



Water-Data Report 2009

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 Records from August 1996 to September 1997 are unpublished and available from the USGS Water Science Center, Raleigh, NC.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.

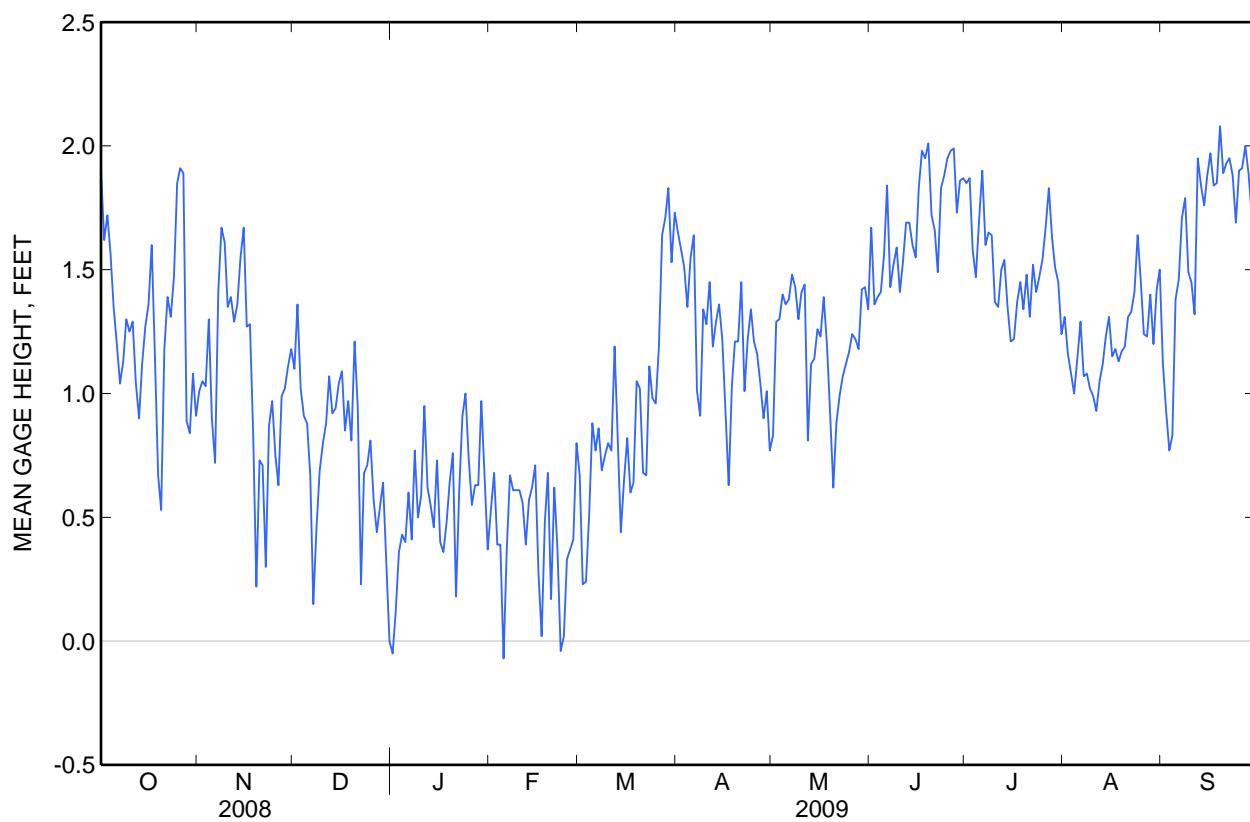
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2.34 ft, September 12; minimum elevation, -0.75 ft, December 31.

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

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.90	1.01	1.10	-0.05	0.53	0.67	1.65	0.83	1.67	1.85	1.31	1.12
2	1.62	1.05	1.36	0.12	0.68	0.23	1.58	1.29	1.36	1.87	1.16	0.93
3	1.72	1.03	1.02	0.36	0.39	0.24	1.51	1.30	1.39	1.58	1.08	0.77
4	1.57	1.30	0.91	0.43	0.39	0.51	1.35	1.40	1.41	1.47	1.00	0.83
5	1.35	0.90	0.88	0.40	-0.07	0.88	1.55	1.36	1.56	1.70	1.14	1.38
6	1.20	0.72	0.67	0.60	0.37	0.77	1.64	1.38	1.84	1.90	1.29	1.46
7	1.04	1.41	0.15	0.41	0.67	0.86	1.01	1.48	1.43	1.60	1.07	1.71
8	1.13	1.67	0.46	0.77	0.61	0.69	0.91	1.43	1.52	1.65	1.08	1.79
9	1.30	1.61	0.69	0.50	0.61	0.75	1.34	1.30	1.59	1.64	1.02	1.49
10	1.25	1.35	0.80	0.59	0.61	0.80	1.28	1.41	1.41	1.37	0.99	1.45
11	1.29	1.39	0.88	0.95	0.56	0.77	1.45	1.44	1.53	1.35	0.93	1.32
12	1.04	1.29	1.07	0.62	0.39	1.19	1.19	0.81	1.69	1.50	1.05	1.95
13	0.90	1.36	0.92	0.55	0.57	0.83	1.29	1.12	1.69	1.54	1.12	1.84
14	1.12	1.55	0.94	0.46	0.62	0.44	1.36	1.14	1.60	1.35	1.23	1.76
15	1.27	1.67	1.04	0.73	0.71	0.65	1.22	1.26	1.55	1.21	1.31	1.88
16	1.36	1.27	1.09	0.40	0.28	0.82	0.93	1.23	1.83	1.22	1.15	1.97
17	1.60	1.28	0.85	0.36	0.02	0.60	0.63	1.39	1.98	1.37	1.18	1.84
18	1.15	0.84	0.97	0.48	0.48	0.64	1.03	1.20	1.95	1.45	1.13	1.85
19	0.67	0.22	0.81	0.64	0.68	1.05	1.21	0.92	2.01	1.34	1.17	2.08
20	0.53	0.73	1.21	0.76	0.17	1.02	1.21	0.62	1.72	1.48	1.19	1.89
21	1.18	0.71	0.94	0.18	0.62	0.68	1.45	0.88	1.66	1.31	1.31	1.93
22	1.39	0.30	0.23	0.61	0.37	0.67	1.01	0.99	1.49	1.52	1.33	1.95
23	1.31	0.87	0.68	0.91	-0.04	1.11	1.22	1.07	1.83	1.41	1.41	1.88
24	1.47	0.97	0.71	1.00	0.02	0.98	1.34	1.12	1.88	1.47	1.64	1.69
25	1.85	0.75	0.81	0.74	0.33	0.96	1.21	1.17	1.95	1.54	1.46	1.90
26	1.91	0.63	0.57	0.55	0.37	1.19	1.16	1.24	1.98	1.67	1.24	1.91
27	1.89	0.99	0.44	0.63	0.41	1.64	1.04	1.22	1.99	1.83	1.23	2.00
28	0.89	1.02	0.54	0.63	0.80	1.71	0.90	1.18	1.73	1.63	1.40	1.89
29	0.84	1.11	0.64	0.97	---	1.83	1.01	1.42	1.86	1.51	1.20	1.72
30	1.08	1.18	0.32	0.67	---	1.53	0.77	1.43	1.87	1.45	1.42	1.48
31	0.91	---	0.00	0.37	---	1.73	---	1.34	---	1.24	1.50	---
Total	39.73	32.18	23.70	17.34	12.15	28.44	36.45	37.37	50.97	47.02	37.74	49.66
Mean	1.28	1.07	0.76	0.56	0.43	0.92	1.22	1.21	1.70	1.52	1.22	1.66
Max	1.91	1.67	1.36	1.00	0.80	1.83	1.65	1.48	2.01	1.90	1.64	2.08
Min	0.53	0.22	0.00	-0.05	-0.07	0.23	0.63	0.62	1.36	1.21	0.93	0.77

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, 8,520 microsiemens, December 2; minimum recorded, 104 microsiemens, April 4.

SPECIFIC CONDUCTANCE (BOTTOM): Maximum recorded, 9,940 microsiemens, December 4; minimum recorded, 106 microsiemens, March 29.

pH (TOP): Maximum recorded, 7.5 standard units, October 17; minimum recorded, 6.1 standard units, April 2.

pH (BOTTOM): Maximum recorded, 7.3 standard units, on several days during the year; minimum recorded, 6.2 standard units, on several days during the year.

WATER TEMPERATURE (TOP): Maximum recorded, 32.2°C, August 10; minimum recorded, 4.4°C, January 26.

WATER TEMPERATURE (BOTTOM): Maximum recorded, 30.5°C, August 12; minimum recorded, 4.5°C, January 25, 26, 27.

DISSOLVED OXYGEN (TOP): Maximum recorded, 12.7 mg/L, February 8; minimum recorded, 1.4 mg/L, August 27.

DISSOLVED OXYGEN (BOTTOM): Maximum recorded, 11.9 mg/L, March 3, 6; minimum recorded, 0.6 mg/L, October 9, 10.

DISSOLVED OXYGEN, PERCENT SATURATION (TOP): Maximum recorded, 128%, August 10; minimum recorded, 19%, August 27.

DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM): Maximum recorded, 102%, March 8; minimum recorded, 7%, October 9, 10.

Water-Data Report 2009

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 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October				November				December				January
1	954	252	380	5,460	210	1,350	7,100	548	2,700	612	145	186
2	354	144	182	5,980	220	914	8,520	1,200	4,150	228	165	184
3	219	148	169	1,400	319	491	1,270	396	743	165	139	148
4	1,730	177	295	1,140	306	523	8,380	413	1,180	142	132	138
5	661	180	219	1,100	201	370	2,510	437	721	142	127	133
6	7,700	200	958	397	203	246	622	234	340	153	138	143
7	571	285	358	3,320	194	1,060	2,110	249	684	180	137	150
8	390	252	315	7,350	324	2,520	2,620	255	587	211	133	160
9	295	193	236	7,530	306	2,260	900	295	454	189	142	151
10	1,100	225	339	8,020	367	2,090	469	286	358	160	144	152
11	858	318	465	8,110	653	3,350	1,420	254	489	160	138	143
12	593	178	290	1,640	536	795	4,720	404	1,380	199	143	158
13	276	175	195	4,330	288	736	926	272	453	166	126	150
14	214	175	188	2,790	357	924	363	195	263	166	143	149
15	3,680	204	1,050	6,650	348	1,580	287	161	183	181	146	159
16	4,540	266	1,430	2,800	333	1,020	2,270	158	299	186	135	152
17	4,710	280	1,950	1,910	290	443	282	171	215	147	136	141
18	1,620	390	728	1,080	316	498	577	172	240	139	123	132
19	390	219	292	562	363	424	224	149	171	126	114	121
20	284	208	231	4,530	407	2,420	382	147	191	130	115	124
21	4,120	233	2,210	3,590	322	886	586	151	202	134	119	128
22	4,540	435	1,200	707	241	328	236	151	173	136	127	130
23	761	368	517	2,340	211	377	242	142	163	136	128	130
24	460	318	414	607	227	303	144	127	138	138	127	131
25	4,230	353	2,430	7,000	243	1,420	152	129	141	136	126	130
26	4,650	434	2,210	5,380	221	1,030	143	125	131	140	126	129
27	4,790	445	3,080	6,070	325	1,640	142	130	135	153	140	146
28	1,780	227	908	8,230	363	1,870	869	139	216	156	142	149
29	2,140	224	668	8,160	364	2,040	565	147	191	145	125	132
30	2,230	213	454	6,600	468	2,020	331	162	191	181	127	143
31	320	209	267	---	---	---	826	170	307	190	164	176
Month	7,700	144	794	8,230	194	1,200	8,520	125	574	612	114	145

Water-Data Report 2009

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 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	215	165	188	198	150	173	115	111	112	130	124	126
2	226	173	188	237	160	186	113	106	111	132	124	127
3	205	178	192	184	157	170	116	111	114	131	123	126
4	231	171	189	171	147	160	121	104	112	129	122	125
5	228	166	181	152	133	145	121	113	117	130	123	126
6	224	177	194	134	111	121	123	113	118	131	125	127
7	221	191	203	127	121	124	126	114	121	131	125	128
8	1,820	196	350	137	124	128	124	118	121	136	125	128
9	329	204	252	138	122	131	126	119	123	129	123	126
10	412	221	264	169	137	144	125	111	119	131	125	128
11	777	223	410	163	131	139	134	110	119	209	123	129
12	2,660	234	903	218	138	157	135	123	127	133	123	127
13	3,620	240	768	152	123	139	133	121	128	137	123	128
14	678	189	330	145	127	138	131	120	123	134	117	124
15	583	184	232	140	129	130	139	120	127	134	116	126
16	236	170	191	151	128	140	148	120	124	132	126	129
17	203	177	190	146	140	143	132	113	123	131	125	128
18	232	174	190	141	133	138	130	117	127	149	124	133
19	1,950	203	392	136	125	132	131	113	118	144	116	131
20	272	177	214	138	115	121	134	127	131	141	127	135
21	246	182	210	130	119	124	137	127	132	145	121	129
22	257	192	226	130	126	128	143	125	130	142	120	131
23	222	181	194	130	118	126	144	124	129	141	125	129
24	254	193	215	126	116	121	142	124	130	133	124	128
25	219	167	205	126	116	118	131	123	127	131	125	128
26	253	175	203	123	116	119	131	125	128	138	125	131
27	224	181	198	123	118	121	131	125	128	148	134	140
28	278	158	205	122	107	114	131	125	127	140	125	130
29	---	---	---	114	106	109	132	126	128	141	126	134
30	---	---	---	115	111	113	139	124	126	147	129	135
31	---	---	---	119	113	115	---	---	---	135	127	130
Month	3,620	158	274	237	106	134	148	104	123	209	116	129

