.0	2.9	3.4	---	---	---
4	5.1	4.7	4.9	2.3	1.2	1.7	4.0	2.8	3.5	---	---	---
5	5.1	4.5	4.8	5.3	1.3	2.6	3.8	2.5	3.3	---	---	---
6	4.9	4.5	4.6	5.7	1.8	3.5	3.8	3.0	3.2	---	---	---
7	4.9	4.5	4.7	6.1	2.7	5.1	4.0	2.2	3.3	---	---	---
8	5.0	4.6	4.8	5.8	4.3	5.4	4.6	2.8	3.8	---	---	---
9	5.3	4.7	5.0	5.6	3.3	4.3	4.6	3.2	3.8	---	---	---
10	5.1	4.5	4.9	5.2	3.5	4.7	5.3	3.9	4.3	---	---	---
11	5.4	4.3	4.8	5.8	4.9	5.3	---	---	---	---	---	---
12	5.9	4.5	4.9	5.8	4.9	5.1	---	---	---	---	---	---
13	5.6	4.3	5.0	5.6	4.7	5.1	5.3	3.2	4.5	---	---	---
14	6.0	4.5	5.1	5.3	4.3	4.8	5.0	3.6	4.1	---	---	---
15	5.9	4.6	5.1	6.0	4.1	4.7	5.3	3.3	3.9	---	---	---
16	5.8	4.5	5.0	6.0	4.6	5.2	5.4	4.5	4.8	---	---	---
17	5.7	4.5	4.8	5.9	4.6	5.1	5.5	4.3	4.9	---	---	---
18	5.6	3.8	4.8	---	---	---	5.4	4.6	5.0	---	---	---
19	5.8	4.1	4.7	---	---	---	5.4	4.3	5.0	---	---	---
20	5.8	4.2	5.0	---	---	---	5.5	4.2	4.8	---	---	---
21	5.7	4.6	5.1	---	---	---	6.3	4.8	5.3	---	---	---
22	5.5	4.3	4.8	---	---	---	6.0	4.9	5.4	---	---	---
23	5.8	4.1	4.8	---	---	---	6.0	4.7	5.3	---	---	---
24	5.8	3.5	4.4	5.0	4.6	4.9	5.5	4.1	4.9	---	---	---
25	4.6	3.3	4.0	5.1	4.7	4.8	5.3	3.8	4.7	---	---	---
26	4.8	3.1	4.2	4.8	4.2	4.4	3.9	3.2	3.7	---	---	---
27	4.1	3.1	3.7	4.6	4.0	4.2	5.4	2.9	4.6	7.3	6.3	6.9
28	4.7	3.1	3.5	4.4	3.3	4.0	5.3	3.1	4.4	7.0	6.6	6.9
29	6.0	3.0	3.4	4.3	2.6	3.3	4.4	2.8	3.5	6.6	5.0	6.0
30	4.3	2.1	3.0	3.9	1.4	2.6	3.7	2.9	3.3	5.4	4.8	5.3
31	---	---	---	2.1	1.2	1.5	5.1	2.1	3.1	---	---	---
Month	6.0	2.1	4.6	---	---	---	---	---	---	---	---	---

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP
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	84	68	74	75	66	69	89	76	84	86	83	85
2	86	68	75	85	66	76	88	82	85	87	85	86
3	80	64	71	83	76	78	101	86	90	89	85	87
4	85	61	72	82	74	77	92	86	89	87	83	85
5	86	70	76	85	74	81	96	88	90	84	81	83
6	101	71	78	85	76	81	95	83	89	86	82	83
7	92	67	74	81	72	76	90	84	87	90	84	86
8	93	53	67	85	79	82	98	86	89	92	86	89
9	95	49	75	85	79	83	93	85	88	95	82	92
10	92	44	60	87	73	82	93	87	90	94	90	93
11	77	37	59	84	78	82	91	75	84	97	90	94
12	77	51	63	94	78	85	93	82	89	98	83	91
13	70	42	57	95	85	91	93	79	87	94	79	89
14	80	53	67	93	87	90	91	64	80	94	79	89
15	76	48	57	92	85	90	89	72	84	93	82	88
16	62	50	54	91	84	87	89	85	87	89	80	85
17	71	57	65	93	84	90	87	84	85	87	73	83
18	79	51	66	91	79	85	86	79	82	88	80	84
19	85	63	73	88	76	80	84	74	79	87	80	85
20	77	56	65	96	76	85	84	81	82	90	85	88
21	87	57	72	97	87	92	88	82	84	90	87	88
22	79	65	73	94	90	92	90	87	88	92	88	90
23	77	58	68	96	87	92	91	88	90	94	91	92
