

0208062765 ROANOKE RIVER AT HALIFAX, NC—Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1998 to current year.

pH: March 1998 to current year.

WATER TEMPERATURE: March 1998 to current year.

DISSOLVED OXYGEN: March 1998 to current year.

DISSOLVED OXYGEN, PERCENT SATURATION: March 1998 to current year.

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

REMARKS.--Station operated in cooperation with North Carolina Department of Environment and Natural Resources (DENR), Division of Water Resources, to define water-quality characteristics in the Roanoke River Basin below Roanoke Rapids Dam. Dissolved oxygen, percent saturation, is computed using a barometric pressure of 760 mm Hg beginning October 1, 2000.

EXTREMES FOR PERIOD OF DAILY RECORD.--

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	213, November 2, 2000	53, September 19, 2003
pH, standard units	8.7, March 12, 2004	6.1, September 16, 1999
WATER TEMPERATURE, °C	30.9, July 22, 1998	2.2, January 25, 28, 2003
DISSOLVED OXYGEN, mg/L	16.1, January 13, 1999	3.8, August 21, 22, 2003
DISSOLVED OXYGEN, PERCENT SATURATION, %	132, January 13, 14, 1999	47, June 27, 2001, August 21, 2003

EXTREMES FOR CURRENT YEAR.--

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	153, September 25, 28, 30	89, October 24
pH, standard units	8.3, May 27	6.6, August 19
WATER TEMPERATURE, °C	30.0 July 26	3.8, January 31
DISSOLVED OXYGEN, mg/L	12.6, March 4	4.3, July 27
DISSOLVED OXYGEN, PERCENT SATURATION, %	109, April 5	55, July 27

0208062765 ROANOKE RIVER AT HALIFAX, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	114	112	113	123	119	122	129	126	127	133	130	132
2	114	113	113	126	121	123	128	124	126	137	130	134
3	113	112	113	125	119	122	127	121	125	136	130	132
4	113	112	112	124	115	120	122	117	119	134	131	132
5	114	112	113	120	110	116	122	118	119	132	128	130
6	113	111	112	118	106	110	119	116	117	131	128	130
7	113	111	112	121	104	111	121	117	119	132	128	130
8	115	112	114	113	93	100	120	117	119	131	128	130
9	115	113	114	101	92	97	120	117	119	132	128	130
10	115	113	114	101	96	99	123	118	120	141	132	137
11	114	111	112	---	---	---	122	112	119	141	137	139
12	114	111	112	---	---	---	122	112	114	140	136	138
13	111	109	110	124	105	110	123	112	115	139	135	137
14	111	109	110	119	104	108	123	112	114	139	137	138
15	111	110	111	129	109	112	122	111	113	140	136	138
16	121	106	110	131	110	113	115	111	112	140	132	136
17	121	106	110	128	112	114	116	113	115	139	120	136
18	122	107	112	127	109	115	128	114	117	138	118	125
19	124	121	123	120	104	110	135	118	125	141	137	139
20	124	107	120	127	108	111	128	124	126	147	123	130
21	122	106	110	128	109	111	129	126	127	144	118	124
22	122	106	109	126	110	114	131	124	127	146	135	144
23	120	106	109	126	111	117	127	124	126	148	121	127
24	121	105	108	126	122	124	134	124	131	148	119	125
25	122	105	111	129	121	126	133	129	131	153	123	133
26	124	121	123	131	126	128	133	129	131	151	118	130
27	126	121	123	129	110	120	134	130	131	150	118	122
28	124	121	123	124	110	116	131	128	129	153	123	134
29	124	119	122	125	121	123	139	129	133	152	126	135
30	123	118	121	127	122	124	136	126	131	153	126	135
31	---	---	---	129	126	127	133	130	131	---	---	---
MONTH	126	105	114	---	---	---	139	111	123	153	118	133