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 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
				June			July			August			September
1	175	125	134	131	123	126	152	130	142	214	148	170	
2	134	125	130	137	122	127	147	130	137	194	146	174	
3	141	130	135	130	122	126	150	131	138	191	155	174	
4	144	131	136	131	126	129	164	139	152	192	154	175	
5	148	134	140	134	127	130	171	145	151	218	160	170	
6	185	133	143	138	124	132	173	153	159	214	136	167	
7	134	128	131	135	127	131	153	133	145	170	137	157	
8	141	131	135	138	122	131	156	141	150	213	136	172	
9	143	127	137	179	130	145	156	138	148	204	147	175	
10	140	122	129	141	132	136	165	148	151	208	151	173	
11	135	124	129	153	138	145	405	161	213	221	150	179	
12	130	121	125	149	135	141	289	177	207	465	148	177	
13	129	121	125	156	142	147	238	153	178	527	143	207	
14	131	121	123	175	135	155	179	148	165	155	142	148	
15	131	119	123	171	142	155	188	159	172	166	148	154	
16	128	119	122	160	142	154	172	157	163	206	157	177	
17	137	117	125	171	154	161	178	157	165	210	149	190	
18	125	116	120	178	142	154	172	162	168	204	146	168	
19	125	117	120	156	145	152	169	154	161	162	146	154	
20	118	117	117	165	127	159	159	150	155	225	133	172	
21	120	116	118	186	147	161	256	146	166	146	139	143	
22	124	117	119	169	137	162	220	158	172	213	137	169	
23	127	118	121	179	150	160	163	148	158	206	151	177	
24	125	118	120	166	153	160	166	151	158	189	145	160	
25	124	118	121	170	135	156	172	153	165	470	143	179	
26	125	118	121	150	144	146	160	145	153	218	142	174	
27	121	118	120	415	144	172	162	144	151	165	139	148	
28	121	119	120	410	154	189	190	153	171	164	136	148	
29	129	121	124	158	146	152	189	146	169	232	142	163	
30	130	122	126	158	137	146	163	141	152	162	137	147	
31	---	---	---	150	133	141	195	144	162	---	---	---	
Month	185	116	126	415	122	148	405	130	161	527	133	168	

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 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	4,540	1,120	2,640	6,070	3,280	4,630	8,370	2,260	6,310	3,360	202	1,630	
2	4,510	142	642	6,610	6,060	6,360	9,670	7,480	9,140	274	168	187	
3	3,220	147	1,410	6,590	6,180	6,450	9,900	9,340	9,480	168	141	150	
4	5,720	3,220	4,190	6,700	646	3,360	9,940	9,640	9,880	143	134	140	
5	8,270	5,550	7,140	2,370	199	625	9,890	9,180	9,780	145	129	135	
6	9,000	7,950	8,520	1,250	197	381	9,740	9,540	9,640	154	141	145	
7	8,260	6,970	7,920	5,330	1,250	3,120	9,560	8,690	9,220	184	139	152	
8	8,170	7,460	7,900	7,200	5,330	6,130	9,020	8,570	8,800	236	135	164	
9	7,880	7,460	7,710	7,590	7,110	7,160	8,760	8,230	8,540	190	146	154	
10	7,880	5,070	7,050	8,300	7,580	7,830	8,500	8,200	8,350	161	147	153	
11	7,090	398	3,440	8,370	6,500	7,670	9,770	8,270	9,380	161	140	144	
12	764	175	379	7,860	6,510	7,680	9,890	6,680	9,180	212	147	160	
13	453	181	220	7,620	1,560	6,640	8,760	1,570	7,730	166	134	152	
14	2,890	190	1,820	6,420	3,400	5,090	7,950	359	3,630	166	144	150	
15	4,320	2,830	3,470	7,340	2,690	6,170	8,100	482	7,460	180	147	159	
16	4,630	3,800	4,350	6,920	3,000	6,030	8,000	4,440	7,700	185	135	152	
17	4,690	2,670	4,190	6,400	5,720	6,050	7,860	6,330	7,340	148	136	142	
18	2,670	487	1,580	6,400	4,130	6,080	7,480	1,290	6,830	139	124	132	
19	487	213	292	6,140	877	4,530	7,160	443	4,970	127	115	122	
20	2,460	220	510	6,510	4,570	5,640	7,060	321	5,630	130	115	125	
21	5,220	2,460	3,570	6,450	2,350	5,680	4,570	155	807	135	120	128	
22	5,220	3,920	4,560	5,880	3,890	5,400	514	155	182	136	128	130	
23	4,800	483	3,270	5,450	4,850	5,150	245	146	166	137	129	131	
24	4,550	353	1,590	6,370	5,290	5,810	147	129	141	140	128	132	
25	4,940	4,480	4,760	8,230	6,370	7,480	155	132	143	137	127	131	
26	4,700	4,000	4,430	8,250	7,720	8,110	146	127	134	142	127	129	
27	4,840	1,980	4,350	8,230	7,660	8,030	145	133	138	153	142	146	
28	2,080	226	1,040	8,330	7,950	8,120	4,540	142	1,380	155	141	148	
29	2,760	226	1,360	8,320	7,970	8,200	4,490	2,090	4,090	144	126	131	
30	2,790	460	2,290	8,380	8,120	8,280	4,460	1,870	4,020	179	127	142	
31	3,280	1,200	2,430	---	---	---	4,290	492	3,560	188	163	174	
Month	9,000	142	3,520	8,380	197	5,930	9,940	127	5,600	3,360	115	193	

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 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	211	164	186	198	152	175	115	112	113	129	124	126
2	225	170	187	240	160	188	114	108	113	132	124	128
3	201	175	189	182	158	170	119	114	116	132	123	127
4	229	169	186	170	149	161	121	107	115	129	122	125
5	226	164	178	153	135	146	122	115	118	131	123	126
6	219	173	193	135	113	123	124	115	120	130	125	128
7	4,740	189	1,940	128	123	126	127	116	123	132	125	128
8	5,400	4,740	5,190	138	126	129	126	119	123	137	125	128
9	5,370	448	4,300	137	123	131	127	120	124	130	123	127
10	4,910	606	3,540	171	137	144	125	112	120	133	125	129
11	4,570	654	3,880	162	130	138	135	110	120	200	123	130
12	6,700	654	4,530	1,970	135	195	136	124	128	133	124	127
13	6,380	4,340	5,760	149	123	138	136	122	129	139	122	128
14	4,340	444	2,620	143	128	137	134	120	124	135	117	124
15	3,840	188	1,110	140	127	130	140	121	128	135	116	126
16	237	171	192	151	128	139	150	121	125	133	126	129
17	204	181	194	145	138	141	132	114	124	131	125	128
18	2,720	176	556	140	131	137	132	118	128	148	124	132
19	4,150	2,690	3,820	134	125	130	133	114	119	145	116	131
20	4,310	3,720	4,120	138	115	121	135	128	132	141	124	134
21	4,300	3,830	4,120	131	119	124	136	128	132	150	119	129
22	4,180	578	3,600	128	126	127	143	126	130	143	119	130
23	3,820	257	2,270	128	117	125	146	125	129	142	124	129
24	3,220	196	600	126	116	120	141	122	130	133	124	128
25	218	165	206	125	116	118	131	123	127	131	125	128
26	252	174	215	123	116	119	130	125	127	138	125	131
27	2,200	188	627	123	118	120	131	125	128	150	134	141
28	4,020	180	2,530	122	107	114	131	126	128	140	125	129
29	---	---	---	114	106	109	132	126	128	140	126	134
30	---	---	---	115	111	113	139	124	126	152	129	135
31	---	---	---	120	112	115	---	---	---	137	127	130
Month	6,700	164	2,040	1,970	106	136	150	107	124	200	116	129

Water-Data Report 2009

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 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
				June			July			August			September
1	176	124	134	137	125	129	152	131	143	214	156	171	
2	134	125	129	139	123	128	146	131	138	192	147	173	
3	142	131	135	131	122	126	149	131	137	191	155	174	
4	144	131	136	132	126	129	165	149	157	186	155	173	
5	147	132	140	135	128	131	1,920	148	728	223	163	176	
6	179	131	142	139	122	132	2,070	154	1,120	219	130	168	
7	133	128	130	137	129	133	196	129	145	171	131	155	
8	141	130	134	138	127	134	155	140	149	212	131	167	
9	144	127	137	183	132	147	154	137	144	202	147	170	
10	140	121	128	145	130	138	744	148	282	202	150	170	
11	134	123	128	155	142	149	1,580	150	746	223	153	182	
12	153	120	127	146	136	140	1,600	297	1,280	580	146	202	
13	129	121	125	156	142	148	1,170	155	412	580	135	232	
14	133	120	122	173	131	154	179	149	166	152	138	146	
15	131	119	123	172	141	157	186	166	173	152	148	150	
16	128	118	122	161	143	153	172	156	165	462	149	201	
17	138	116	125	169	152	161	180	156	169	211	146	188	
18	125	116	120	179	144	156	174	168	170	194	140	167	
19	124	117	119	158	146	153	171	155	163	159	143	151	
20	118	116	117	166	128	158	326	154	177	223	129	169	
21	120	116	117	185	147	162	1,660	155	971	144	136	141	
22	125	116	120	174	144	167	1,960	157	1,380	205	130	160	
23	128	119	122	181	148	160	789	153	196	203	147	174	
24	126	118	121	165	154	161	196	151	159	185	143	158	
25	126	120	122	171	152	160	172	160	166	1,940	141	362	
26	131	125	128	152	142	147	168	145	155	226	141	170	
27	128	124	126	445	143	181	161	148	153	162	138	147	
28	126	124	125	464	157	197	187	161	170	161	134	145	
29	137	126	131	159	146	153	187	146	171	238	140	160	
30	140	131	135	160	137	148	164	138	152	158	134	143	
31	---	---	---	151	134	141	194	145	162	---	---	---	
Month	179	116	127	464	122	149	2,070	129	342	1,940	129	175	

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
October				November				December				January	
1	7.1	6.9	7.0	7.2	7.0	7.1	---	---	---	6.8	6.6	6.7	
2	7.0	6.8	6.9	7.3	6.8	7.1	---	---	---	6.8	6.7	6.7	
3	7.0	6.8	6.8	7.3	7.1	7.2	---	---	---	6.8	6.7	6.7	
4	7.0	6.8	6.9	7.3	7.1	7.2	7.4	7.0	7.1	6.9	6.8	6.8	
5	7.0	6.8	7.0	7.3	7.1	7.3	7.2	7.0	7.1	6.8	6.8	6.8	
6	7.2	6.8	7.0	7.1	7.1	7.1	7.1	7.0	7.0	6.8	6.8	6.8	
7	7.2	7.0	7.1	7.1	6.9	7.0	7.2	7.0	7.1	6.8	6.7	6.8	
8	7.2	7.0	7.0	7.2	6.8	7.0	7.3	6.9	7.0	6.9	6.7	6.8	
9	7.2	7.0	7.1	7.1	6.8	7.0	7.2	7.0	7.1	6.9	6.8	6.9	
10	7.3	7.1	7.2	7.1	6.7	7.0	7.2	7.0	7.1	7.0	6.9	6.9	
11	7.3	6.9	7.2	7.1	6.7	7.0	7.4	7.1	7.1	7.0	6.9	7.0	
12	7.2	7.1	7.2	7.1	7.0	7.0	7.4	7.1	7.2	7.1	7.0	7.0	
13	7.2	7.1	7.2	7.1	6.8	7.0	7.2	7.0	7.1	7.0	6.9	6.9	
14	7.2	7.1	7.1	7.0	6.8	6.9	7.0	6.8	6.9	7.0	6.8	6.9	
15	7.2	7.0	7.2	7.1	6.8	7.0	7.0	6.8	6.8	6.9	6.8	6.9	
16	7.4	7.0	7.2	7.0	6.8	6.9	7.2	6.8	6.9	7.0	6.9	6.9	
17	7.5	7.0	7.2	7.0	6.8	6.9	6.8	6.6	6.7	7.0	6.9	6.9	
18	7.3	7.1	7.3	7.0	6.9	7.0	6.8	6.6	6.8	7.0	7.0	7.0	
19	7.3	7.1	7.2	6.9	6.8	6.9	6.9	6.8	6.8	7.0	7.0	7.0	
20	7.2	7.1	7.2	6.9	6.7	6.8	6.9	6.8	6.9	7.0	7.0	7.0	
21	7.2	7.0	7.1	7.1	6.8	7.0	6.9	6.7	6.9	7.0	6.9	7.0	
22	7.3	7.1	7.2	7.0	6.9	6.9	6.9	6.7	6.8	7.0	6.9	6.9	
23	7.3	7.2	7.3	7.0	6.7	6.9	6.9	6.7	6.8	6.9	6.8	6.9	
24	7.3	7.1	7.2	6.9	6.8	6.9	7.0	6.8	6.9	6.8	6.6	6.6	
25	7.2	7.0	7.2	---	---	---	7.0	6.9	6.9	6.6	6.6	6.6	
26	7.3	7.1	7.2	---	---	---	6.9	6.9	6.9	6.6	6.5	6.5	
27	7.2	7.0	7.1	---	---	---	6.9	6.9	6.9	6.6	6.5	6.5	
28	7.2	7.0	7.1	---	---	---	7.0	6.8	6.9	6.7	6.5	6.6	
29	7.1	7.0	7.0	---	---	---	6.8	6.7	6.8	6.6	6.5	6.6	
30	7.2	7.0	7.1	---	---	---	6.8	6.6	6.7	6.8	6.6	6.6	
31	7.2	7.1	7.1	---	---	---	6.8	6.7	6.7	6.9	6.7	6.8	
Max	7.5	7.2	7.3	---	---	---	---	---	---	7.1	7.0	7.0	
Min	7.0	6.8	6.8	---	---	---	---	---	---	6.6	6.5	6.5	