24	77	24	49	95	89	92	92	88	90	98	92	95
25	74	19	48	91	79	88	91	85	89	98	93	95
26	80	52	68	92	80	86	90	83	88	98	94	96
27	77	52	64	94	84	88	90	84	87	99	94	96
28	72	47	62	93	80	86	91	84	87	101	95	98
29	75	65	70	91	83	88	91	86	88	103	94	99
30	74	57	65	89	82	86	90	84	88	104	99	102
31	78	64	68	---	---	---	89	85	87	106	100	104
Month	101	19	66	97	66	85	101	64	87	106	73	90

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP
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	107	103	105	100	96	98	85	77	81	70	62	65
2	109	101	104	100	90	95	91	76	81	73	68	70
3	109	102	105	96	93	95	91	76	85	73	69	71
4	109	103	106	96	92	94	89	75	82	74	68	71
5	108	100	105	96	92	94	81	75	79	77	68	73
6	107	101	104	---	---	---	81	77	79	77	69	73
7	107	101	104	101	91	96	79	72	76	74	66	69
8	109	93	100	94	90	92	77	72	74	77	71	74
9	109	98	104	93	86	89	77	74	76	81	74	78
10	108	96	101	91	86	88	77	73	75	81	76	79
11	100	90	95	88	82	85	79	73	76	79	73	75
12	94	86	91	87	81	83	83	77	80	77	70	74
13	98	91	94	85	82	83	82	79	80	79	69	73
14	97	92	95	84	80	81	82	77	79	79	74	76
15	96	90	93	80	73	76	82	78	80	78	74	76
16	95	91	93	79	72	76	82	77	79	80	75	77
17	98	92	96	80	74	77	84	79	81	80	76	78
18	100	96	98	80	74	77	84	80	82	81	75	78
19	101	95	98	85	76	80	85	82	84	81	76	78
20	103	96	100	86	79	84	85	81	84	80	74	77
21	103	96	100	87	77	81	84	80	82	77	73	75
22	101	96	98	86	81	83	82	76	79	75	71	73
23	97	92	96	85	77	81	76	68	72	73	69	71
24	96	92	95	83	76	80	69	59	62	71	68	70
25	98	93	95	84	76	80	62	57	59	72	68	70
26	96	91	94	84	78	81	63	58	60	78	67	72
27	98	93	96	81	70	76	63	58	60	78	72	75
28	100	94	98	86	67	76	62	58	60	77	71	75
29	98	94	96	83	68	79	64	58	60	73	68	70
30	---	---	---	89	70	80	64	59	62	69	63	66
31	---	---	---	85	75	79	---	---	---	69	64	66
Month	109	86	99	---	---	---	91	57	75	81	62	73

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP
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	68	63	65	99	61	74	88	60	67	87	61	68
2	65	60	63	94	66	75	93	61	71	97	61	69
3	65	60	62	98	68	81	86	60	67	91	54	68
4	70	59	63	100	67	80	112	61	70	86	50	65
5	67	61	63	92	70	79	96	56	65	79	55	63
6	70	60	62	83	66	73	130	54	75	77	53	61
7	69	62	65	85	65	77	117	58	71	75	50	57
8	75	63	66	85	73	79	79	57	63	71	47	56
9	73	62	66	84	67	75	84	55	65	61	54	56
10	72	60	65	90	65	69	73	61	66	55	46	51
11	87	60	67	92	68	79	77	60	67	59	46	52
12	94	58	70	100	73	84	94	59	66	53	43	48
13	87	59	67	106	79	88	77	56	65	78	43	50
14	85	62	69	105	80	86	76	53	61	90	48	67
15	83	60	69	---	---	---	98	50	65	76	59	67
16	93	62	72	---	---	---	75	60	67	79	57	68