0208062765 ROANOKE RIVER AT HALIFAX, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.9	7.2	7.4	7.5	7.1	7.3	7.1	6.9	7.0	7.4	7.1	7.2
2	7.4	7.1	7.2	7.4	7.0	7.2	7.2	6.9	7.0	7.5	7.0	7.2
3	7.2	7.1	7.2	7.3	7.0	7.2	7.3	6.9	7.1	7.4	7.0	7.2
4	7.4	7.2	7.2	7.4	7.0	7.2	7.2	6.8	7.0	7.4	7.0	7.1
5	7.4	7.1	7.2	7.4	7.0	7.2	7.2	6.9	7.0	7.3	7.0	7.1
6	7.5	7.1	7.2	7.6	6.9	7.1	7.2	6.9	7.0	7.4	7.0	7.2
7	7.4	7.1	7.2	7.4	7.2	7.2	7.2	6.9	7.0	7.5	7.0	7.2
8	7.5	7.1	7.2	7.4	7.1	7.2	7.1	6.9	7.0	7.5	7.2	7.3
9	7.5	7.0	7.2	7.5	7.2	7.3	7.2	6.9	7.0	7.5	7.2	7.3
10	7.3	7.0	7.1	7.7	7.1	7.4	7.1	6.9	7.0	7.6	7.2	7.4
11	7.4	7.0	7.2	7.4	7.2	7.3	7.1	6.8	6.9	7.6	7.2	7.4
12	7.4	7.0	7.1	7.3	7.1	7.2	7.2	6.8	6.8	7.6	7.2	7.4
13	7.4	7.1	7.2	7.4	7.1	7.2	7.1	6.8	6.8	7.5	7.2	7.3
14	7.6	7.1	7.3	7.4	7.1	7.1	7.1	6.8	6.8	7.5	7.2	7.3
15	7.6	7.2	7.3	7.3	7.0	7.1	7.0	6.8	6.8	7.4	7.2	7.3
16	7.6	7.1	7.2	7.1	7.0	7.0	7.3	6.8	6.9	7.5	7.2	7.3
17	7.6	7.0	7.2	7.3	7.0	7.0	7.0	6.8	6.8	7.7	7.2	7.4
18	7.3	7.0	7.1	7.3	7.0	7.1	7.3	6.8	6.9	7.3	7.2	7.2
19	7.5	7.0	7.2	7.2	6.9	7.0	6.9	6.6	6.8	7.6	7.2	7.4
20	7.4	7.0	7.2	7.1	6.8	7.0	7.0	6.8	6.9	7.5	7.1	7.3
21	7.6	7.0	7.1	7.1	6.9	6.9	7.0	6.7	6.8	7.3	7.2	7.2
22	7.5	7.0	7.1	7.2	6.8	6.9	7.1	6.8	6.9	7.6	7.2	7.4
23	7.6	7.0	7.1	7.2	6.8	6.9	7.1	6.7	6.9	7.6	7.2	7.3
24	7.4	7.0	7.1	7.2	6.9	7.0	7.2	6.9	7.0	7.6	7.3	7.3
25	7.2	7.0	7.0	7.1	6.9	7.0	7.3	6.9	7.1	7.6	7.2	7.4
26	7.4	7.0	7.2	7.2	6.9	7.0	7.2	7.0	7.1	7.6	7.2	7.3
27	7.3	7.0	7.1	7.2	6.8	6.9	7.3	7.0	7.1	7.6	7.2	7.2
28	7.3	7.0	7.2	7.0	6.8	6.9	7.2	6.9	7.0	7.6	7.3	7.4
29	7.4	7.0	7.1	7.1	6.9	7.0	7.3	6.9	7.0	7.6	7.2	7.3
30	7.3	7.0	7.1	7.0	6.9	6.9	7.3	6.9	7.1	7.7	7.2	7.4
31	---	---	---	7.0	6.9	6.9	7.3	7.0	7.1	---	---	---
MONTH	7.9	7.0	7.2	7.7	6.8	7.1	7.3	6.6	7.0	7.7	7.0	7.3