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
February				March				April				May	
1	7.0	6.8	6.9	7.1	7.0	7.1	6.3	6.2	6.3	7.1	7.1	7.1	
2	7.0	6.9	6.9	7.2	7.0	7.1	6.2	6.1	6.2	7.1	7.1	7.1	
3	7.0	6.9	7.0	7.1	7.0	7.0	6.3	6.2	6.2	7.1	7.0	7.1	
4	7.1	6.9	7.0	7.0	6.8	6.9	6.4	6.2	6.3	7.1	7.0	7.1	
5	7.1	6.9	7.0	6.8	6.7	6.8	6.4	6.3	6.4	7.0	7.0	7.0	
6	7.1	7.0	7.0	6.8	6.6	6.7	6.5	6.4	6.5	7.0	7.0	7.0	
7	7.1	7.0	7.0	6.9	6.8	6.9	6.5	6.4	6.4	7.0	6.8	6.8	
8	7.2	7.0	7.1	7.0	6.9	6.9	6.4	6.3	6.4	6.8	6.7	6.8	
9	7.2	7.0	7.2	6.9	6.7	6.8	6.5	6.4	6.4	6.8	6.7	6.8	
10	7.2	7.1	7.2	6.8	6.6	6.7	6.7	6.4	6.5	6.8	6.7	6.8	
11	7.2	7.0	7.2	6.7	6.6	6.6	6.6	6.6	6.6	7.0	6.7	6.8	
12	7.2	7.1	7.2	6.8	6.6	6.6	6.7	6.6	6.6	6.8	6.7	6.8	
13	7.3	6.9	7.1	6.7	6.5	6.6	6.7	6.6	6.7	6.9	6.7	6.8	
14	7.2	7.1	7.1	6.6	6.6	6.6	6.7	6.6	6.7	6.8	6.8	6.8	
15	7.2	7.0	7.1	6.7	6.6	6.6	6.7	6.6	6.7	6.9	6.8	6.8	
16	7.2	7.1	7.2	6.8	6.6	6.7	6.8	6.7	6.7	6.9	6.8	6.9	
17	7.3	7.1	7.1	6.8	6.7	6.8	6.8	6.7	6.8	7.0	6.8	6.9	
18	7.2	7.1	7.1	6.8	6.7	6.7	6.8	6.8	6.8	7.0	6.9	7.0	
19	7.2	7.1	7.2	6.8	6.7	6.7	6.8	6.8	6.8	7.0	6.9	6.9	
20	7.3	7.1	7.2	6.9	6.7	6.8	6.9	6.8	6.8	7.1	6.9	6.9	
21	7.2	7.1	7.2	7.0	6.9	6.9	6.9	6.8	6.8	7.0	6.8	6.9	
22	7.2	7.2	7.2	7.0	6.9	6.9	6.9	6.8	6.8	7.0	6.9	6.9	
23	7.2	7.1	7.2	6.9	6.9	6.9	7.0	6.8	6.9	6.9	6.8	6.9	
24	7.3	7.2	7.2	6.9	6.7	6.9	7.0	6.9	6.9	7.0	6.8	6.9	
25	7.3	7.2	7.2	6.8	6.6	6.7	7.0	6.9	7.0	6.9	6.8	6.9	
26	7.3	7.1	7.2	6.7	6.6	6.7	7.0	6.9	7.0	7.0	6.8	6.9	
27	7.2	7.0	7.1	6.7	6.6	6.7	7.0	6.9	7.0	6.9	6.8	6.9	
28	7.1	7.0	7.1	6.6	6.6	6.6	7.0	6.9	7.0	6.9	6.8	6.8	
29	---	---	---	6.7	6.5	6.6	7.0	7.0	7.0	6.9	6.8	6.8	
30	---	---	---	6.6	6.4	6.5	7.1	7.0	7.1	6.9	6.8	6.8	
31	---	---	---	6.4	6.3	6.4	---	---	---	6.9	6.8	6.8	
Max	7.3	7.2	7.2	7.2	7.0	7.1	7.1	7.0	7.1	7.1	7.1	7.1	
Min	7.0	6.8	6.9	6.4	6.3	6.4	6.2	6.1	6.2	6.8	6.7	6.8	

Water-Data Report 2009

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

**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	June			July			August			September		
1	7.0	6.8	6.8	---	---	---	6.6	6.5	6.5	6.7	6.6	6.6
2	6.9	6.8	6.8	6.4	6.3	6.3	6.7	6.4	6.5	6.8	6.7	6.7
3	6.9	6.8	6.8	6.4	6.3	6.4	6.7	6.5	6.5	6.8	6.7	6.7
4	7.0	6.8	6.8	6.5	6.4	6.4	6.7	6.4	6.5	6.7	6.6	6.6
5	7.0	6.9	6.9	6.5	6.4	6.5	6.8	6.4	6.6	6.9	6.6	6.7
6	7.0	6.8	6.9	6.5	6.4	6.5	6.7	6.5	6.6	6.9	6.6	6.7
7	6.8	6.7	6.8	6.5	6.4	6.4	7.1	6.6	6.6	6.8	6.6	6.7
8	6.9	6.7	6.8	6.5	6.4	6.4	6.8	6.6	6.6	6.8	6.6	6.7
9	6.9	6.8	6.8	6.6	6.5	6.5	6.9	6.6	6.6	7.0	6.7	6.8
10	6.9	6.8	6.8	6.6	6.5	6.5	7.4	6.6	6.7	7.1	6.9	7.0
11	6.8	6.7	6.8	6.6	6.5	6.5	7.3	6.6	6.7	7.0	6.9	6.9
12	6.8	6.7	6.8	6.7	6.5	6.6	7.0	6.7	6.7	7.1	6.8	6.9
13	6.8	6.7	6.8	6.6	6.5	6.6	6.7	6.6	6.6	7.1	6.8	6.8
14	6.8	6.6	6.7	6.6	6.5	6.5	6.7	6.6	6.6	6.8	6.6	6.8
15	6.7	6.6	6.6	6.7	6.4	6.5	6.7	6.5	6.6	6.8	6.6	6.7
16	6.6	6.6	6.6	6.6	6.4	6.5	6.8	6.4	6.5	6.8	6.6	6.7
17	6.6	6.5	6.6	6.7	6.5	6.6	6.8	6.4	6.5	6.8	6.6	6.7
18	6.5	6.4	6.5	6.6	6.5	6.5	6.9	6.4	6.6	6.8	6.6	6.7
19	6.5	6.4	6.4	6.6	6.5	6.5	6.7	6.4	6.5	6.7	6.5	6.6
20	6.4	6.4	6.4	6.6	6.4	6.5	6.6	6.4	6.5	6.8	6.6	6.6
21	6.5	6.4	6.4	6.5	6.3	6.4	6.7	6.4	6.6	6.7	6.6	6.6
22	6.4	6.4	6.4	6.5	6.3	6.4	6.7	6.5	6.6	6.8	6.5	6.7
23	6.4	6.4	6.4	6.6	6.3	6.4	6.6	6.5	6.6	6.7	6.5	6.6
24	6.4	6.3	6.4	6.6	6.3	6.4	6.7	6.5	6.6	6.7	6.4	6.6
25	6.4	6.4	6.4	6.5	6.3	6.4	6.6	6.5	6.6	6.7	6.4	6.6
26	6.5	6.4	6.4	6.6	6.3	6.4	6.7	6.4	6.5	6.6	6.4	6.5
27	6.5	6.4	6.4	6.6	6.3	6.4	6.8	6.4	6.5	6.6	6.5	6.6
28	6.4	6.3	6.4	6.8	6.4	6.5	6.9	6.5	6.6	6.6	6.5	6.5
29	6.4	6.3	6.4	6.6	6.4	6.5	6.7	6.5	6.6	6.6	6.4	6.5
30	6.5	6.4	6.4	6.6	6.4	6.4	6.7	6.5	6.6	6.4	6.3	6.4
31	---	---	---	6.6	6.4	6.5	6.7	6.5	6.6	---	---	---
Max	7.0	6.9	6.9	---	---	---	7.4	6.7	6.7	7.1	6.9	7.0
Min	6.4	6.3	6.4	---	---	---	6.6	6.4	6.5	6.4	6.3	6.4

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
October				November				December				January	
1	7.0	6.8	6.9	7.0	6.9	7.0	7.2	7.0	7.1	7.1	6.9	7.0	
2	6.9	6.6	6.8	6.9	6.8	6.9	7.1	7.0	7.1	7.1	7.0	7.0	
3	6.9	6.7	6.8	6.9	6.8	6.8	7.0	7.0	7.0	7.0	6.9	7.0	
4	6.8	6.8	6.8	7.2	6.8	7.0	7.1	7.0	7.0	7.1	7.0	7.1	
5	6.8	6.7	6.7	7.2	6.9	7.1	7.1	7.0	7.0	7.1	7.1	7.1	
6	6.7	6.5	6.6	6.9	6.8	6.9	7.0	7.0	7.0	7.1	7.1	7.1	
7	6.6	6.5	6.5	6.9	6.8	6.8	7.0	6.9	7.0	7.1	7.0	7.1	
8	6.5	6.5	6.5	6.9	6.7	6.8	7.0	6.9	7.0	7.1	7.0	7.0	
9	6.5	6.5	6.5	6.8	6.7	6.8	7.0	6.9	6.9	7.0	6.9	7.0	
10	6.7	6.5	6.6	6.7	6.6	6.7	7.0	6.9	6.9	7.0	7.0	7.0	
11	7.2	6.6	6.8	6.7	6.6	6.6	7.3	6.9	7.2	7.0	7.0	7.0	
12	7.2	7.0	7.1	6.6	6.6	6.6	7.2	7.1	7.2	7.2	7.0	7.0	
13	7.1	7.0	7.0	6.9	6.5	6.6	7.2	7.0	7.1	7.0	6.9	7.0	
14	7.1	6.9	7.0	6.8	6.6	6.7	7.3	6.9	7.1	7.0	6.7	6.8	
15	7.0	7.0	7.0	6.9	6.6	6.8	7.3	6.9	7.0	6.8	6.7	6.8	
16	7.0	7.0	7.0	6.9	6.6	6.7	7.2	7.0	7.1	6.8	6.8	6.8	
17	7.0	6.9	7.0	6.6	6.5	6.6	7.1	7.0	7.1	6.9	6.8	6.8	
18	7.2	6.9	7.0	6.7	6.6	6.6	7.1	7.0	7.1	6.9	6.8	6.9	
19	7.2	7.0	7.0	6.8	6.5	6.6	7.3	6.9	7.1	6.9	6.8	6.8	
20	7.0	6.9	7.0	6.8	6.5	6.7	7.3	7.0	7.1	6.9	6.8	6.9	
21	7.1	7.0	7.0	6.9	6.7	6.8	7.1	6.9	7.0	6.9	6.8	6.8	
22	7.0	6.8	6.9	6.7	6.6	6.7	7.1	6.9	6.9	6.8	6.8	6.8	
23	7.3	6.8	6.8	6.6	6.5	6.6	7.1	6.9	6.9	6.8	6.6	6.7	
24	7.2	6.7	7.1	6.8	6.6	6.7	7.1	6.9	7.0	6.6	6.4	6.5	
25	7.1	6.8	7.0	7.1	6.7	7.0	7.1	7.0	7.0	6.4	6.3	6.3	
26	7.1	6.9	7.0	7.1	7.0	7.0	7.0	7.0	7.0	6.3	6.2	6.3	
27	7.1	6.9	7.0	7.1	7.0	7.0	7.0	7.0	7.0	6.3	6.3	6.3	
28	7.1	6.9	7.0	7.2	7.0	7.1	7.2	7.0	7.0	6.4	6.3	6.3	
29	6.9	6.8	6.8	7.1	7.0	7.1	7.2	7.1	7.1	6.4	6.2	6.3	
30	7.0	6.8	6.9	7.1	7.0	7.0	7.2	7.0	7.1	6.5	6.3	6.3	
31	7.0	6.8	6.8	---	---	---	7.2	7.0	7.0	6.6	6.5	6.5	
Max	7.3	7.0	7.1	7.2	7.0	7.1	7.3	7.1	7.2	7.2	7.1	7.1	
Min	6.5	6.5	6.5	6.6	6.5	6.6	7.0	6.9	6.9	6.3	6.2	6.3	