17	82	58	65	---	---	---	84	63	70	67	56	61
18	84	60	68	---	---	---	82	65	71	71	60	64
19	96	64	72	---	---	---	92	66	72	80	65	72
20	107	66	76	---	---	---	81	61	70	77	69	73
21	86	64	72	---	---	---	91	63	73	81	73	76
22	104	64	73	---	---	---	85	67	75	79	71	75
23	94	63	72	---	---	---	88	69	76	84	72	78
24	82	56	66	72	65	68	90	67	74	90	74	81
25	124	66	83	76	68	70	90	69	77	97	73	90
26	123	67	86	74	62	66	87	56	73	95	79	85
27	110	68	84	76	65	69	80	65	73	83	75	79
28	113	71	88	89	62	67	76	57	66	87	80	83
29	108	74	87	106	63	85	---	---	---	90	66	77
30	101	72	81	97	60	78	85	47	60	91	62	74
31	---	---	---	86	58	69	78	54	62	---	---	---
Month	124	56	71	---	---	---	---	---	---	97	43	68

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM
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	86	69	76	62	40	47	---	---	---	68	56	62
2	86	69	76	80	49	63	---	---	---	81	58	64
3	80	63	70	79	70	74	---	---	---	85	55	66
4	83	57	66	79	70	75	---	---	---	78	53	63
5	88	64	77	78	75	77	---	---	---	83	72	77
6	82	65	74	81	73	78	---	---	---	87	72	78
7	74	59	67	80	75	78	---	---	---	84	67	74
8	64	45	53	78	69	74	---	---	---	77	66	71
9	49	43	46	73	67	69	---	---	---	77	62	68
10	48	35	41	70	64	67	---	---	---	77	60	66
11	38	30	34	65	56	61	---	---	---	72	60	65
12	42	20	28	---	---	---	---	---	---	85	58	71
13	71	20	47	---	---	---	---	---	---	83	58	66
14	73	65	68	---	---	---	---	---	---	63	45	57
15	65	39	53	---	---	---	85	60	71	75	49	58
16	52	41	47	---	---	---	88	75	84	66	46	53
17	54	43	51	---	---	---	86	82	83	79	47	59
18	69	49	59	---	---	---	87	80	83	---	---	---
19	70	55	65	---	---	---	86	79	84	84	64	73
20	62	51	57	---	---	---	85	82	84	81	63	72
21	57	47	52	---	---	---	88	76	82	84	61	75
22	50	41	46	---	---	---	90	86	88	84	64	74
23	55	41	48	---	---	---	90	78	85	83	72	78
24	51	12	27	---	---	---	89	85	87	91	72	78
25	21	11	14	---	---	---	89	84	87	85	69	75
26	23	7	10	---	---	---	89	80	85	89	68	76
27	30	7	12	---	---	---	89	83	86	91	73	81
28	39	14	26	---	---	---	89	85	87	95	73	81
29	75	31	62	---	---	---	88	85	86	98	75	87
30	74	25	49	---	---	---	87	60	82	100	77	88
31	56	44	49	---	---	---	82	54	65	96	81	89
Month	88	7	50	---	---	---	---	---	---	---	---	---

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM
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	100	74	84	98	78	87	91	77	85	63	56	58
2	93	69	78	96	79	88	95	77	86	64	61	62
3	90	72	78	92	73	85	89	79	86	65	58	62
4	87	69	76	92	76	83	88	76	83	66	61	64
5	88	67	76	98	75	84	82	72	77	66	61	64
6	92	73	82	---	---	---	82	79	80	67	60	64