0208062765 ROANOKE RIVER AT HALIFAX, NC—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.3	20.4	20.9	26.6	25.7	26.0	27.9	26.6	27.1	28.2	27.0	27.6
2	20.9	20.1	20.3	26.9	25.7	26.2	28.8	27.4	28.0	28.3	27.2	27.7
3	20.4	20.1	20.3	25.8	25.1	25.5	29.2	27.8	28.4	27.9	26.7	27.4
4	21.2	20.2	20.6	26.6	25.2	25.8	29.0	27.2	27.9	27.9	26.3	26.8
5	21.7	20.0	20.8	27.3	26.1	26.6	28.8	27.6	28.1	26.9	25.8	26.3
6	22.4	20.1	21.2	28.7	25.0	26.3	28.4	26.6	27.4	26.8	25.6	26.1
7	22.5	20.8	21.7	28.1	26.4	26.9	28.1	26.6	27.2	26.5	25.3	25.8
8	23.9	21.1	22.7	27.0	25.3	26.0	27.4	26.3	26.8	26.3	25.1	25.7
9	23.8	21.5	22.5	28.1	26.6	27.3	27.4	26.4	26.8	26.2	24.9	25.6
10	23.5	21.7	22.5	28.4	26.9	27.5	27.8	27.0	27.4	26.0	25.0	25.4
11	23.8	21.6	22.7	27.3	26.4	26.9	28.1	26.6	27.3	25.4	24.6	24.9
12	23.7	21.9	22.8	28.1	26.9	27.5	29.2	27.1	27.8	25.6	24.4	24.9
13	24.8	22.2	23.3	27.8	26.5	27.1	28.7	27.1	27.6	26.0	25.3	25.5
14	26.4	24.8	25.5	27.8	26.5	26.8	28.5	27.0	27.5	25.8	25.1	25.4
15	26.6	24.1	25.1	28.2	26.6	27.0	28.9	27.6	28.0	25.5	25.0	25.3
16	27.1	25.0	26.3	27.8	26.2	26.9	29.2	27.9	28.4	26.2	25.5	25.8
17	26.7	25.0	26.0	27.6	26.2	26.7	28.8	27.2	27.6	27.3	25.9	26.4
18	25.7	24.3	24.9	28.6	26.7	27.3	28.3	27.1	27.5	26.8	25.6	26.2
19	26.1	24.5	25.2	28.6	27.3	27.7	27.8	26.8	27.2	27.1	26.1	26.5
20	24.8	23.4	24.0	28.9	27.4	27.8	28.7	27.3	28.0	27.0	25.4	26.1
21	25.6	23.1	23.8	28.6	27.5	27.9	28.7	27.2	28.0	26.3	25.7	25.9
22	26.1	24.3	24.8	28.7	27.4	27.8	29.4	28.6	29.0	27.1	25.9	26.5
23	26.4	23.8	24.7	28.8	27.2	27.7	29.4	27.7	28.2	27.2	25.4	26.1
24	25.2	23.4	23.9	29.1	27.2	27.9	28.4	27.1	27.7	26.5	26.0	26.2
25	25.1	23.5	24.1	28.5	27.0	27.7	28.5	27.2	27.7	26.4	25.5	26.0
26	25.7	24.1	24.7	30.0	28.4	29.0	28.0	26.6	27.2	26.4	25.4	25.8
27	25.5	24.1	24.6	29.9	27.7	28.6	27.8	26.7	27.2	26.6	25.6	26.0
28	25.9	24.8	25.3	28.8	28.2	28.4	27.5	26.2	26.9	26.6	24.8	25.5
29	25.1	23.9	24.4	28.7	27.2	27.7	28.0	26.9	27.3	25.9	24.7	25.2
30	25.9	24.3	24.8	27.6	26.6	27.1	27.8	26.5	27.2	25.4	24.0	24.6
31	---	---	---	27.2	26.6	26.8	27.9	27.1	27.5	---	---	---
MONTH	27.1	20.0	23.5	30.0	25.0	27.2	29.4	26.2	27.6	28.3	24.0	26.0