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median	
February				March				April				May	
1	6.7	6.5	6.6	7.0	6.9	7.0	6.4	6.2	6.3	6.9	6.9	6.9	
2	6.7	6.6	6.6	7.1	6.9	7.0	6.3	6.2	6.2	6.9	6.9	6.9	
3	6.7	6.6	6.7	7.0	6.8	6.9	6.3	6.2	6.2	7.0	6.9	6.9	
4	6.8	6.6	6.7	6.9	6.7	6.8	6.4	6.2	6.3	6.9	6.8	6.9	
5	6.8	6.6	6.7	6.7	6.6	6.7	6.5	6.4	6.4	6.9	6.8	6.8	
6	6.7	6.6	6.6	6.7	6.4	6.5	6.5	6.4	6.4	6.8	6.7	6.8	
7	7.0	6.6	6.6	6.8	6.7	6.8	6.7	6.4	6.6	6.8	6.7	6.8	
8	7.0	7.0	7.0	6.8	6.7	6.8	6.7	6.6	6.6	6.8	6.7	6.8	
9	7.0	6.8	7.0	6.7	6.5	6.6	6.8	6.7	6.7	6.8	6.8	6.8	
10	6.9	6.8	6.8	6.6	6.5	6.5	6.8	6.7	6.7	6.8	6.8	6.8	
11	7.1	6.7	6.8	6.5	6.4	6.4	6.8	6.7	6.8	7.0	6.8	6.8	
12	7.1	6.8	6.8	6.7	6.5	6.6	6.9	6.8	6.8	6.8	6.8	6.8	
13	6.9	6.7	6.8	6.6	6.5	6.6	6.9	6.8	6.8	6.9	6.8	6.8	
14	7.0	6.7	6.8	6.6	6.5	6.5	6.9	6.8	6.8	6.9	6.8	6.8	
15	6.9	6.7	6.9	6.6	6.5	6.5	6.9	6.8	6.8	7.0	6.8	6.9	
16	7.0	6.8	6.9	6.6	6.5	6.6	7.0	6.8	6.9	7.0	6.9	6.9	
17	6.9	6.8	6.9	6.7	6.6	6.6	6.9	6.8	6.9	7.0	6.9	7.0	
18	6.9	6.8	6.9	6.7	6.6	6.6	6.9	6.8	6.9	7.1	7.0	7.0	
19	7.0	6.9	6.9	6.6	6.6	6.6	6.9	6.8	6.9	7.1	6.9	7.0	
20	6.9	6.8	6.9	6.7	6.6	6.6	7.0	6.9	6.9	7.0	7.0	7.0	
21	6.8	6.8	6.8	6.8	6.7	6.7	6.9	6.8	6.8	7.0	6.9	7.0	
22	7.1	6.7	6.8	6.8	6.7	6.8	6.8	6.8	6.8	7.0	7.0	7.0	
23	7.1	6.8	6.9	6.8	6.7	6.7	6.9	6.8	6.8	7.0	7.0	7.0	
24	7.1	6.8	7.0	6.7	6.6	6.7	6.9	6.8	6.8	7.0	7.0	7.0	
25	7.1	7.0	7.0	6.6	6.5	6.6	6.9	6.8	6.8	7.0	7.0	7.0	
26	7.1	7.0	7.1	6.6	6.5	6.6	6.9	6.8	6.8	7.0	7.0	7.0	
27	7.1	7.0	7.0	6.6	6.5	6.6	6.9	6.8	6.8	7.1	7.0	7.0	
28	7.1	7.0	7.1	6.6	6.5	6.5	6.9	6.8	6.8	7.1	7.0	7.0	
29	---	---	---	6.6	6.5	6.5	6.9	6.8	6.9	7.0	7.0	7.0	
30	---	---	---	6.6	6.5	6.5	7.0	6.8	6.9	7.1	6.9	7.0	
31	---	---	---	6.5	6.3	6.4	---	---	---	7.0	7.0	7.0	
Max	7.1	7.0	7.1	7.1	6.9	7.0	7.0	6.9	6.9	7.1	7.0	7.0	
Min	6.7	6.5	6.6	6.5	6.3	6.4	6.3	6.2	6.2	6.8	6.7	6.8	

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
				June			July			August		
1	7.2	6.9	7.0	6.5	6.3	6.5	6.7	6.7	6.7	6.9	6.7	6.8
2	7.0	6.9	7.0	6.4	6.3	6.3	6.7	6.6	6.7	6.9	6.7	6.8
3	7.1	7.0	7.0	6.4	6.3	6.4	6.7	6.6	6.6	6.9	6.6	6.7
4	7.1	7.0	7.0	6.5	6.4	6.4	6.7	6.6	6.6	6.8	6.5	6.6
5	7.1	7.0	7.0	6.5	6.5	6.5	6.7	6.3	6.6	6.9	6.6	6.7
6	7.1	6.9	7.0	6.6	6.5	6.5	6.9	6.3	6.5	6.9	6.7	6.8
7	7.0	7.0	7.0	6.5	6.4	6.4	6.9	6.8	6.8	6.9	6.7	6.8
8	7.0	6.9	7.0	6.4	6.3	6.4	7.0	6.8	6.9	6.9	6.6	6.8
9	7.1	6.9	7.0	6.6	6.4	6.5	7.0	6.8	6.9	7.0	6.6	6.8
10	7.0	6.9	6.9	6.5	6.4	6.4	6.9	6.6	6.9	7.2	6.9	7.0
11	6.9	6.8	6.9	6.5	6.4	6.4	7.0	6.6	6.7	7.0	6.9	7.0
12	6.9	6.8	6.9	6.5	6.4	6.4	7.0	6.6	6.6	7.0	6.9	6.9
13	6.9	6.8	6.9	6.6	6.4	6.5	6.9	6.6	6.8	7.0	6.9	7.0
14	6.9	6.8	6.8	6.5	6.4	6.5	6.9	6.7	6.8	7.0	6.8	6.9
15	6.8	6.7	6.7	6.5	6.4	6.5	6.8	6.6	6.8	7.0	6.8	6.9
16	6.7	6.7	6.7	6.6	6.4	6.5	6.8	6.6	6.7	7.0	6.7	6.8
17	6.7	6.6	6.7	6.7	6.4	6.6	6.6	6.6	6.6	7.0	6.7	6.9
18	6.6	6.6	6.6	6.7	6.5	6.6	6.8	6.6	6.6	6.9	6.7	6.8
19	6.6	6.5	6.6	6.6	6.5	6.6	6.8	6.6	6.7	6.8	6.7	6.8
20	6.5	6.5	6.5	6.6	6.5	6.6	6.8	6.6	6.7	6.9	6.7	6.8
21	6.5	6.5	6.5	6.6	6.5	6.5	6.8	6.5	6.6	6.8	6.6	6.7
22	6.5	6.5	6.5	6.6	6.5	6.5	6.9	6.5	6.6	6.8	6.6	6.8
23	6.6	6.5	6.5	6.6	6.5	6.6	6.8	6.6	6.7	6.8	6.7	6.7
24	6.5	6.5	6.5	6.6	6.5	6.6	6.8	6.6	6.7	6.8	6.7	6.8
25	6.5	6.5	6.5	6.6	6.6	6.6	6.8	6.6	6.7	6.8	6.6	6.7
26	6.6	6.5	6.5	6.7	6.6	6.6	6.7	6.6	6.7	6.9	6.6	6.8
27	6.5	6.5	6.5	6.7	6.5	6.6	6.7	6.6	6.6	6.8	6.7	6.8
28	6.5	6.4	6.5	6.6	6.5	6.6	6.7	6.6	6.7	6.8	6.6	6.7
29	6.5	6.4	6.5	6.7	6.6	6.6	6.8	6.6	6.7	6.8	6.6	6.7
30	6.6	6.5	6.5	6.7	6.6	6.6	6.7	6.6	6.7	6.6	6.6	6.6
31	---	---	---	6.7	6.6	6.6	6.8	6.6	6.7	---	---	---
Max	7.2	7.0	7.0	6.7	6.6	6.6	7.0	6.8	6.9	7.2	6.9	7.0
Min	6.5	6.4	6.5	6.4	6.3	6.3	6.6	6.3	6.5	6.6	6.5	6.6

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**TEMPERATURE, WATER, DEGREES CELSIUS, TOP
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	23.7	22.8	23.2	15.0	13.2	14.2	9.8	9.1	9.5	9.9	8.3	8.7	
2	23.2	22.5	22.8	15.0	13.5	14.4	9.6	8.8	9.2	8.8	8.0	8.5	
3	23.0	21.8	22.4	15.5	14.7	15.2	9.3	8.5	8.9	8.9	8.3	8.6	
4	22.8	22.0	22.3	15.7	15.2	15.5	9.0	8.4	8.8	8.6	7.6	7.9	
5	22.8	22.3	22.5	15.7	15.4	15.6	8.9	8.6	8.8	8.6	7.7	8.1	
6	23.1	21.7	22.6	15.6	15.3	15.4	8.9	8.3	8.5	8.6	8.4	8.6	
7	23.0	22.4	22.7	15.5	15.2	15.4	8.9	8.2	8.7	9.7	8.6	9.1	
8	23.0	21.6	22.1	16.1	15.0	15.6	8.5	7.4	7.9	9.4	8.7	9.0	
9	22.4	21.8	22.0	15.6	15.1	15.3	8.3	7.5	7.9	8.7	8.1	8.3	
10	22.2	21.7	21.9	15.4	14.9	15.2	9.0	8.0	8.4	8.7	8.0	8.3	
11	22.1	21.8	22.0	15.3	14.5	15.0	10.0	8.9	9.3	8.9	8.4	8.7	
12	22.0	21.3	21.6	15.3	14.4	14.9	10.2	9.3	9.8	8.7	8.2	8.4	
13	22.4	21.3	21.6	15.3	14.5	15.1	9.7	8.8	9.2	8.4	7.8	8.1	
14	21.8	21.4	21.6	15.4	14.9	15.2	9.4	8.7	9.1	7.9	7.5	7.7	
15	22.1	21.0	21.6	16.2	14.3	15.5	10.5	9.3	10	7.8	7.0	7.5	
16	23.1	21.3	21.9	16.0	14.9	15.3	10.8	10.3	10.6	7.1	6.3	6.8	
17	23.1	21.3	22.0	15.0	14.2	14.6	11.3	10.7	11.0	6.3	5.5	5.9	
18	21.5	20.3	20.9	14.5	12.8	13.7	11.2	10.5	10.9	5.9	5.4	5.7	
19	20.3	19.3	19.6	13.0	11.7	12.2	10.8	10.4	10.5	5.9	5.6	5.8	
20	19.3	18.5	18.8	12.5	10.5	11.5	10.7	10.5	10.6	5.9	5.0	5.5	
21	18.5	16.7	17.4	11.8	10.8	11.4	11.0	10.6	10.8	5.1	4.8	5.0	
22	18.2	17.0	17.8	11.0	10.1	10.5	10.7	9.4	10.1	5.2	4.8	5.1	
23	17.7	17.3	17.6	10.6	10.0	10.3	9.5	8.8	9.1	5.2	4.9	5.1	
24	17.6	17.1	17.4	10.4	9.9	10.2	9.3	8.9	9.1	5.1	4.7	4.9	
25	17.6	15.7	16.6	10.1	8.6	9.7	9.3	8.8	9.0	4.7	4.5	4.5	
26	18.3	15.6	17.1	9.5	8.8	9.2	8.9	8.6	8.7	4.6	4.4	4.5	
27	18.3	16.3	16.9	9.4	8.5	9.0	9.0	8.7	8.9	4.6	4.5	4.5	
28	17.2	15.9	16.5	9.4	8.8	9.1	10.8	9.0	9.8	6.8	4.6	5.3	
29	16.0	14.3	15.2	9.2	8.9	9.1	10.6	10.0	10.3	6.5	5.8	6.2	
30	14.8	14.0	14.5	9.4	9.0	9.1	10.2	9.6	9.9	6.7	6.0	6.3	
31	15.2	14.0	14.4	---	---	---	10.1	9.6	9.8	6.5	6.1	6.4	
Month	23.7	14.0	19.9	16.2	8.5	13.1	11.3	7.4	9.5	9.9	4.4	6.9	

