

02081022 ROANOKE RIVER NEAR OAK CITY, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to 1973, 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. Partial record site from October 1967 to September 1973. 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	5160, March 29, 2003	52, September 17, 1999
pH, standard units	8.1, July 1, 2, 2002	6.1, September 17, 1999, September 20, 21, 2003
WATER TEMPERATURE, °C	31.0, August 1, 2002	2.1, January 3, 2001
DISSOLVED OXYGEN, mg/L	15.5, January 6, 7, 1999	2.4, September 24, 2003
DISSOLVED OXYGEN, PERCENT SATURATION,%	123, January 6, 7, 1999	28, September 24, 2003

EXTREMES FOR CURRENT YEAR.--

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	5160, March 29	62, September 20
pH, standard units	7.7, February 21, 22, 25, 26, 27	6.1, September 20, 21
WATER TEMPERATURE, °C	28.8, August 31	2.2, January 28
DISSOLVED OXYGEN, mg/L	13.8, January 29	2.4, September 24
DISSOLVED OXYGEN, PERCENT SATURATION,%	106, February 21, 24, March 10, 11	28, September 24

02081022 ROANOKE RIVER NEAR OAK CITY, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	175	174	174	157	149	154	145	137	139	111	110	111
2	176	172	174	154	147	153	145	137	140	111	109	110
3	177	174	175	153	151	152	146	139	141	109	106	107
4	178	177	177	154	146	153	146	139	142	106	103	105
5	178	176	177	153	144	149	145	137	140	108	99	102
6	179	177	178	152	146	149	144	137	140	107	100	102
7	179	177	178	150	138	147	143	134	137	104	100	101
8	179	175	177	138	127	132	146	134	139	108	102	105
9	178	175	177	136	126	131	141	134	135	112	103	106
10	191	177	182	137	128	132	142	136	141	113	104	107
11	180	170	177	141	129	136	144	142	143	114	105	108
12	172	168	170	143	137	140	153	144	147	115	107	111
13	168	141	153	145	143	144	152	139	143	117	108	112
14	142	138	140	144	130	138	143	139	141	125	115	118
15	147	142	144	138	128	132	144	135	139	123	115	119
16	152	147	149	134	129	131	139	136	137	125	115	118
17	161	152	156	136	132	133	140	128	137	125	115	118
18	164	161	163	135	129	131	129	123	125	124	114	117
19	167	164	165	146	131	135	125	118	121	124	114	117
20	168	166	167	134	129	131	124	117	122	123	113	116
21	168	159	162	133	132	132	128	122	125	122	114	117
22	161	159	160	132	132	132	129	127	128	122	113	116
23	165	161	164	132	131	131	129	127	128	122	112	115
24	165	163	164	131	130	131	127	126	127	121	111	114
25	165	163	164	131	130	130	126	125	126	119	110	114
26	166	162	164	132	130	131	126	123	125	118	110	113
27	166	165	165	133	131	132	123	117	119	119	112	115
28	167	166	166	136	131	133	117	110	113	122	113	116
29	166	164	165	140	132	137	113	109	112	126	113	121
30	165	162	164	142	136	138	113	112	112	124	111	117
31	163	157	159	---	---	---	112	111	111	118	111	113
MONTH	191	138	166	157	126	138	153	109	131	126	99	112
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	117	108	112	95	93	94	95	94	95	86	86	86
2	108	104	106	93	91	92	96	95	95	87	86	86
3	113	105	110	91	90	91	96	95	96	87	86	87
4	116	103	111	91	90	90	96	96	96	87	86	86
5	115	110	111	92	90	91	97	96	96	87	85	86
6	119	108	114	93	92	92	96	95	96	89	86	87
7	117	107	110	93	92	92	95	94	95	89	89	89
8	121	105	113	93	92	93	94	92	93	90	89	89
9	112	104	108	96	93	94	92	91	92	90	90	90
10	111	110	111	97	94	95	92	88	90	92	90	91
11	113	110	111	97	96	97	88	87	87	92	91	92
12	116	113	114	98	96	97	87	86	87	92	91	92
13	121	115	117	99	98	98	89	86	87	92	90	92
14	120	113	117	99	98	99	89	87	88	91	90	91
15	113	108	110	99	98	99	88	87	87	92	91	91
16	123	108	117	100	95	97	87	84	86	93	91	92
17	116	106	111	102	96	99	84	83	83	94	93	94
18	112	105	110	102	98	100	83	82	82	94	92	93
19	114	97	103	103	99	100	83	82	82	92	91	92
20	113	102	104	103	99	100	83	82	83	92	91	91
21	108	102	104	102	97	99	84	82	83	91	89	91
22	107	102	104	97	95	96	84	83	83	89	88	88
23	105	100	102	96	95	96	84	83	84	88	87	88
24	102	98	100	97	96	96	84	83	84	88	87	88
25	100	98	99	97	97	97	84	83	84	88	87	87
26	99	97	98	97	97	97	84	83	83	88	87	88
27	98	97	98	97	96	97	84	83	83	88	86	87
28	97	95	96	96	94	95	86	83	84	87	86	87
29	---	---	---	5,160	94	2,470	86	85	85	87	87	87
30	---	---	---	94	94	94	86	85	86	88	87	88
31	---	---	---	94	94	94	---	---	---	88	87	88
MONTH	123	95	108	5,160	90	172	97	82	88	94	85	89