0208062765 ROANOKE RIVER AT HALIFAX, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
 WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.6	7.4	7.7	---	---	---	6.5	5.8	6.1	6.8	5.8	6.2
2	7.9	6.8	7.1	---	---	---	6.8	5.4	6.0	6.9	5.6	6.2
3	7.6	6.9	7.1	---	---	---	6.6	5.2	5.9	6.8	5.7	6.1
4	8.2	7.1	7.4	---	---	---	6.7	5.3	5.9	6.9	5.6	6.1
5	8.5	6.9	7.6	---	---	---	7.0	5.4	6.1	6.9	5.8	6.2
6	8.8	7.3	7.9	---	---	---	7.1	5.9	6.3	7.0	5.8	6.3
7	8.7	7.3	7.8	---	---	---	7.3	5.9	6.5	7.0	5.8	6.3
8	8.3	6.9	7.4	---	---	---	7.2	6.0	6.5	6.9	5.8	6.2
9	8.1	6.5	7.1	---	---	---	7.2	6.0	6.4	7.0	5.9	6.3
10	7.8	6.4	7.0	---	---	---	7.3	6.1	6.5	7.1	6.1	6.5
11	8.0	6.5	7.1	---	---	---	7.3	4.8	6.2	7.2	6.0	6.5
12	7.9	6.4	7.0	---	---	---	7.2	4.8	5.2	7.1	5.9	6.5
13	7.8	6.5	6.9	---	---	---	7.1	4.8	5.2	7.0	5.8	6.3
14	7.7	6.1	6.7	---	---	---	6.8	4.8	5.2	6.8	5.8	6.2
15	7.4	6.0	6.5	---	---	---	6.9	5.0	5.4	6.7	6.0	6.3
16	7.2	5.6	6.3	---	---	---	6.8	5.2	5.7	6.9	6.0	6.4
17	7.1	5.4	6.1	---	---	---	6.3	5.2	5.6	7.3	6.2	6.7
18	6.6	5.6	5.8	---	---	---	6.9	5.4	6.1	6.5	5.5	6.0
19	7.1	5.6	6.3	---	---	---	6.1	4.5	5.2	7.4	6.0	6.5
20	7.2	5.6	6.1	---	---	---	6.8	5.8	6.1	7.1	5.6	6.1
21	7.6	5.0	5.7	6.2	5.2	5.4	6.7	5.4	6.0	6.5	5.6	6.0
22	7.4	5.8	6.2	6.1	5.0	5.3	7.0	5.5	6.2	7.3	6.1	6.5
23	7.7	6.0	6.3	5.8	4.7	5.0	7.0	5.6	6.1	7.0	5.5	5.9
24	6.9	5.2	6.0	5.9	4.6	5.2	6.5	5.3	5.9	7.0	5.8	6.1
25	---	---	---	5.8	4.5	5.0	6.7	5.5	6.0	7.4	5.6	6.1
26	---	---	---	5.7	4.5	5.1	6.8	5.6	6.1	7.2	5.7	6.2
27	---	---	---	5.6	4.3	4.8	6.8	5.4	6.0	7.2	5.6	6.0
28	---	---	---	6.1	4.5	5.0	6.6	5.6	5.9	7.3	5.8	6.3
29	---	---	---	6.3	5.2	5.6	6.9	5.5	6.0	7.3	5.4	6.2
30	---	---	---	6.2	5.4	5.7	6.7	5.4	5.9	7.8	6.0	6.5
31	---	---	---	6.5	5.6	6.0	6.6	5.4	5.9	---	---	---
MONTH	---	---	---	---	---	---	7.3	4.5	5.9	7.8	5.4	6.3

0208062765 ROANOKE RIVER AT HALIFAX, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	99	82	87	---	---	---	83	73	77	87	74	79
2	89	75	79	---	---	---	87	69	77	89	71	79
3	84	76	79	---	---	---	86	67	76	87	71	77
4	93	79	83	---	---	---	87	67	76	88	70	76
5	97	77	85	---	---	---	91	69	79	87	72	78
6	102	81	89	---	---	---	91	75	80	88	71	78
7	101	82	89	---	---	---	94	74	82	87	71	77
8	96	80	86	---	---	---	91	75	81	85	71	77
9	96	75	82	---	---	---	91	75	81	87	72	77
10	92	73	81	---	---	---	93	78	83	88	74	79
11	95	74	82	---	---	---	93	61	78	88	72	79
12	94	73	81	---	---	---	94	61	67	86	72	79
13	93	75	82	---	---	---	92	61	66	86	71	77
14	93	74	83	---	---	---	88	60	66	84	71	76
15	92	72	79	---	---	---	90	64	70	82	73	77
16	90	69	78	---	---	---	89	67	73	85	74	79
17	89	67	75	---	---	---	82	66	72	92	77	83
18	81	67	71	---	---	---	89	69	78	81	69	74
19	88	67	76	---	---	---	78	57	66	93	75	81
20	87	66	73	---	---	---	88	73	78	89	69	76
21	93	59	68	80	66	69	87	69	76	81	69	74
22	92	70	75	79	63	67	92	71	81	92	75	81
23	96	73	77	75	60	63	92	71	78	88	67	73
24	84	62	71	77	58	66	84	68	75	87	72	75
25	---	---	---	75	57	64	87	70	76	92	69	76
26	---	---	---	76	59	67	87	70	77	90	70	76
27	---	---	---	74	55	62	87	68	75	90	70	74
28	---	---	---	79	58	65	84	70	74	90	71	77
29	---	---	---	82	66	72	88	69	76	90	66	76
30	---	---	---	78	68	72	85	68	74	98	72	79
31	---	---	---	82	70	75	84	68	75	---	---	---
MONTH	---	---	---	---	---	---	94	57	76	98	66	77