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**TEMPERATURE, WATER, DEGREES CELSIUS, TOP
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
February				March				April				May	
1	6.9	5.8	6.4	8.2	7.5	7.9	14.7	13.9	14.3	20.8	20.0	20.4	
2	7.3	6.3	6.7	7.5	6.4	7.0	14.8	14.5	14.7	21.0	20.2	20.6	
3	6.9	6.6	6.7	6.6	6.0	6.3	16.0	14.7	15.2	21.2	20.4	20.8	
4	6.6	6.1	6.3	7.0	6.0	6.5	15.8	14.9	15.3	21.0	20.1	20.5	
5	6.1	5.6	5.9	6.8	5.7	6.3	15.7	14.9	15.3	20.8	20.6	20.7	
6	6.2	5.3	5.7	6.9	5.4	6.0	16.0	15.4	15.6	21.1	20.5	20.8	
7	6.8	5.3	5.9	8.2	6.8	7.5	16.0	14.9	15.3	21.9	21.0	21.3	
8	7.2	5.8	6.4	9.4	7.9	8.5	14.9	14.2	14.5	22.2	21.3	21.7	
9	7.6	6.2	6.8	11.0	8.9	9.8	14.8	14.0	14.4	23.1	21.8	22.4	
10	8.5	6.7	7.4	11.3	10.3	10.7	15.0	14.2	14.5	23.0	22.2	22.5	
11	8.9	7.4	8.0	13.1	11.1	11.9	15.5	14.8	15.1	22.6	21.3	22.1	
12	9.6	8.3	8.9	13.1	12.4	12.7	15.4	14.5	14.9	21.9	20.7	21.2	
13	9.6	8.6	9.1	12.8	11.9	12.3	15.1	14.4	14.7	22.3	21.2	21.6	
14	9.8	9.0	9.4	12.0	11.7	11.9	14.7	14.4	14.5	21.9	21.1	21.5	
15	9.6	8.7	9.1	12.0	11.8	11.9	14.7	14.3	14.6	22.5	21.3	21.9	
16	9.7	9.0	9.4	11.9	10.9	11.4	14.7	13.9	14.3	22.6	22.0	22.2	
17	9.7	8.6	9.0	10.9	9.9	10.3	15.0	14.1	14.6	23.1	21.9	22.4	
18	9.3	8.8	9.0	10.8	9.7	10.0	15.8	14.6	15.1	21.9	20.4	21.2	
19	10.0	8.5	9.5	11.1	10.1	10.5	15.7	15.2	15.4	20.5	20.0	20.3	
20	9.6	8.6	9.1	10.9	10.3	10.6	16.2	15.5	15.7	21.3	19.8	20.2	
21	9.4	8.0	8.5	10.4	9.9	10.2	17.0	15.9	16.4	22.0	20.0	20.6	
22	8.6	8.0	8.3	11.0	10.0	10.5	17.0	16.4	16.7	21.8	20.7	21.2	
23	8.2	7.2	7.8	11.5	10.7	11.0	17.2	16.1	16.6	22.7	21.1	21.9	
24	7.8	6.9	7.3	11.2	10.6	11.0	17.6	16.5	17.0	23.2	21.8	22.4	
25	7.9	6.9	7.4	11.0	10.4	10.7	18.6	17.3	17.9	23.1	22.2	22.6	
26	9.0	7.2	7.9	10.8	10.4	10.6	19.3	18.3	18.7	23.3	22.2	22.6	
27	9.3	7.8	8.5	11.2	10.8	11.1	19.6	18.7	19.1	23.9	22.5	23.0	
28	8.9	8.2	8.7	12.4	11.2	11.8	20.4	19.3	19.7	24.5	23.1	23.5	
29	---	---	---	14.4	12.3	13.2	20.4	19.7	20.0	24.7	23.2	23.9	
30	---	---	---	14.4	13.6	14.0	20.5	19.8	20.2	25.0	23.8	24.3	
31	---	---	---	14.5	13.5	14.0	---	---	---	25.4	24.1	24.7	
Month	10.0	5.3	7.8	14.5	5.4	10.3	20.5	13.9	16.0	25.4	19.8	21.8	

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

TEMPERATURE, WATER, DEGREES CELSIUS, TOP WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	25.5	24.4	24.9	26.6	25.7	26.2	29.6	29.0	29.3	28.5	27.6	27.9
2	25.8	24.5	24.9	27.0	25.9	26.4	29.2	28.5	28.9	27.6	26.7	27.0
3	26.4	24.9	25.6	27.0	26.3	26.6	29.6	28.3	28.6	26.8	26.1	26.4
4	27.0	25.8	26.2	27.2	26.3	26.8	30.5	28.4	29.2	27.4	26.2	26.6
5	26.4	25.7	26.0	27.0	26.4	26.7	30.5	28.6	29.4	27.7	26.6	27.0
6	26.3	25.4	25.8	26.4	25.7	26.0	30.0	29.2	29.7	27.5	26.8	27.1
7	25.8	25.0	25.3	25.9	25.1	25.4	30.7	28.9	29.4	26.9	26.0	26.5
8	27.1	25.1	25.7	26.5	25.5	25.9	30.3	29.2	29.6	26.4	25.8	26.2
9	26.9	25.4	26.0	26.4	25.9	26.1	30.8	29.1	29.7	26.4	25.6	25.9
10	25.8	24.8	25.3	27.1	25.5	26.1	32.2	29.6	30.2	25.8	24.9	25.4
11	25.8	24.9	25.3	27.4	25.8	26.1	31.8	29.9	30.3	25.2	24.6	24.7
12	25.6	24.8	25.1	27.7	25.7	26.2	31.4	30.2	30.6	25.8	24.3	24.7
13	25.6	25.0	25.2	27.0	26.6	26.7	30.3	30.0	30.1	25.8	24.6	25.2
14	25.2	24.8	24.9	27.5	26.4	26.7	30.0	29.4	29.6	25.4	24.9	25.0
15	24.9	24.4	24.6	28.5	26.6	26.9	29.8	28.8	29.1	25.9	24.9	25.3
16	24.5	24.0	24.3	28.0	26.8	27.4	30.6	29.0	29.3	26.0	25.3	25.6
17	24.0	23.7	23.9	28.5	27.1	27.8	30.9	29.3	29.6	25.8	25.2	25.5
18	23.8	23.4	23.6	27.9	27.0	27.4	31.3	29.6	30.2	25.4	24.8	25.1
19	24.0	23.4	23.7	28.1	27.4	27.6	31.3	29.6	30.2	25.6	25.0	25.2
20	24.5	23.5	24.0	28.0	27.5	27.7	30.9	29.7	30.3	25.5	24.8	25.2
21	24.5	24.0	24.2	28.2	27.2	27.5	30.9	29.9	30.3	25.6	24.9	25.2
22	24.4	23.8	24.1	28.3	27.4	27.7	31.4	30.1	30.4	25.8	25.0	25.4
23	24.6	23.8	24.1	29.4	27.6	28.1	30.3	29.8	30.0	25.8	25.3	25.5
24	24.4	23.8	24.1	28.6	27.5	27.9	30.8	29.7	30.0	26.1	25.3	25.6
25	24.9	24.2	24.5	29.2	27.8	28.4	30.3	29.7	29.9	26.1	25.4	25.8
26	25.4	24.6	25.0	29.1	28.2	28.6	30.8	29.6	29.9	25.4	24.5	24.9
27	25.4	24.8	25.1	29.0	28.3	28.6	31.0	29.6	30.0	24.7	24.4	24.5
28	25.3	24.7	24.9	29.5	28.2	28.7	30.7	29.9	30.1	25.0	24.1	24.5
29	25.9	24.8	25.3	29.2	28.5	28.8	30.5	29.7	30.0	24.8	23.8	24.3
30	26.4	25.4	25.8	29.5	28.5	28.9	30.7	29.4	29.7	23.8	23.2	23.4
31	---	---	---	30.0	29.0	29.4	30.2	28.5	29.2	---	---	---
Month	27.1	23.4	24.9	30.0	25.1	27.3	32.2	28.3	29.8	28.5	23.2	25.6

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued
**TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	22.6	21.7	21.9	13.1	12.6	12.9	9.6	9.0	9.2	10.3	8.7	9.5	
2	22.9	21.7	22.6	13.1	12.9	12.9	9.6	9.2	9.3	8.9	8.1	8.6	
3	22.5	21.8	22.1	13.3	13.0	13.1	9.4	8.8	9.2	9.0	8.4	8.7	
4	21.9	21.7	21.8	15.3	13.2	14.3	9.1	8.8	8.9	8.7	7.7	8.0	
5	21.7	21.6	21.6	15.4	14.8	15.2	9.1	8.9	9.0	8.6	7.8	8.2	
6	21.8	21.6	21.7	15.2	15.0	15.1	9.2	9.0	9.1	8.8	8.6	8.7	
7	22.0	21.8	21.8	15.2	15.0	15.1	9.3	9.0	9.2	9.8	8.7	9.2	
8	22.0	21.8	21.9	15.0	14.7	14.9	9.3	9.1	9.2	9.5	8.7	9.0	
9	22.0	21.9	21.9	14.9	14.7	14.8	9.3	9.1	9.2	8.7	8.0	8.3	
10	22.0	21.6	21.7	14.8	14.7	14.7	9.2	8.8	9.1	8.7	8.0	8.3	
11	21.7	21.4	21.6	14.9	14.7	14.8	8.9	7.5	7.8	8.8	8.4	8.7	
12	21.7	21.0	21.3	14.9	14.8	14.8	9.2	8.0	8.5	8.6	8.1	8.4	
13	21.5	21.0	21.1	15.0	14.2	14.8	9.0	8.8	8.9	8.4	7.8	8.1	
14	21.2	20.6	20.8	14.6	14.3	14.5	9.4	8.8	9.1	7.9	7.3	7.7	
15	20.9	20.6	20.7	14.9	13.7	13.9	9.6	9.3	9.5	7.7	7.0	7.5	
16	21.0	20.8	20.9	14.9	13.9	14.2	10.2	9.4	9.6	7.1	6.3	6.7	
17	21.3	20.9	21.1	14.7	14.3	14.5	9.9	9.6	9.7	6.3	5.5	5.9	
18	21.3	19.8	20.9	14.6	14.3	14.6	10.6	9.7	10	6.0	5.4	5.7	
19	20.0	18.7	19.3	14.6	12.7	14.1	10.5	10.1	10.3	6.0	5.7	5.8	
20	18.8	17.0	18.2	14.4	10.3	12.2	10.7	10.2	10.4	5.9	5.1	5.5	
21	17.0	16.2	16.5	11.4	10.3	10.8	11.1	10.7	10.9	5.1	4.8	5.0	
22	16.9	16.6	16.7	11.3	10.8	11.0	10.8	9.5	10.2	5.2	4.9	5.1	
23	17.4	16.8	17.0	11.3	9.8	10.6	9.6	8.9	9.3	5.2	4.9	5.1	
24	17.4	15.8	16.9	10.2	8.1	8.5	9.3	9.1	9.2	5.1	4.7	4.9	
25	15.8	14.8	15.0	8.8	8.1	8.5	9.2	9.0	9.1	4.7	4.5	4.6	
26	15.7	15.0	15.4	9.0	8.8	8.9	9.0	8.8	8.9	4.6	4.5	4.5	
27	16.8	15.5	15.8	9.1	8.9	9.0	9.2	8.9	8.9	4.6	4.5	4.6	
28	16.8	15.7	16.2	9.0	8.7	8.8	10.4	9.2	9.6	6.6	4.6	5.3	
29	16.0	13.7	15.2	9.0	8.8	8.9	10.0	9.6	9.7	6.4	5.9	6.2	
30	14.4	13.7	14.0	9.1	9.0	9.0	10.1	9.7	9.9	6.7	6.0	6.3	
31	14.1	13.1	13.8	---	---	---	10.3	10.0	10.1	6.6	6.1	6.4	
Month	22.9	13.1	19.3	15.4	8.1	12.6	11.1	7.5	9.4	10.3	4.5	6.9	

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued
**TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	6.8	5.8	6.3	8.2	7.5	7.9	14.7	13.9	14.3	20.8	20.1	20.4
2	7.1	6.3	6.7	7.6	6.4	7.0	14.8	14.5	14.7	21.0	20.3	20.6
3	6.9	6.6	6.8	6.6	5.8	6.2	15.8	14.8	15.2	21.1	20.5	20.8
4	6.6	6.2	6.3	7.0	6.0	6.5	15.7	14.9	15.3	20.9	20.2	20.6
5	6.2	5.5	5.8	6.8	5.8	6.3	15.7	14.9	15.3	20.9	20.7	20.8
6	6.0	5.2	5.6	6.8	5.4	6.0	16.0	15.4	15.5	21.2	20.6	20.9
7	5.7	4.8	5.2	7.9	6.8	7.4	16.0	14.9	15.4	21.8	21.1	21.3
8	4.9	4.8	4.8	9.2	7.9	8.5	14.9	14.3	14.6	22.1	21.4	21.7
9	7.1	4.9	5.4	10.5	8.9	9.6	14.7	14.1	14.4	23.0	21.8	22.3
10	6.8	5.4	5.9	11.2	10.2	10.6	14.9	14.3	14.6	22.9	22.2	22.5
11	8.3	5.6	6.3	12.6	11.1	11.6	15.5	14.9	15.2	22.7	21.4	22.1
12	8.3	7.3	8.0	13.1	11.6	12.7	15.4	14.5	15.0	21.7	20.7	21.2
13	8.6	8.1	8.3	12.8	11.8	12.3	15.2	14.6	14.8	21.8	21.1	21.5
14	9.2	8.6	8.9	11.9	11.7	11.8	14.8	14.6	14.7	22.0	21.1	21.6
15	9.6	8.6	9.0	12.0	11.7	11.9	14.9	14.5	14.7	22.5	21.4	21.9
16	9.7	9.0	9.4	11.9	10.8	11.4	14.8	14.0	14.4	22.5	22.0	22.3
17	9.2	8.4	8.8	10.8	9.9	10.3	15.1	14.2	14.6	22.8	21.9	22.4
18	9.2	8.1	8.8	10.4	9.7	10	15.7	14.6	15.1	21.9	20.4	21.2
19	8.1	7.7	7.8	10.9	10.1	10.5	15.8	15.2	15.5	20.5	20.0	20.3
20	8.1	7.8	7.9	10.9	10.3	10.5	16.2	15.6	15.9	20.6	19.7	20.1
21	8.2	8.0	8.1	10.4	9.9	10.2	16.8	16.0	16.4	21.2	20.1	20.5
22	8.5	8.2	8.2	11.0	10.0	10.4	17.1	16.6	16.8	21.7	20.7	21.2
23	8.3	7.4	8.1	11.2	10.7	11.0	16.8	16.0	16.5	22.6	21.2	21.9
24	8.3	6.7	7.4	11.2	10.6	11.0	17.7	16.6	17.1	23.1	21.8	22.4
25	7.9	6.8	7.2	11.1	10.4	10.7	18.6	17.4	17.9	23.1	22.2	22.7
26	8.4	7.2	7.7	10.8	10.4	10.6	19.2	18.4	18.7	23.1	22.3	22.6
27	9.0	7.6	8.1	11.2	10.8	11.0	19.6	18.8	19.2	23.5	22.6	23.0
28	8.8	7.3	7.9	12.3	11.2	11.7	20.2	19.3	19.7	23.9	23.1	23.5
29	---	---	---	14.0	12.3	13.2	20.5	19.7	20.1	24.4	23.2	23.8
30	---	---	---	14.4	13.7	14.0	20.6	19.9	20.3	24.9	23.8	24.3
31	---	---	---	14.4	13.4	13.9	---	---	---	25.1	24.1	24.6
Month	9.7	4.8	7.3	14.4	5.4	10.2	20.6	13.9	16.1	25.1	19.7	21.8