02081022 ROANOKE RIVER NEAR OAK CITY, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	88	87	88	95	94	94	99	98	99	100	99	99
2	88	88	88	94	93	94	100	99	99	103	100	102
3	88	88	88	94	93	93	101	99	100	102	101	102
4	89	88	88	94	93	93	101	100	101	103	102	102
5	90	88	89	95	93	94	101	99	100	104	102	103
6	89	88	89	95	94	94	100	98	99	104	102	102
7	91	89	90	95	94	95	98	97	98	103	102	103
8	91	89	90	95	92	94	98	98	98	104	103	103
9	91	90	91	93	92	93	---	---	---	112	102	105
10	91	90	91	93	92	92	---	---	---	111	105	108
11	94	90	92	92	91	92	---	---	---	105	102	103
12	95	94	95	92	91	92	---	---	---	102	94	98
13	96	95	96	93	90	92	---	---	---	96	93	94
14	97	96	97	---	---	---	---	---	---	95	93	94
15	97	96	97	---	---	---	---	---	---	95	92	94
16	96	96	96	---	---	---	---	---	---	96	94	95
17	97	96	96	---	---	---	---	---	---	97	94	95
18	96	96	96	---	---	---	---	---	---	94	84	89
19	96	96	96	---	---	---	---	---	---	87	74	80
20	99	96	97	---	---	---	100	99	100	74	62	65
21	99	97	98	---	---	---	101	100	100	73	64	68
22	98	96	97	---	---	---	101	99	100	79	73	76
23	98	97	97	99	95	98	100	98	100	86	79	81
24	98	97	97	98	97	97	99	97	98	98	82	87
25	98	97	98	98	97	98	98	96	97	92	89	91
26	98	97	98	99	98	98	97	96	96	93	92	93
27	98	97	97	99	97	98	97	95	96	93	92	93
28	97	95	96	99	98	98	96	94	95	93	91	92
29	95	93	94	100	98	98	97	95	96	92	89	91
30	96	94	95	99	98	99	99	97	98	89	87	88
31	---	---	---	100	98	99	100	98	98	---	---	---
MONTH	99	87	94	---	---	---	---	---	---	112	62	93