7	97	72	81	100	91	93	80	75	77	68	60	64
8	93	69	81	92	88	89	79	74	76	73	69	71
9	89	66	74	89	83	86	79	77	78	75	71	73
10	96	64	79	88	84	86	79	74	77	75	69	73
11	95	66	80	86	80	83	80	75	77	73	68	70
12	87	66	78	82	80	81	83	79	81	70	66	68
13	94	65	74	82	79	81	83	80	81	71	64	67
14	97	72	84	82	78	79	82	78	80	71	67	69
15	93	71	83	80	71	74	83	78	80	71	69	70
16	93	73	85	79	67	76	82	78	80	71	69	70
17	94	75	87	79	75	76	84	80	81	74	70	71
18	98	71	83	79	74	76	84	81	83	72	68	70
19	97	71	86	84	77	80	86	83	85	73	70	71
20	99	72	88	87	81	85	86	82	85	71	67	69
21	99	78	93	83	79	81	84	81	83	70	67	68
22	93	72	87	87	82	84	83	74	79	69	64	66
23	92	71	83	88	79	84	76	67	72	68	63	65
24	91	77	88	85	79	82	67	58	61	66	62	64
25	91	72	85	84	77	80	59	56	57	67	62	64
26	91	73	85	84	78	80	60	56	58	69	63	66
27	93	72	86	89	72	78	59	55	57	70	65	68
28	94	67	81	89	69	77	58	55	57	69	62	67
29	94	78	85	85	68	79	58	53	55	65	60	62
30	---	---	---	91	72	83	59	54	57	61	56	58
31	---	---	---	84	76	80	---	---	---	63	58	60
Month	100	64	82	---	---	---	95	53	75	75	56	66

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM
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	63	57	60	49	25	39	45	10	24	65	45	57
2	60	56	59	35	23	28	---	---	---	---	---	---
3	60	56	58	36	18	25	53	39	46	---	---	---
4	62	56	58	30	15	22	54	37	47	---	---	---
5	62	54	58	70	17	33	51	33	44	---	---	---
6	60	55	57	75	23	45	51	40	43	---	---	---
7	62	56	58	80	35	67	54	30	45	---	---	---
8	63	58	61	75	55	70	62	37	50	---	---	---
9	67	60	64	73	42	56	61	42	51	---	---	---
10	67	59	63	67	45	61	70	51	57	---	---	---
11	70	56	62	74	62	68	---	---	---	---	---	---
12	77	58	64	75	62	65	---	---	---	---	---	---
13	73	55	64	72	60	65	69	42	59	---	---	---
14	79	58	66	68	55	62	65	46	53	---	---	---
15	77	59	65	78	53	61	68	42	50	---	---	---
16	75	58	64	78	59	67	70	58	62	---	---	---
17	74	58	62	76	59	65	71	55	63	---	---	---
18	73	49	62	---	---	---	69	59	63	---	---	---
19	75	53	61	---	---	---	69	55	64	---	---	---
20	75	54	64	---	---	---	71	54	61	---	---	---
21	73	59	65	---	---	---	81	61	68	---	---	---
22	71	55	61	---	---	---	77	63	68	---	---	---
23	75	52	61	---	---	---	77	60	67	---	---	---
24	75	45	56	65	60	63	70	52	63	---	---	---
25	59	42	52	67	61	63	68	48	60	---	---	---
26	62	40	54	62	54	56	50	41	47	---	---	---
27	52	40	47	60	52	55	68	37	58	83	72	78
28	61	39	44	57	43	51	67	39	56	80	75	78
29	79	38	44	56	34	42	55	35	44	75	58	68
30	56	27	38	51	18	34	47	37	42	62	55	61
31	---	---	---	27	16	19	66	26	39	---	---	---
Month	79	27	58	---	---	---	---	---	---	---	---	---