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued
**TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	25.4	24.4	24.8	26.6	25.8	26.1	29.6	29.0	29.2	28.5	27.5	27.8
2	25.4	24.5	24.8	26.9	25.9	26.3	29.1	28.5	28.9	27.5	26.6	26.9
3	26.3	24.9	25.5	26.9	26.3	26.6	28.8	28.1	28.4	26.8	26.0	26.3
4	26.7	25.7	26.2	27.1	26.3	26.7	28.9	28.4	28.6	26.6	26.1	26.3
5	26.4	25.8	26.0	27.0	26.5	26.7	29.0	28.0	28.5	27.0	26.5	26.7
6	26.3	25.4	25.9	26.5	25.7	26.0	29.7	28.0	28.7	27.1	26.7	26.9
7	25.9	24.9	25.3	25.9	25.0	25.4	29.6	28.8	29.1	26.9	25.8	26.4
8	26.2	25.2	25.5	25.9	25.5	25.7	29.7	29.1	29.3	26.3	25.6	26.1
9	26.4	25.5	26.0	26.2	25.8	26.0	29.7	29.0	29.2	26.1	25.4	25.6
10	25.7	24.8	25.3	26.1	25.4	25.7	30.0	28.7	29.4	25.7	24.8	25.2
11	25.6	25.0	25.3	26.1	25.6	25.8	30.2	28.5	29.3	24.8	24.1	24.5
12	25.5	24.8	25.1	26.4	25.7	25.9	30.5	28.5	28.9	24.6	23.5	24.4
13	25.3	25.0	25.2	26.9	26.0	26.6	30.1	29.1	29.8	25.5	23.7	24.9
14	25.3	24.8	25.0	26.6	26.1	26.4	30.0	29.4	29.6	25.2	24.5	24.8
15	24.9	24.5	24.7	26.9	26.5	26.7	29.4	28.7	29.0	25.1	24.8	24.9
16	24.6	24.1	24.3	27.5	26.7	27.0	29.1	28.8	29.0	25.5	24.9	25.1
17	24.1	23.8	23.9	28.3	27.1	27.5	29.3	29.0	29.1	25.6	25.1	25.3
18	23.8	23.4	23.6	27.8	27.0	27.3	30.4	29.3	29.6	25.1	24.6	24.8
19	24.0	23.5	23.7	27.7	27.3	27.5	30.4	29.4	29.8	25.2	24.8	25.0
20	24.4	23.5	24.0	27.8	27.5	27.6	30.4	29.5	29.9	25.1	24.7	24.9
21	24.4	24.0	24.2	27.6	26.9	27.3	30.2	28.7	29.3	25.2	24.4	24.8
22	24.3	23.8	24.1	27.9	27.3	27.5	30.4	28.8	29.2	25.4	24.7	25.1
23	24.5	23.8	24.1	28.1	27.6	27.9	30.3	29.6	29.8	25.3	25.1	25.2
24	24.4	23.8	24.2	28.3	27.4	27.7	30.0	29.6	29.8	25.5	25.2	25.3
25	24.9	24.2	24.6	28.6	27.8	28.2	30.0	29.6	29.8	25.8	25.0	25.5
26	25.4	24.7	25.0	29.0	28.0	28.5	29.9	29.4	29.6	25.1	24.4	24.7
27	25.4	24.8	25.1	28.7	28.4	28.5	29.9	29.5	29.7	24.5	23.9	24.3
28	25.2	24.7	24.9	29.3	27.8	28.5	30.0	29.6	29.8	24.8	23.7	24.3
29	26.0	24.8	25.3	29.2	28.4	28.8	30.0	29.7	29.9	24.6	23.6	24.1
30	26.3	25.4	25.8	29.3	28.4	28.8	29.8	29.2	29.5	23.7	22.5	23.2
31	---	---	---	29.9	28.8	29.4	29.7	28.5	29.2	---	---	---
Month	26.7	23.4	24.9	29.9	25.0	27.1	30.5	28.0	29.3	28.5	22.5	25.3

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	7.2	5.5	6.0	8.8	7.5	7.9	9.4	8.9	9.1	10.0	9.4	9.8	
2	6.4	5.5	5.9	8.6	7.7	7.9	9.4	9.0	9.2	9.8	9.5	9.7	
3	6.4	5.8	6.1	8.4	7.8	8.1	9.6	8.6	9.2	10.2	9.6	9.9	
4	6.3	5.1	5.9	8.5	8.0	8.3	9.8	9.3	9.5	10.8	10.2	10.6	
5	6.1	5.3	5.8	8.3	7.9	8.0	9.8	9.0	9.5	10.8	10.5	10.7	
6	6.5	2.6	5.5	8.1	7.6	7.9	9.9	9.6	9.7	10.6	10.3	10.4	
7	6.8	5.6	6.4	8.5	7.7	8.1	10.0	9.3	9.6	10.4	10.1	10.3	
8	7.2	5.8	6.4	8.5	7.8	8.1	10.5	9.8	10.1	10.6	9.9	10.2	
9	7.3	6.0	6.6	8.2	7.9	8.0	10.2	9.5	9.9	10.8	10.1	10.5	
10	6.8	5.6	6.2	8.0	7.4	7.8	10.4	10.1	10.2	10.9	10.5	10.7	
11	6.9	5.7	6.5	8.2	7.2	7.7	10.4	10.0	10.2	11.0	10.6	10.8	
12	7.1	6.5	6.8	8.1	6.9	7.6	10.2	9.8	10.0	11.0	10.5	10.8	
13	7.1	6.3	6.6	7.9	7.1	7.5	10.1	9.7	9.9	10.9	10.3	10.6	
14	6.7	6.1	6.4	7.6	6.9	7.2	10.1	9.6	9.9	10.9	10.4	10.7	
15	6.9	5.7	6.5	8.2	7.2	7.5	9.9	9.5	9.7	11.0	10.2	10.7	
16	7.4	5.3	6.2	7.5	7.2	7.3	9.9	9.2	9.6	11.7	10.7	11.2	
17	7.6	6.2	6.8	7.4	6.9	7.2	9.3	8.8	9.1	12.1	11.2	11.6	
18	6.7	5.5	6.3	7.6	7.0	7.3	9.3	8.6	9.0	12.1	11.3	11.7	
19	7.1	6.6	6.8	7.7	7.1	7.4	9.6	9.3	9.5	11.9	11.3	11.6	
20	7.0	6.5	6.7	9.0	7.4	8.0	9.6	9.4	9.5	12.1	11.4	11.7	
21	8.2	6.7	7.6	8.8	7.4	7.9	9.5	9.2	9.4	11.8	11.4	11.6	
22	8.2	7.1	7.4	8.6	8.2	8.4	9.6	9.1	9.3	11.8	11.4	11.6	
23	7.6	7.1	7.4	8.5	8.0	8.3	9.9	9.2	9.5	11.8	11.3	11.6	
24	7.7	7.1	7.4	8.6	8.1	8.3	10.4	9.9	10.1	11.6	10.8	11.1	
25	8.3	7.0	7.8	10.0	8.4	9.4	10.5	10.2	10.3	11.9	10.7	11.0	
26	8.3	6.7	7.6	9.8	9.4	9.6	10.4	10.2	10.3	11.3	10.4	10.7	
27	8.5	6.7	7.6	9.9	9.2	9.5	10.4	10.2	10.3	10.9	10.3	10.6	
28	7.8	6.7	7.1	9.8	9.1	9.4	10.4	10.1	10.2	11.2	10.4	10.8	
29	8.0	7.0	7.3	9.7	8.6	9.1	10.2	9.6	9.9	11.3	10.6	10.9	
30	8.1	7.0	7.5	9.4	8.6	9.1	9.8	9.5	9.6	11.3	10.7	11.0	
31	7.8	7.2	7.4	---	---	---	10.0	9.4	9.7	11.5	10.7	11.1	
Month	8.5	2.6	6.7	10.0	6.9	8.1	10.5	8.6	9.7	12.1	9.4	10.8	

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	11.5	11.1	11.3	12.0	11.5	11.8	7.9	7.0	7.4	8.2	7.8	8.0
2	11.8	11.0	11.3	12.0	11.5	11.8	7.1	6.4	6.6	8.1	7.9	8.0
3	11.6	10.9	11.3	12.3	11.7	11.9	7.4	6.4	6.9	8.1	7.8	7.9
4	11.7	11.0	11.4	12.0	11.3	11.7	8.2	7.0	7.6	8.0	7.8	7.9
5	12.0	11.1	11.6	11.9	11.3	11.6	8.6	7.5	8.0	7.8	7.5	7.6
6	12.1	11.3	11.6	12.1	11.6	11.8	8.7	8.0	8.3	7.5	7.0	7.2
7	12.0	11.2	11.7	12.0	11.6	11.8	8.2	7.8	8.0	7.1	6.6	6.8
8	12.7	11.6	11.9	11.9	11.2	11.7	8.3	7.5	7.9	6.6	6.1	6.3
9	12.4	11.6	12.0	11.4	10.5	10.9	8.6	8.0	8.3	6.5	6.2	6.4
10	12.4	11.8	12.1	10.7	9.9	10.3	9.1	8.4	8.7	6.4	6.2	6.3
11	12.1	11.2	11.7	10.1	9.5	9.8	8.7	8.3	8.5	6.5	6.0	6.2
12	11.6	10.7	11.2	9.5	9.0	9.3	9.2	8.5	8.8	6.4	6.1	6.2
13	12.1	10.6	11.4	9.5	9.1	9.3	9.1	8.7	8.9	7.1	6.2	6.5
14	11.9	11.0	11.6	9.3	8.8	9.0	8.9	8.6	8.8	6.7	6.3	6.5
15	12.0	10.9	11.5	9.0	8.6	8.8	8.8	8.6	8.7	7.0	6.6	6.8
16	12.0	11.0	11.5	9.5	8.7	9.1	9.2	8.7	8.9	7.0	6.7	6.9
17	12.0	11.0	11.4	10.0	9.4	9.7	9.0	8.7	8.8	7.2	6.8	7.0
18	11.6	10.8	11.1	10.0	9.7	9.9	9.0	8.7	8.9	7.4	7.0	7.2
19	11.4	10.7	11.0	10.1	9.7	9.9	9.0	8.7	8.8	7.4	7.0	7.2
20	11.6	10.7	11.2	10.4	9.7	10.0	8.8	8.6	8.7	7.9	7.2	7.3
21	11.5	10.7	11.1	10.5	10.1	10.3	8.7	8.4	8.6	7.8	7.0	7.2
22	11.6	10.9	11.2	10.5	10.0	10.2	8.5	8.2	8.4	7.5	7.1	7.2
23	11.9	11.2	11.5	10.6	9.8	10.1	8.6	8.2	8.4	7.5	7.0	7.2
24	12.2	11.2	11.6	10.5	9.9	10.2	8.4	8.1	8.3	7.4	7.0	7.2
25	12.1	11.5	11.8	10.2	9.7	10.0	8.5	8.3	8.4	7.3	6.9	7.1
26	12.3	11.6	11.9	10.3	9.9	10.1	8.6	8.3	8.4	7.1	6.8	7.0
27	12.0	11.4	11.7	10.2	9.7	9.9	8.5	8.3	8.4	7.1	6.7	6.8
28	11.9	11.3	11.6	10.0	9.5	9.8	8.6	8.2	8.4	7.1	6.5	6.7
29	---	---	---	9.8	9.2	9.5	8.5	8.1	8.3	6.9	6.4	6.7
30	---	---	---	9.3	8.3	8.8	8.4	7.9	8.0	6.8	6.1	6.5
31	---	---	---	8.6	7.8	8.2	---	---	---	6.8	6.2	6.5
Month	12.7	10.6	11.5	12.3	7.8	10.2	9.2	6.4	8.3	8.2	6.0	7.0