ROANOKE RIVER BASIN

02081022 ROANOKE RIVER NEAR OAK CITY, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.3	7.2	7.3	7.2	7.1	7.2	7.1	7.1	7.1	7.0	7.0	7.0
2	7.2	7.2	7.2	7.3	7.1	7.2	7.2	7.1	7.2	7.0	7.0	7.0
3	7.2	7.1	7.2	7.3	7.2	7.3	7.2	7.2	7.2	7.0	6.9	6.9
4	7.2	7.1	7.2	7.3	7.2	7.3	7.2	7.1	7.2	6.9	6.6	6.8
5	7.2	7.1	7.2	7.3	7.2	7.3	7.1	7.0	7.1	6.6	6.6	6.6
6	7.2	7.2	7.2	7.3	7.3	7.3	7.0	6.9	7.0	6.7	6.6	6.6
7	7.2	7.2	7.2	7.3	7.2	7.3	6.9	6.8	6.9	6.6	6.5	6.5
8	7.2	7.2	7.2	7.2	7.2	7.2	6.9	6.8	6.8	6.6	6.5	6.6
9	7.3	7.2	7.2	7.3	7.2	7.2	6.8	6.8	6.8	6.7	6.6	6.6
10	7.2	7.2	7.2	7.2	7.2	7.2	6.8	6.8	6.8	6.7	6.7	6.7
11	7.2	7.1	7.1	7.2	7.2	7.2	6.8	6.8	6.8	6.8	6.7	6.8
12	7.1	7.0	7.0	7.2	7.2	7.2	7.0	6.8	6.9	6.7	6.7	6.7
13	7.0	6.6	6.8	7.2	7.2	7.2	7.0	6.9	6.9	6.7	6.7	6.7
14	6.7	6.6	6.6	7.2	7.1	7.2	6.9	6.8	6.9	7.0	6.7	6.8
15	6.8	6.6	6.7	7.2	7.1	7.2	6.8	6.8	6.8	7.0	6.9	6.9
16	6.9	6.8	6.8	7.2	7.2	7.2	6.9	6.8	6.8	6.9	6.8	6.8
17	6.9	6.9	6.9	7.2	7.2	7.2	7.1	6.8	6.9	6.8	6.8	6.8
18	7.0	6.9	7.0	7.2	7.1	7.1	7.1	7.0	7.1	6.8	6.8	6.8
19	7.1	7.0	7.1	7.2	7.1	7.1	7.1	7.1	7.1	6.8	6.8	6.8
20	7.2	7.1	7.1	7.3	7.2	7.2	7.2	7.1	7.1	6.8	6.8	6.8
21	7.2	7.1	7.2	7.4	7.3	7.3	7.2	7.0	7.1	6.9	6.8	6.9
22	7.3	7.2	7.2	7.4	7.3	7.3	7.1	7.1	7.1	6.9	6.9	6.9
23	7.2	7.2	7.2	7.3	7.2	7.3	7.1	7.0	7.0	6.9	6.9	6.9
24	7.2	7.2	7.2	7.3	7.2	7.3	7.1	6.9	7.0	6.9	6.9	6.9
25	7.2	7.2	7.2	7.3	7.1	7.3	6.9	6.8	6.8	6.9	6.9	6.9
26	7.3	7.2	7.2	7.2	7.0	7.1	6.8	6.7	6.8	6.9	6.8	6.8
27	7.3	7.2	7.2	7.0	6.8	6.9	7.1	6.8	7.0	6.8	6.8	6.8
28	7.2	7.2	7.2	6.9	6.7	6.8	7.1	7.0	7.0	6.8	6.7	6.8
29	7.3	7.2	7.2	7.0	6.9	7.0	7.0	7.0	7.0	6.8	6.7	6.8
30	7.3	7.2	7.2	7.1	7.0	7.0	7.0	7.0	7.0	6.9	6.8	6.8
31	7.2	7.2	7.2	---	---	---	7.0	7.0	7.0	6.8	6.7	6.8
MONTH	7.3	6.6	7.1	7.4	6.7	7.2	7.2	6.7	7.0	7.0	6.5	6.8
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.7	6.5	6.6	7.6	7.5	7.6	7.2	7.2	7.2	6.7	6.7	6.7
2	6.5	6.4	6.5	7.6	7.5	7.5	7.2	7.1	7.2	6.7	6.7	6.7
3	6.7	6.5	6.6	7.5	7.4	7.4	7.2	7.2	7.2	6.7	6.7	6.7
4	6.8	6.7	6.8	7.5	7.4	7.4	7.2	7.1	7.1	6.7	6.7	6.7
5	7.0	6.8	6.9	7.5	7.4	7.5	7.2	7.1	7.1	6.7	6.6	6.6
6	7.0	7.0	7.0	7.5	7.4	7.4	7.3	7.1	7.2	6.7	6.6	6.6
7	7.0	7.0	7.0	7.4	7.4	7.4	7.3	7.2	7.2	6.7	6.6	6.7
8	7.0	6.8	6.9	7.4	7.4	7.4	7.2	7.2	7.2	6.6	6.6	6.6
9	6.8	6.8	6.8	7.4	7.4	7.4	7.2	7.0	7.1	6.6	6.5	6.6
10	6.8	6.8	6.8	7.4	7.3	7.4	7.0	6.9	6.9	6.5	6.4	6.4
11	7.2	6.8	7.0	7.4	7.3	7.4	6.9	6.8	6.9	6.5	6.4	6.4
12	7.2	7.2	7.2	7.4	7.4	7.4	6.8	6.8	6.8	6.5	6.5	6.5
13	7.4	7.2	7.3	7.4	7.4	7.4	6.9	6.8	6.8	6.7	6.4	6.5
14	7.5	7.4	7.5	7.4	7.4	7.4	6.9	6.9	6.9	6.7	6.7	6.7
15	7.5	7.4	7.4	7.4	7.3	7.4	6.9	6.8	6.8	6.8	6.7	6.8
16	7.4	7.3	7.3	7.3	7.2	7.2	6.8	6.7	6.8	6.8	6.7	6.7
17	7.3	7.2	7.3	7.2	7.2	7.2	6.7	6.7	6.7	6.7	6.6	6.7
18	7.4	7.2	7.3	7.3	7.2	7.2	6.7	6.7	6.7	6.7	6.7	6.7
19	7.5	7.4	7.4	7.3	7.2	7.2	6.7	6.6	6.6	6.8	6.7	6.7
20	7.6	7.5	7.5	7.4	7.2	7.3	6.6	6.6	6.6	6.8	6.7	6.8
21	7.7	7.6	7.6	7.5	7.3	7.4	6.6	6.6	6.6	6.9	6.8	6.8
22	7.7	7.6	7.6	7.4	7.4	7.4	6.7	6.6	6.6	6.9	6.8	6.8
23	7.6	7.6	7.6	7.4	7.4	7.4	6.6	6.6	6.6	6.8	6.8	6.8
24	7.6	7.5	7.5	7.4	7.4	7.4	6.6	6.6	6.6	6.8	6.7	6.8
25	7.7	7.6	7.6	7.4	7.4	7.4	6.6	6.6	6.6	6.8	6.7	6.7
26	7.7	7.6	7.6	7.4	7.4	7.4	6.6	6.4	6.6	6.7	6.7	6.7
27	7.7	7.6	7.6	7.4	7.3	7.3	6.5	6.4	6.4	6.7	6.7	6.7
28	7.6	7.6	7.6	7.3	7.3	7.3	6.7	6.4	6.5	6.7	6.7	6.7
29	---	---	---	7.3	7.2	7.2	6.8	6.7	6.8	6.7	6.7	6.7
30	---	---	---	7.2	7.2	7.2	6.8	6.7	6.8	6.7	6.7	6.7
31	---	---	---	7.2	7.2	7.2	---	---	---	6.7	6.7	6.7
MONTH	7.7	6.4	7.2	7.6	7.2	7.4	7.3	6.4	6.8	6.9	6.4	6.7