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
				June			July			August		
1	7.1	5.9	6.5	3.7	3.1	3.4	6.6	6.1	6.3	---	---	---
2	6.8	5.9	6.4	3.8	3.3	3.5	6.5	5.4	6.1	---	---	---
3	6.8	6.0	6.4	3.8	3.3	3.5	7.1	5.7	6.1	---	---	---
4	6.7	5.8	6.3	4.2	3.5	3.8	7.8	4.9	6.1	---	---	---
5	6.7	6.1	6.4	4.4	3.9	4.2	8.1	3.6	6.2	---	---	---
6	6.4	5.8	6.2	5.0	3.9	4.6	6.9	5.1	5.7	---	---	---
7	6.1	5.7	5.8	4.4	3.6	3.9	8.3	4.9	5.4	---	---	---
8	6.1	5.5	5.7	4.0	3.2	3.5	7.0	5.2	5.8	---	---	---
9	6.4	5.4	5.8	4.6	3.2	3.7	7.4	5.3	6.0	---	---	---
10	6.4	5.9	6.2	6.0	3.8	4.5	9.3	5.3	6.4	6.7	5.8	6.2
11	6.4	6.1	6.2	5.7	4.1	4.5	8.7	4.6	5.6	6.4	5.5	5.9
12	6.5	6.0	6.3	6.5	4.3	4.7	7.7	4.8	5.8	7.9	5.4	6.0
13	6.8	6.3	6.5	5.6	4.4	4.8	5.5	4.5	5.1	7.3	5.5	6.3
14	6.5	6.0	6.2	6.0	4.0	4.5	5.3	4.1	4.8	6.4	5.5	6.0
15	6.0	5.4	5.7	7.7	4.0	4.7	6.4	4.2	4.9	7.8	5.0	6.1
16	5.7	5.5	5.6	6.6	4.1	5.3	7.6	4.1	5.0	7.0	4.5	5.9
17	5.6	5.2	5.5	6.2	4.3	5.5	8.8	3.0	5.0	6.8	4.3	5.9
18	5.2	4.7	4.8	5.6	4.9	5.2	8.7	2.4	5.7	6.4	4.3	5.9
19	4.8	4.3	4.6	6.4	4.7	5.3	7.3	4.2	5.2	6.1	3.9	5.5
20	4.4	3.9	4.1	5.9	4.0	5.0	6.0	3.7	5.0	6.6	5.5	5.9
21	4.7	3.9	4.2	5.9	4.1	4.6	6.2	1.7	4.9	6.9	4.8	6.0
22	4.3	4.0	4.1	6.3	3.8	4.9	7.0	4.1	5.2	---	---	---
23	4.2	3.9	4.0	7.2	4.4	5.3	5.6	2.5	4.6	---	---	---
24	4.0	3.6	3.7	5.9	2.7	4.9	6.5	3.0	4.6	---	---	---
25	3.9	3.4	3.7	6.2	3.2	5.0	5.5	3.4	4.6	---	---	---
26	4.0	3.4	3.6	6.6	4.1	5.4	6.8	2.5	4.6	---	---	---
27	4.0	3.2	3.7	6.0	3.9	5.3	7.5	1.4	4.4	---	---	---
28	3.2	2.4	2.8	5.9	4.6	5.3	7.3	3.1	4.9	---	---	---
29	3.3	2.4	3.0	6.3	5.2	5.7	---	---	---	---	---	---
30	3.5	2.8	3.2	6.2	5.5	5.8	---	---	---	---	---	---
31	---	---	---	6.8	5.9	6.3	---	---	---	---	---	---
Month	7.1	2.4	5.1	7.7	2.7	4.7	---	---	---	---	---	---

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	5.2	3.9	4.6	---	---	---	9.7	9.2	9.4	---	---	---	---
2	5.5	3.8	5.0	---	---	---	9.8	9.2	9.4	---	---	---	---
3	5.5	3.8	4.6	---	---	---	9.4	8.9	9.1	---	---	---	---
4	3.9	3.0	3.6	---	---	---	9.7	9.0	9.3	---	---	---	---
5	3.2	2.2	2.7	---	---	---	9.6	8.9	9.2	---	---	---	---
6	2.2	1.6	1.9	---	---	---	9.3	8.9	9.0	---	---	---	---
7	2.0	1.3	1.6	---	---	---	9.5	8.8	9.0	---	---	---	---
8	1.4	0.9	1.2	---	---	---	9.0	8.7	8.8	---	---	---	---
9	1.1	0.6	0.9	---	---	---	8.9	8.4	8.6	10.7	10.2	10.5	
10	2.7	0.6	1.2	---	---	---	9.3	8.5	8.8	10.8	10.5	10.6	
11	5.9	0.7	2.8	---	---	---	---	---	---	10.8	10.6	10.7	
12	6.4	4.0	5.1	---	---	---	---	---	---	10.8	10.5	10.7	
13	5.7	3.4	4.2	---	---	---	---	---	---	10.7	10.3	10.5	
14	5.8	3.4	4.4	---	---	---	---	---	---	10.6	10.3	10.5	
15	5.8	3.7	4.6	---	---	---	---	---	---	10.8	10.2	10.5	
16	6.2	3.4	4.4	---	---	---	---	---	---	11.3	10.7	11.0	
17	5.5	3.6	4.5	---	---	---	---	---	---	11.7	11.0	11.3	
18	4.9	3.1	3.8	---	---	---	---	---	---	11.7	11.2	11.4	
19	5.5	4.5	4.9	---	---	---	---	---	---	11.4	11.2	11.3	
20	6.1	4.0	4.7	---	---	---	---	---	---	11.5	11.2	11.4	
21	7.2	5.3	6.5	---	---	---	---	---	---	11.4	11.2	11.3	
22	6.4	4.8	5.5	---	---	---	---	---	---	11.4	11.2	11.3	
23	6.6	4.8	5.4	---	---	---	---	---	---	11.4	11.1	11.3	
24	6.5	4.7	5.6	---	---	---	---	---	---	11.1	10.5	10.8	
25	8.3	5.6	7.3	---	---	---	---	---	---	10.7	10.4	10.6	
26	8.1	6.2	6.8	9.9	9.5	9.6	---	---	---	10.5	10.2	10.3	
27	---	---	---	9.8	9.2	9.5	---	---	---	10.2	10.1	10.1	
28	---	---	---	10.1	9.5	9.8	---	---	---	10.8	10.1	10.4	
29	---	---	---	10.0	9.4	9.7	---	---	---	10.8	10.4	10.6	
30	---	---	---	9.6	9.4	9.5	---	---	---	10.8	10.6	10.7	
31	---	---	---	---	---	---	---	---	---	10.9	10.5	10.7	
Month	---	---	---	---	---	---	---	---	---	---	---	---	

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	11.1	10.8	10.9	11.7	11.4	11.5	8.0	7.2	7.6	8.3	8.0	8.1
2	11.1	10.6	10.8	11.8	11.3	11.6	7.2	6.6	6.8	8.1	7.8	8.0
3	11.0	10.6	10.8	11.9	11.6	11.8	7.3	6.6	6.9	8.1	7.8	8.0
4	11.1	10.6	10.9	11.8	11.2	11.5	8.1	7.1	7.6	8.1	7.8	7.9
5	11.3	10.6	11.1	11.7	11.3	11.5	8.6	7.7	8.0	7.9	7.5	7.7
6	11.4	10.6	11.0	11.9	11.6	11.8	8.6	7.9	8.2	7.6	7.0	7.3
7	11.5	10.8	11.2	11.8	11.7	11.8	8.2	7.8	8.0	7.1	6.4	6.7
8	11.7	11.4	11.5	11.8	11.4	11.7	8.2	7.5	7.9	6.5	5.9	6.2
9	11.6	10.8	11.3	11.4	10.6	11.0	8.6	8.0	8.3	6.4	6.0	6.2
10	11.5	10.3	10.7	10.7	10.1	10.3	9.1	8.6	8.8	6.3	6.0	6.2
11	11.4	9.6	10.3	10.1	9.5	9.9	8.8	8.4	8.7	6.5	5.9	6.1
12	11.4	9.7	10.1	9.7	9.2	9.4	9.1	8.6	8.8	6.2	5.8	6.0
13	10.1	8.7	9.4	9.6	9.3	9.5	9.1	8.8	8.9	6.5	6.0	6.2
14	10.4	8.1	9.1	9.5	9.1	9.2	8.9	8.7	8.8	6.6	6.2	6.4
15	11.1	7.5	9.9	9.2	8.9	9.0	8.9	8.6	8.8	7.0	6.4	6.7
16	11.4	10.7	11.1	9.6	9.0	9.3	9.3	8.8	9.0	7.0	6.8	6.9
17	11.0	10.4	10.7	10.1	9.5	9.9	9.2	8.8	8.9	7.2	6.7	6.9
18	11.1	9.6	10.6	10.2	10.1	10.2	9.1	8.7	8.9	7.4	7.0	7.2
19	10.2	9.6	9.9	10.3	10.1	10.2	9.1	8.8	8.9	7.4	7.0	7.2
20	9.8	8.8	9.4	10.7	10.1	10.4	9.0	8.7	8.8	7.3	7.0	7.2
21	9.2	8.2	8.7	10.9	10.6	10.7	8.9	8.6	8.7	7.3	6.9	7.1
22	10.9	7.6	8.3	10.9	10.5	10.7	8.7	8.1	8.5	7.4	7.1	7.2
23	11.3	7.6	9.0	10.7	10.4	10.5	8.5	8.1	8.4	7.4	7.0	7.2
24	11.7	7.1	10.8	10.6	10.2	10.4	8.5	8.1	8.3	7.3	6.9	7.1
25	11.8	11.1	11.4	10.3	10.0	10.2	8.6	8.4	8.5	7.3	6.9	7.1
26	11.6	11.1	11.4	10.2	10.0	10.1	8.6	8.3	8.5	7.1	6.9	7.0
27	11.6	10.6	11.2	10.1	9.9	10	8.6	8.3	8.5	7.0	6.7	6.8
28	11.5	10.2	10.8	10.0	9.7	9.9	8.7	8.3	8.5	6.9	6.5	6.7
29	---	---	---	9.8	9.4	9.6	8.7	8.0	8.4	6.8	6.4	6.6
30	---	---	---	9.4	8.6	9.0	8.5	8.0	8.2	6.7	5.8	6.5
31	---	---	---	8.6	8.0	8.3	---	---	---	6.8	6.2	6.5
Month	11.8	7.1	10.4	11.9	8.0	10.4	9.3	6.6	8.4	8.3	5.8	6.9