ROANOKE RIVER BASIN

02081022 ROANOKE RIVER NEAR OAK CITY, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	24.9	24.0	24.4	14.5	13.9	14.1	10.7	10.0	10.4	7.8	7.4	7.6
2	25.3	24.3	24.7	13.9	13.4	13.6	10.0	9.1	9.7	7.9	7.7	7.8
3	25.9	24.7	25.2	13.6	13.2	13.4	9.4	8.8	9.2	8.0	7.8	7.9
4	26.1	25.2	25.6	13.9	13.6	13.7	9.1	8.4	8.9	7.9	7.4	7.7
5	26.6	25.5	26.0	14.0	13.7	13.8	8.5	7.7	8.1	7.4	6.9	7.2
6	26.2	25.4	25.9	14.2	13.8	14.1	7.8	7.4	7.7	7.0	6.7	6.8
7	25.4	24.4	24.9	13.8	13.4	13.6	7.5	6.9	7.3	6.8	6.3	6.5
8	24.4	23.6	24.1	13.4	12.9	13.2	6.9	6.6	6.8	6.5	6.1	6.3
9	23.6	23.0	23.4	13.6	12.7	13.2	6.8	6.2	6.5	6.6	6.0	6.4
10	23.0	22.5	22.7	15.0	13.3	14.0	6.5	6.1	6.3	7.0	6.5	6.8
11	22.7	22.4	22.6	15.9	15.0	15.4	6.6	6.3	6.5	6.8	6.2	6.5
12	22.7	22.3	22.5	16.2	15.9	16.1	7.2	6.3	6.7	6.2	5.7	6.0
13	22.4	22.1	22.2	16.1	14.7	15.5	7.4	7.2	7.4	6.1	5.6	5.9
14	22.1	20.8	21.5	14.7	13.7	14.1	7.7	7.3	7.4	5.9	5.6	5.8
15	20.8	20.0	20.4	13.8	13.6	13.7	7.3	7.2	7.2	5.9	5.5	5.8
16	20.0	19.3	19.8	14.2	13.8	14.1	7.4	7.2	7.3	5.5	5.1	5.4
17	19.5	18.9	19.2	14.5	14.0	14.3	7.4	7.1	7.3	5.2	4.7	5.1
18	19.1	18.6	18.8	14.0	13.0	13.4	7.5	7.2	7.3	4.9	4.4	4.7
19	18.9	18.2	18.5	13.0	12.3	12.5	7.5	7.3	7.4	4.5	3.8	4.3
20	18.9	18.2	18.6	13.4	12.7	13.0	7.9	7.4	7.7	4.2	3.8	4.1
21	19.1	18.5	18.8	13.6	13.0	13.3	7.8	7.6	7.7	4.5	4.0	4.3
22	18.6	18.1	18.4	13.6	13.4	13.5	7.9	7.5	7.7	4.2	3.7	4.0
23	18.2	17.8	18.0	13.5	13.0	13.2	7.8	7.3	7.5	3.8	3.0	3.6
24	17.8	17.5	17.7	13.0	12.4	12.6	7.5	7.3	7.3	3.2	2.8	3.1
25	17.8	17.6	17.7	12.4	12.0	12.1	7.4	7.2	7.3	3.2	2.7	3.0
26	18.2	17.7	18.0	12.2	11.8	11.9	7.2	6.7	6.9	2.8	2.5	2.7
27	18.2	17.8	18.0	12.1	11.5	11.8	6.9	6.5	6.7	3.1	2.4	2.7
28	18.0	17.8	17.9	11.5	11.0	11.2	6.7	6.4	6.5	2.7	2.2	2.5
29	17.8	16.9	17.5	11.0	10.4	10.8	7.0	6.5	6.7	3.0	2.6	2.7
30	16.9	15.6	16.3	10.8	10.4	10.7	7.2	6.8	7.0	3.6	2.9	3.2
31	15.6	14.5	14.9	---	---	---	7.5	7.0	7.2	3.5	3.3	3.3
MONTH	26.6	14.5	20.8	16.2	10.4	13.3	10.7	6.1	7.5	8.0	2.2	5.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.4	3.2	3.3	5.2	4.8	4.9	11.2	10.7	10.9	16.2	15.6	15.9
2	3.7	3.2	3.4	5.8	5.2	5.4	11.9	11.1	11.4	16.5	16.0	16.2
3	4.6	3.7	4.1	6.1	5.7	5.9	12.8	11.8	12.2	16.4	16.1	16.2
4	5.7	4.6	5.2	6.3	5.7	6.0	13.4	12.6	12.9	16.1	15.6	15.8
5	5.9	5.1	5.5	6.7	6.1	6.3	13.5	13.0	13.3	15.6	15.4	15.5
6	5.6	4.6	5.1	7.0	6.4	6.6	13.4	13.0	13.2	15.4	15.1	15.3
7	5.0	4.5	4.7	7.0	6.7	6.8	13.2	12.5	12.8	16.0	15.4	15.6
8	4.8	4.3	4.6	6.9	6.5	6.7	12.5	11.9	12.2	16.9	16.0	16.3
9	4.9	4.6	4.7	7.1	6.6	6.8	11.9	10.9	11.2	17.7	16.9	17.3
10	4.8	4.5	4.7	7.8	6.8	7.2	10.9	10.8	10.8	18.1	17.7	18.0
11	5.0	4.4	4.7	7.8	7.3	7.4	10.8	10.5	10.6	18.4	18.0	18.2
12	5.5	4.8	5.1	7.6	7.2	7.4	11.1	10.4	10.7	18.5	18.2	18.4
13	5.6	5.1	5.3	8.0	7.3	7.6	11.9	11.0	11.4	18.9	18.1	18.6
14	5.6	4.8	5.1	8.6	7.8	8.1	12.4	11.8	12.1	18.2	17.4	17.8
15	5.3	4.8	5.0	8.8	8.3	8.5	12.7	12.1	12.4	18.6	17.9	18.2
16	5.4	4.8	5.0	9.1	8.6	8.8	13.2	12.4	12.8	18.8	18.5	18.7
17	4.8	4.1	4.6	9.2	9.0	9.1	13.5	12.9	13.2	18.9	18.2	18.5
18	4.1	3.3	3.6	9.5	8.8	9.2	13.4	13.0	13.2	18.4	17.1	18.0
19	4.3	3.7	4.0	9.5	9.4	9.4	13.2	13.0	13.1	17.4	16.8	17.1
20	4.3	3.9	4.1	9.5	9.2	9.3	13.2	12.8	13.0	17.6	17.1	17.4
21	4.7	4.0	4.3	9.5	9.4	9.4	13.5	13.1	13.3	17.6	16.9	17.3
22	5.4	4.7	5.0	9.6	9.1	9.3	14.1	13.5	13.8	17.9	17.1	17.4
23	5.8	5.4	5.6	10.2	9.5	9.8	14.2	13.8	14.0	17.8	17.3	17.5
24	6.0	5.6	5.7	10.7	10.1	10.4	14.1	13.7	13.9	17.5	17.2	17.3
25	6.0	5.4	5.7	10.9	10.3	10.6	14.0	13.8	13.9	17.6	17.2	17.4
26	5.9	5.3	5.5	11.1	10.3	10.7	14.1	13.8	14.0	17.9	17.4	17.6
27	5.5	5.1	5.3	11.2	10.6	10.9	14.3	13.9	14.1	18.2	17.7	17.9
28	5.1	4.8	4.9	11.8	10.5	11.1	14.7	14.1	14.4	18.2	17.9	18.0
29	---	---	---	12.2	11.6	11.9	15.3	14.6	14.9	18.6	17.9	18.2
30	---	---	---	11.9	11.5	11.7	15.8	15.1	15.4	18.6	17.8	18.2
31	---	---	---	11.5	11.0	11.2	---	---	---	18.8	18.4	18.6
MONTH	6.0	3.2	4.8	12.2	4.8	8.5	15.8	10.4	12.8	18.9	15.1	17.4