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
				June			July			August		
1	7.1	6.0	6.5	---	---	---	5.7	5.3	5.5	---	---	---
2	6.9	6.0	6.4	3.5	3.1	3.3	5.7	4.8	5.3	---	---	---
3	6.8	6.0	6.5	3.6	3.1	3.3	5.5	4.4	5.0	---	---	---
4	6.8	6.0	6.4	3.9	3.2	3.5	5.0	4.2	4.6	---	---	---
5	6.8	6.2	6.5	4.0	3.5	3.7	4.8	1.9	3.7	---	---	---
6	6.5	5.6	6.3	4.6	3.6	4.3	5.6	1.5	3.3	---	---	---
7	6.1	5.7	5.8	4.1	3.2	3.5	5.7	4.8	5.2	---	---	---
8	5.9	5.3	5.7	3.4	2.6	3.0	6.4	4.7	5.4	---	---	---
9	6.6	5.5	5.9	3.8	2.6	3.2	6.5	4.8	5.5	---	---	---
10	6.3	5.9	6.1	3.8	3.4	3.6	6.0	3.1	4.8	6.8	5.8	6.3
11	6.3	5.9	6.1	4.1	3.1	3.7	6.0	2.8	3.9	6.0	5.5	5.8
12	6.5	6.0	6.2	4.5	3.5	3.9	5.6	2.4	3.1	6.7	5.1	5.8
13	6.5	6.1	6.3	4.5	3.4	4.1	5.3	2.3	4.3	6.9	5.3	6.1
14	6.4	5.9	6.0	4.0	3.4	3.7	5.4	4.2	4.8	6.3	4.7	5.6
15	5.9	5.3	5.6	4.1	3.1	3.7	5.1	3.9	4.5	6.3	4.5	5.6
16	5.7	5.4	5.5	4.5	2.2	3.7	4.6	3.4	4.2	6.4	3.7	5.3
17	5.6	5.2	5.5	5.4	1.8	4.4	3.8	1.9	3.1	6.3	4.2	5.9
18	5.2	4.7	4.8	5.0	4.3	4.6	5.7	2.6	3.7	6.3	3.2	5.6
19	4.9	4.4	4.7	4.9	4.0	4.3	5.9	2.6	4.7	6.1	4.5	5.6
20	4.4	3.9	4.1	5.1	4.0	4.4	6.0	2.7	4.6	6.2	5.1	5.7
21	4.6	4.0	4.2	4.6	3.6	4.1	5.6	1.5	3.4	6.3	4.0	5.5
22	4.3	4.1	4.2	4.8	3.4	3.8	6.1	2.1	3.2	---	---	---
23	4.2	4.0	4.1	5.1	3.3	4.3	5.6	2.9	4.6	---	---	---
24	4.0	3.7	3.8	5.1	3.3	4.1	5.5	2.6	4.7	---	---	---
25	3.9	3.4	3.7	4.8	3.7	4.3	5.3	3.3	4.5	---	---	---
26	---	---	---	5.4	3.7	4.7	5.4	2.7	4.3	---	---	---
27	---	---	---	5.3	4.2	4.9	5.0	1.7	4.0	---	---	---
28	---	---	---	5.1	3.7	4.6	4.5	2.7	3.9	---	---	---
29	---	---	---	5.6	4.7	5.1	---	---	---	---	---	---
30	---	---	---	5.5	4.7	5.1	---	---	---	---	---	---
31	---	---	---	5.9	5.3	5.5	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	85	64	71	86	74	78	83	78	81	87	82	85	
2	75	64	69	85	76	78	84	79	82	84	82	83	
3	75	66	71	84	77	81	84	75	80	88	82	85	
4	73	59	68	85	81	83	86	81	82	91	87	90	
5	71	61	67	84	79	81	85	78	83	93	90	91	
6	76	30	64	81	76	79	86	82	83	91	88	89	
7	80	65	74	86	77	82	86	81	83	---	---	---	
8	84	66	73	87	78	82	88	83	86	92	86	88	
9	84	69	76	84	79	81	86	81	84	92	86	90	
10	78	64	71	82	75	78	90	86	88	94	89	92	
11	79	65	74	83	73	78	91	88	89	95	91	93	
12	82	74	77	80	69	76	91	87	89	94	90	92	
13	82	71	75	79	71	75	88	84	86	92	88	90	
14	77	69	73	76	69	72	88	84	86	92	88	90	
15	79	65	75	83	72	76	89	83	86	92	85	89	
16	87	61	71	76	72	74	89	83	87	95	88	92	
17	89	71	78	74	68	71	84	75	82	96	90	93	
18	75	63	71	73	67	70	84	78	81	96	91	93	
19	78	72	74	71	67	69	87	84	85	96	90	93	
20	75	70	72	82	68	74	87	84	86	96	91	93	
21	86	72	80	81	68	73	86	83	85	93	89	91	
22	87	75	79	78	73	75	84	81	83	93	89	91	
23	80	75	77	77	72	74	86	80	83	93	89	91	
24	81	74	78	77	72	74	91	86	88	91	84	87	
25	85	73	81	88	75	83	91	88	89	92	83	85	
26	85	71	80	87	82	84	90	88	89	88	81	83	
27	89	71	80	87	80	83	90	88	89	85	80	82	
28	81	69	73	87	79	82	94	88	90	91	81	86	
29	79	70	73	86	75	79	92	85	88	92	85	89	
30	80	69	74	83	75	80	87	84	85	92	87	89	
31	77	70	73	---	---	---	89	83	86	94	87	90	
Month	89	30	74	88	67	78	94	75	85	---	---	---	

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	95	90	92	101	98	99	77	69	73	92	86	89
2	96	90	93	100	95	98	70	63	65	91	88	89
3	95	90	93	100	95	97	75	63	68	91	87	89
4	95	89	92	97	93	95	83	70	76	90	86	88
5	96	90	93	97	92	94	87	75	80	87	84	85
6	98	89	93	99	92	95	87	80	83	84	79	81
7	98	89	94	102	96	99	82	77	80	80	75	78
8	104	93	97	103	97	100	82	73	77	75	70	72
9	104	94	99	99	94	97	85	78	81	76	71	74
10	106	97	101	96	90	93	90	82	85	75	71	73
11	102	96	99	95	89	91	86	83	85	74	69	71
12	102	92	97	90	85	88	92	84	87	73	68	70
13	106	93	99	89	84	87	90	86	88	82	70	74
14	105	96	101	86	81	83	88	85	87	77	71	74
15	106	95	100	84	80	82	86	85	85	81	75	78
16	106	97	101	86	81	83	91	85	87	81	77	79
17	106	94	99	89	85	87	89	85	87	84	78	81
18	101	93	96	90	86	88	91	86	88	84	79	81
19	101	92	97	92	86	89	91	87	89	82	77	80
20	102	92	98	93	87	90	90	86	88	89	79	81
21	100	91	96	94	89	91	90	86	87	90	77	81
22	99	93	96	94	90	92	88	85	86	86	79	82
23	101	93	97	97	89	92	90	83	86	87	79	83
24	102	92	97	96	90	92	88	83	86	87	80	83
25	102	95	98	93	87	90	91	87	89	86	80	83
26	106	96	100	92	89	91	94	90	91	84	78	81
27	105	96	100	93	88	90	93	89	91	84	78	80
28	102	97	100	94	87	91	95	90	92	85	76	79
29	---	---	---	95	87	91	94	89	91	83	75	79
30	---	---	---	90	81	85	93	87	89	83	73	78
31	---	---	---	85	76	79	---	---	---	83	74	78
Month	106	89	97	103	76	91	95	63	84	92	68	80

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
				June			July			August		
1	87	71	79	46	38	42	87	80	82	---	---	---
2	84	71	78	48	41	44	85	70	79	---	---	---
3	85	73	79	48	41	44	94	74	79	---	---	---
4	84	72	79	53	44	48	104	64	80	---	---	---
5	83	75	79	55	49	52	109	47	81	---	---	---
6	79	72	76	62	49	56	91	67	75	---	---	---
7	75	69	71	54	44	47	112	64	71	---	---	---
8	77	67	70	50	39	43	93	68	76	---	---	---
9	80	67	72	57	40	45	99	69	79	---	---	---
10	78	71	75	75	47	55	128	70	85	82	71	76
11	79	74	76	72	51	56	119	61	75	78	66	72
12	80	73	77	83	53	59	105	64	78	97	65	73
13	84	77	79	71	55	60	73	60	67	90	67	77
14	79	73	75	76	50	57	70	54	63	78	67	73
15	73	65	69	100	50	59	84	55	64	96	61	75
16	68	66	67	85	51	68	102	54	65	86	55	72
17	67	62	65	80	54	70	119	39	66	84	53	73
18	62	55	57	72	62	66	117	32	77	78	52	72
19	57	51	55	82	60	67	99	56	69	75	47	68
20	53	46	49	76	51	64	81	49	67	80	67	71
21	57	46	50	76	52	58	84	23	66	84	58	73
22	52	48	49	81	48	62	95	55	69	---	---	---
23	51	46	48	95	57	68	75	33	61	---	---	---
24	48	43	44	76	34	63	88	40	61	---	---	---
25	47	41	44	81	41	65	73	45	61	---	---	---
26	49	41	44	86	53	70	92	33	61	---	---	---
27	49	39	45	78	50	69	101	19	59	---	---	---
28	39	29	34	77	59	69	98	41	65	---	---	---
29	41	29	36	82	67	74	---	---	---	---	---	---
30	44	31	39	82	71	75	---	---	---	---	---	---
31	---	---	---	90	77	83	---	---	---	---	---	---
Month	87	29	62	100	34	60	---	---	---	---	---	---

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	
October				November				December				January	
1	60	45	53	---	---	---	88	82	84	---	---	---	
2	64	44	58	---	---	---	88	83	85	---	---	---	
3	64	44	53	---	---	---	84	80	82	---	---	---	
4	45	35	41	---	---	---	87	81	84	---	---	---	
5	37	26	31	---	---	---	86	80	83	---	---	---	
6	26	19	23	---	---	---	84	80	81	---	---	---	
7	23	15	19	---	---	---	85	79	81	---	---	---	
8	16	11	14	---	---	---	81	78	79	---	---	---	
9	13	7	10	---	---	---	80	76	78	91	87	89	
10	31	7	14	---	---	---	83	76	79	93	89	91	
11	67	8	32	---	---	---	---	---	---	93	91	92	
12	73	45	58	---	---	---	---	---	---	92	90	91	
13	64	38	47	---	---	---	---	---	---	91	87	89	
14	65	38	49	---	---	---	---	---	---	90	87	88	
15	65	42	52	---	---	---	---	---	---	90	85	88	
16	71	39	50	---	---	---	---	---	---	92	88	90	
17	63	41	52	---	---	---	---	---	---	94	89	91	
18	55	35	43	---	---	---	---	---	---	93	90	91	
19	60	49	54	---	---	---	---	---	---	92	90	91	
20	64	43	50	---	---	---	---	---	---	91	89	91	
21	74	56	67	---	---	---	---	---	---	90	87	89	
22	67	50	57	---	---	---	---	---	---	90	88	89	
23	69	50	57	---	---	---	---	---	---	90	87	89	
24	68	49	58	---	---	---	---	---	---	87	82	84	
25	84	58	74	---	---	---	---	---	---	83	81	82	
26	82	63	70	88	85	86	---	---	---	82	79	80	
27	---	---	---	87	82	84	---	---	---	79	78	78	
28	---	---	---	90	85	87	---	---	---	88	78	82	
29	---	---	---	89	84	87	---	---	---	88	84	86	
30	---	---	---	86	84	85	---	---	---	88	85	87	
31	---	---	---	---	---	---	---	---	---	89	85	87	
Month	---	---	---	---	---	---	---	---	---	---	---	---	

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March				April				May
1	91	87	89	99	97	97	78	71	74	93	88	90
2	91	88	89	97	94	96	71	65	67	91	88	89
3	90	87	89	97	93	95	74	65	69	91	88	90
4	90	86	88	96	92	94	82	71	76	91	86	89
5	91	86	89	95	92	93	87	77	80	89	84	86
6	92	84	88	98	92	95	86	76	82	85	78	82
7	91	86	89	100	97	98	82	78	80	80	73	76
8	93	91	92	102	99	100	81	74	78	74	68	70
9	96	87	91	99	95	97	85	78	81	75	69	72
10	94	83	87	96	91	93	90	84	87	73	69	71
11	97	79	85	93	88	91	88	84	86	74	68	71
12	97	80	87	91	85	89	91	85	88	71	66	68
13	88	75	81	90	87	89	90	87	89	74	68	70
14	91	71	79	88	84	85	88	86	87	76	70	73
15	97	66	87	85	82	84	88	85	87	81	73	77
16	101	93	97	87	83	85	92	86	89	81	78	79
17	95	90	93	90	86	89	91	86	88	84	78	80
18	97	82	92	91	89	90	92	86	89	84	79	81
19	87	82	85	93	90	92	91	88	90	82	77	80
20	84	76	80	96	91	93	92	88	89	82	77	79
21	79	71	75	98	94	96	91	88	90	82	77	79
22	93	66	72	98	94	96	90	83	88	84	79	81
23	95	65	76	98	94	95	88	83	86	86	79	82
24	98	61	90	97	93	94	90	83	87	86	79	82
25	99	91	95	94	90	92	92	88	90	86	80	83
26	99	93	96	92	90	91	93	89	91	83	80	81
27	100	90	95	92	90	91	94	89	92	83	78	80
28	98	86	92	92	89	91	96	90	93	82	76	79
29	---	---	---	95	90	92	96	88	92	82	75	79
30	---	---	---	91	83	87	95	88	91	81	69	78
31	---	---	---	83	78	81	---	---	---	83	75	78
Month	101	61	87	102	78	92	96	65	85	93	66	79

0208114150 ROANOKE RIVER AT NORTH CAROLINA HIGHWAY 45 NEAR WESTOVER, NC—Continued**DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
				June			July			August		
1	87	72	79	---	---	---	75	69	72	---	---	---
2	84	72	78	44	38	41	74	62	69	---	---	---
3	85	73	79	45	39	42	71	57	65	---	---	---
4	85	74	79	49	40	44	65	54	59	---	---	---
5	85	77	81	50	44	47	63	24	48	---	---	---
6	80	69	77	57	45	53	74	19	43	---	---	---
7	75	70	71	50	39	43	75	63	68	---	---	---
8	73	65	70	42	32	37	85	61	70	---	---	---
9	82	68	73	47	32	39	86	63	72	---	---	---
10	77	71	75	47	42	44	79	40	64	83	71	76
11	77	72	75	51	38	46	80	37	52	73	66	69
12	79	73	75	56	43	48	75	31	41	80	61	70
13	79	74	77	56	42	51	71	30	57	83	65	74
14	78	71	73	50	42	46	71	55	64	77	57	67
15	72	64	68	51	39	46	67	51	59	76	54	67
16	68	65	66	57	28	47	60	44	55	78	45	65
17	67	62	66	70	23	56	50	25	40	77	51	72
18	62	55	57	64	55	58	76	34	49	77	39	68
19	58	52	56	63	51	55	79	34	62	74	55	68
20	52	46	49	65	51	56	80	36	61	75	62	69
21	55	48	51	59	46	52	74	20	45	77	48	67
22	51	49	50	61	43	48	82	28	42	---	---	---
23	50	48	49	65	42	56	75	38	61	---	---	---
24	48	44	45	65	42	52	73	34	62	---	---	---
25	47	41	45	62	48	55	70	44	59	---	---	---
26	---	---	---	70	48	61	72	36	57	---	---	---
27	---	---	---	69	54	64	66	22	53	---	---	---
28	---	---	---	66	47	59	60	36	51	---	---	---
29	---	---	---	73	61	66	---	---	---	---	---	---
30	---	---	---	72	61	66	---	---	---	---	---	---
31	---	---	---	78	69	72	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---