ROANOKE RIVER BASIN

02081022 ROANOKE RIVER NEAR OAK CITY, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.7	6.3	6.5	8.0	7.9	7.9	10.0	9.6	9.8	12.0	11.6	11.8
2	6.7	6.2	6.5	8.2	7.9	8.0	10.3	9.8	10.1	11.9	11.5	11.7
3	6.6	6.2	6.4	8.3	8.2	8.3	10.6	10.3	10.4	12.0	11.5	11.7
4	6.7	6.1	6.3	8.3	8.0	8.2	10.8	10.4	10.6	12.0	11.3	11.7
5	6.8	6.1	6.4	8.2	8.0	8.2	11.0	10.7	10.9	11.6	10.5	11.0
6	6.7	6.0	6.3	8.2	8.0	8.0	11.1	10.7	10.9	11.3	10.6	10.9
7	6.9	6.1	6.5	8.1	7.9	8.0	11.0	10.7	10.8	11.0	10.3	10.5
8	7.7	6.5	7.0	8.0	7.8	7.9	11.2	10.7	11.0	10.8	10.6	10.7
9	7.9	7.2	7.6	8.1	7.9	8.0	11.3	10.9	11.1	11.0	10.8	10.9
10	8.1	7.3	7.7	8.1	7.8	7.9	11.3	11.0	11.2	11.2	10.8	11.0
11	8.3	7.3	7.9	7.8	7.4	7.7	11.5	11.1	11.3	11.6	11.0	11.3
12	8.3	7.4	7.8	7.6	7.2	7.3	---	---	---	11.6	11.2	11.4
13	7.8	6.1	6.9	7.3	7.2	7.3	---	---	---	11.6	11.3	11.4
14	6.6	5.6	6.0	7.3	7.0	7.2	---	---	---	11.8	11.3	11.6
15	6.9	6.0	6.6	7.3	7.0	7.2	---	---	---	11.7	11.5	11.6
16	7.0	6.7	6.9	7.3	7.0	7.1	---	---	---	11.8	11.6	11.7
17	7.3	7.0	7.2	7.1	6.8	7.0	---	---	---	12.0	11.7	11.8
18	7.5	7.2	7.4	7.0	6.9	6.9	11.2	9.5	10.4	12.1	11.8	12.0
19	7.8	7.4	7.7	7.3	7.0	7.1	10.7	9.8	10.3	12.5	12.0	12.1
20	8.0	7.8	7.8	7.5	7.1	7.3	10.3	9.5	9.9	12.6	12.2	12.4
21	7.9	7.7	7.8	8.3	7.4	7.8	11.2	9.9	10.8	12.6	12.3	12.4
22	7.9	7.7	7.8	8.3	8.1	8.2	11.0	10.4	10.7	12.8	12.4	12.6
23	7.9	7.7	7.8	8.5	7.8	8.3	11.0	10.4	10.7	13.0	12.6	12.8
24	7.9	7.8	7.8	9.0	8.4	8.6	11.0	10.2	10.6	13.1	12.8	12.9
25	7.9	7.7	7.8	9.1	8.8	8.9	10.5	9.6	10.0	13.5	12.9	13.1
26	7.8	7.6	7.7	9.1	8.8	8.9	10.3	9.6	9.9	13.6	13.3	13.5
27	7.8	7.6	7.7	8.9	8.1	8.4	11.3	10.0	10.7	13.6	13.3	13.4
28	7.6	7.4	7.5	9.0	8.1	8.4	11.5	10.8	11.1	13.6	13.3	13.5
29	7.7	7.5	7.6	9.5	8.9	9.2	12.1	10.9	11.7	13.8	13.4	13.6
30	7.8	7.6	7.6	9.8	9.4	9.6	12.1	11.7	11.9	13.7	13.3	13.5
31	7.9	7.6	7.8	---	---	---	12.1	11.6	11.9	13.5	13.1	13.3
MONTH	8.3	5.6	7.2	9.8	6.8	8.0	---	---	---	13.8	10.3	12.1
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.4	12.9	13.2	13.1	11.7	12.7	---	---	---	7.2	6.7	7.0
2	13.0	12.7	12.9	13.0	12.6	12.8	---	---	---	7.2	6.7	6.9
3	12.9	12.7	12.8	12.8	12.4	12.7	---	---	---	7.0	6.5	6.8
4	12.9	12.6	12.7	12.7	12.4	12.6	---	---	---	7.2	6.4	6.8
5	12.9	12.5	12.7	12.8	12.5	12.6	---	---	---	7.5	6.7	7.2
6	13.2	12.5	12.8	12.7	12.5	12.6	---	---	---	7.4	6.7	7.0
7	13.2	12.9	13.1	12.6	12.3	12.4	---	---	---	6.9	6.6	6.8
8	13.0	12.6	12.8	12.5	12.2	12.3	---	---	---	6.9	6.6	6.7
9	12.7	12.2	12.4	12.6	12.3	12.5	---	---	---	6.7	6.2	6.5
10	12.6	12.2	12.4	12.6	12.4	12.5	8.7	7.8	8.4	6.3	6.0	6.2
11	12.6	12.3	12.5	---	---	---	8.3	7.7	8.1	6.4	6.1	6.2
12	12.4	12.2	12.3	---	---	---	8.3	7.7	8.1	6.7	6.3	6.5
13	12.8	12.2	12.5	---	---	---	8.6	7.8	8.2	7.3	6.5	6.9
14	13.0	12.6	12.8	---	---	---	8.7	8.2	8.5	7.7	7.2	7.4
15	13.0	12.7	12.9	---	---	---	8.7	8.3	8.5	7.7	7.4	7.6
16	12.8	12.3	12.5	---	---	---	8.6	8.1	8.4	7.7	7.0	7.3
17	12.6	12.3	12.5	---	---	---	8.5	7.9	8.2	7.1	6.8	6.9
18	12.9	12.3	12.6	---	---	---	8.3	7.9	8.1	7.4	6.9	7.2
19	13.3	12.8	13.0	---	---	---	8.4	7.8	8.1	7.6	7.2	7.4
20	13.7	13.1	13.4	---	---	---	8.4	7.9	8.2	7.8	7.4	7.5
21	13.7	13.2	13.4	---	---	---	8.5	7.7	8.3	8.2	7.6	7.9
22	13.5	13.2	13.3	---	---	---	8.5	7.9	8.2	8.1	7.7	7.9
23	13.2	12.8	13.0	---	---	---	8.5	7.8	8.2	7.9	7.5	7.7
24	13.3	12.5	13.0	---	---	---	8.6	7.9	8.2	7.8	7.3	7.5
25	13.1	12.5	12.8	---	---	---	8.5	7.9	8.3	7.6	7.2	7.3
26	13.1	12.3	12.6	---	---	---	8.4	7.7	8.0	7.4	6.8	7.1
27	13.2	12.8	13.0	---	---	---	8.3	7.6	7.9	7.5	6.7	7.2
28	13.1	12.9	13.0	---	---	---	8.2	7.6	7.9	7.4	6.9	7.3
29	---	---	---	---	---	---	7.8	7.0	7.3	7.5	7.2	7.3
30	---	---	---	---	---	---	7.7	6.9	7.2	7.5	6.9	7.3
31	---	---	---	---	---	---	---	---	---	7.6	7.3	7.5
MONTH	13.7	12.2	12.8	---	---	---	---	---	---	8.2	6.0	7.1

02081022 ROANOKE RIVER NEAR OAK CITY, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.5	7.0	7.3	5.4	4.9	5.1	4.7	4.2	4.4	5.0	4.9	4.9
2	7.7	7.0	7.3	5.1	4.8	4.9	4.7	4.3	4.4	4.9	4.7	4.8
3	7.9	7.6	7.7	5.1	4.8	4.9	4.5	4.1	4.3	4.9	4.7	4.8
4	7.8	7.4	7.6	5.0	4.8	4.9	4.3	4.0	4.1	5.0	4.7	4.9
5	7.5	7.2	7.3	5.2	4.5	4.9	4.4	4.0	4.2	5.0	4.8	4.9
6	7.4	6.9	7.1	5.1	4.8	5.0	4.7	4.3	4.5	5.3	4.9	5.1
7	7.3	7.0	7.1	5.4	4.6	5.1	4.8	4.6	4.7	5.4	5.2	5.3
8	7.3	6.6	6.9	5.4	5.0	5.2	4.9	4.7	4.8	5.4	5.2	5.3
9	6.8	6.3	6.6	5.5	5.2	5.3	5.0	4.8	4.9	5.5	5.3	5.4
10	6.6	6.0	6.3	5.5	5.3	5.4	5.0	4.7	4.8	5.6	5.4	5.5
11	6.3	6.0	6.1	5.5	5.2	5.3	5.0	4.8	4.9	5.7	5.5	5.6
12	6.3	6.1	6.2	5.4	5.1	5.3	5.0	4.7	4.9	5.8	5.5	5.7
13	6.3	6.0	6.2	5.4	5.2	5.3	5.0	4.8	4.8	5.9	5.7	5.8
14	6.2	5.9	6.0	5.4	5.2	5.3	5.0	4.6	4.8	6.0	5.8	5.9
15	6.0	5.9	6.0	5.4	5.1	5.2	5.0	4.8	4.9	6.1	5.8	6.0
16	6.0	5.8	5.9	5.2	4.9	5.0	5.0	4.6	4.8	6.1	5.9	6.0
17	5.8	5.4	5.6	5.2	4.9	5.0	4.9	4.5	4.7	6.2	5.9	6.0
18	5.6	5.3	5.5	5.3	4.8	5.0	5.0	4.7	4.8	6.6	6.0	6.3
19	5.5	5.3	5.4	5.3	5.0	5.1	5.0	4.8	4.8	6.3	5.5	5.8
20	5.4	5.1	5.2	5.2	4.9	5.0	5.0	4.7	4.9	5.6	4.1	4.8
21	5.4	5.1	5.3	5.6	4.9	5.0	4.8	4.5	4.6	4.1	3.5	3.9
22	5.5	5.3	5.3	5.2	4.8	5.0	4.6	4.3	4.4	3.8	3.0	3.5
23	5.5	5.3	5.4	5.0	4.8	4.9	4.5	4.3	4.4	4.0	2.6	3.4
24	5.7	5.4	5.5	5.2	4.9	5.0	4.5	4.2	4.3	5.4	2.4	3.6
25	5.6	5.4	5.5	5.2	4.9	5.1	4.5	4.2	4.3	5.8	5.4	5.7
26	5.6	5.3	5.4	5.0	4.4	4.6	4.6	4.4	4.5	5.9	5.6	5.8
27	5.4	5.2	5.3	4.5	4.3	4.4	4.8	4.5	4.7	5.8	5.3	5.5
28	5.4	5.1	5.2	4.6	4.3	4.4	4.5	4.3	4.4	5.6	5.2	5.4
29	5.5	5.1	5.3	4.7	4.4	4.6	4.7	4.4	4.6	5.4	5.1	5.2
30	5.4	5.1	5.2	4.8	4.2	4.5	4.8	4.7	4.8	5.3	5.1	5.2
31	---	---	---	4.3	4.1	4.2	5.0	4.8	4.9	---	---	---
MONTH	7.9	5.1	6.1	5.6	4.1	5.0	5.0	4.0	4.6	6.6	2.4	5.2

ROANOKE RIVER BASIN

02081022 ROANOKE RIVER NEAR OAK CITY, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	81	76	78	78	77	77	89	86	88	100	97	99
2	81	75	78	79	76	77	90	87	89	100	97	98
3	81	75	78	80	78	79	92	89	91	102	97	99
4	83	75	77	80	77	79	93	90	92	101	94	98
5	85	75	79	80	77	79	94	91	92	96	87	92
6	83	74	78	80	77	78	93	90	91	93	87	89
7	84	74	79	78	76	77	91	88	90	90	84	86
8	92	78	83	77	74	75	92	88	90	88	86	87
9	93	85	89	78	75	76	92	89	90	90	87	89
10	94	85	90	79	75	77	92	90	91	92	88	90
11	96	85	92	78	75	77	94	90	92	94	90	92
12	96	86	91	77	73	74	---	---	---	94	90	92
13	90	70	79	74	72	73	---	---	---	93	90	92
14	76	64	69	72	68	70	---	---	---	95	90	92
15	77	67	73	71	67	69	---	---	---	94	91	93
16	76	74	76	71	68	69	---	---	---	94	91	93
17	79	76	78	69	67	68	---	---	---	94	92	93
18	80	78	80	68	66	67	93	79	87	94	92	93
19	83	79	82	68	66	67	89	82	86	95	93	94
20	86	83	84	72	67	69	86	80	83	97	94	95
21	86	82	84	80	71	75	94	83	91	97	94	96
22	85	82	83	80	78	79	92	87	90	98	95	96
23	84	81	83	81	75	79	92	87	89	98	96	97
24	83	82	82	85	79	81	92	85	88	98	96	97
25	83	81	82	85	82	83	88	80	83	100	96	98
26	83	81	82	84	81	83	85	79	82	101	98	99
27	83	80	81	83	75	78	93	82	88	102	98	99
28	80	78	79	82	74	77	94	88	91	100	97	99
29	81	78	79	86	80	83	100	89	96	103	99	100
30	80	77	78	88	84	87	100	96	98	102	100	101
31	78	76	77	---	---	---	100	97	99	102	98	100
MONTH	96	64	81	88	66	76	---	---	---	103	84	95
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	101	97	99	103	91	100	---	---	---	73	67	71
2	99	96	97	103	99	102	---	---	---	73	69	71
3	100	96	98	103	99	102	---	---	---	71	66	69
4	102	99	100	103	99	101	---	---	---	73	65	69
5	103	99	101	105	101	103	---	---	---	75	67	72
6	103	99	101	105	102	103	---	---	---	74	67	70
7	103	100	102	104	101	102	---	---	---	70	66	68
8	101	97	100	103	99	101	---	---	---	70	67	69
9	99	95	97	104	101	102	---	---	---	69	65	67
10	98	95	97	106	102	103	79	71	76	67	64	65
11	98	95	97	---	---	---	75	69	73	68	65	66
12	98	96	97	---	---	---	76	69	73	72	67	69
13	101	96	99	---	---	---	80	71	75	78	70	74
14	103	98	101	---	---	---	82	76	79	81	75	78
15	102	100	101	---	---	---	82	77	80	83	79	80
16	101	97	98	---	---	---	82	77	80	83	75	79
17	98	95	97	---	---	---	81	75	79	77	72	74
18	98	94	96	---	---	---	79	75	77	78	74	76
19	102	97	99	---	---	---	80	74	77	79	74	76
20	105	100	102	---	---	---	80	75	78	81	77	79
21	106	101	104	---	---	---	82	74	79	86	79	82
22	105	104	105	---	---	---	82	77	80	85	81	83
23	105	102	103	---	---	---	83	76	80	83	78	80
24	106	100	103	---	---	---	84	76	80	81	77	78
25	105	100	102	---	---	---	83	76	80	80	75	77
26	104	97	100	---	---	---	82	75	78	78	71	75
27	104	101	103	---	---	---	81	74	77	80	71	76
28	103	101	102	---	---	---	80	74	77	79	73	77
29	---	---	---	---	---	---	78	69	72	80	76	78
30	---	---	---	---	---	---	77	69	72	80	73	77
31	---	---	---	---	---	---	---	---	---	82	78	80
MONTH	106	94	100	---	---	---	---	---	---	86	64	74

02081022 ROANOKE RIVER NEAR OAK CITY, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	81	75	79	64	58	60	58	51	55	65	63	64
2	84	76	79	60	56	58	58	52	54	63	60	62
3	86	82	84	60	56	57	55	51	53	63	60	62
4	85	81	83	58	56	57	53	49	51	64	60	63
5	82	78	80	61	52	57	54	49	52	64	61	63
6	81	75	78	61	57	59	58	53	56	67	62	65
7	81	77	78	64	55	61	60	57	59	68	65	66
8	81	74	77	65	60	62	61	58	59	67	64	66
9	76	71	74	67	63	65	62	59	61	68	65	66
10	74	68	71	67	64	65	62	58	59	68	66	67
11	72	68	70	67	63	65	62	59	60	69	66	68
12	73	69	72	66	62	64	62	58	60	70	66	68
13	73	69	71	66	63	64	62	59	60	71	68	69
14	72	68	70	66	63	64	63	57	60	72	69	70
15	70	69	70	65	62	63	63	60	61	73	69	71
16	71	68	69	63	59	61	63	58	60	74	71	72
17	68	63	65	63	59	60	62	57	59	74	71	73
18	64	61	63	64	58	61	63	59	61	79	72	75
19	63	60	62	64	61	62	63	60	61	74	64	68
20	61	58	59	63	59	61	63	59	61	65	47	55
21	62	58	60	69	59	61	61	56	58	47	41	45
22	63	60	61	64	59	61	58	54	56	45	35	41
23	63	60	61	61	58	59	57	54	55	47	31	40
24	66	62	63	63	60	61	57	53	54	64	28	43
25	65	62	63	63	60	62	57	52	54	69	64	67
26	65	62	63	61	54	56	58	55	57	70	66	68
27	64	61	62	56	52	54	61	57	59	69	63	66
28	64	60	61	57	53	54	57	54	56	66	62	64
29	65	60	63	58	54	57	61	56	59	64	60	62
30	64	60	62	60	52	56	62	61	62	63	59	61
31	---	---	---	53	50	51	65	62	63	---	---	---
MONTH	86	58	69	69	50	60	65	49	58	79	28	63