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Water-Data Report 2010

**02081094 ROANOKE RIVER AT JAMESVILLE, NC**

Roanoke Basin  
Lower Roanoke Subbasin

LOCATION.--Lat 35°48'47", long 76°53'34" referenced to North American Datum of 1983, Martin County, NC, Hydrologic Unit 03010107, at private pier on right bank, 50 ft downstream of boat ramp at end of Water Street, approximately 19.2 mi upstream from mouth, and 0.5 mi northeast of Jamesville.

DRAINAGE AREA.--9,250 mi<sup>2</sup>.

**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 Records from August 1996 to September 1997 are unpublished and available from the USGS Water Science Center, Raleigh, NC.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 National Geodetic Vertical Datum of 1929. Satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 5.87 ft, September 18, 19, 1999; minimum elevation, -1.14 ft, September 1, 1993.

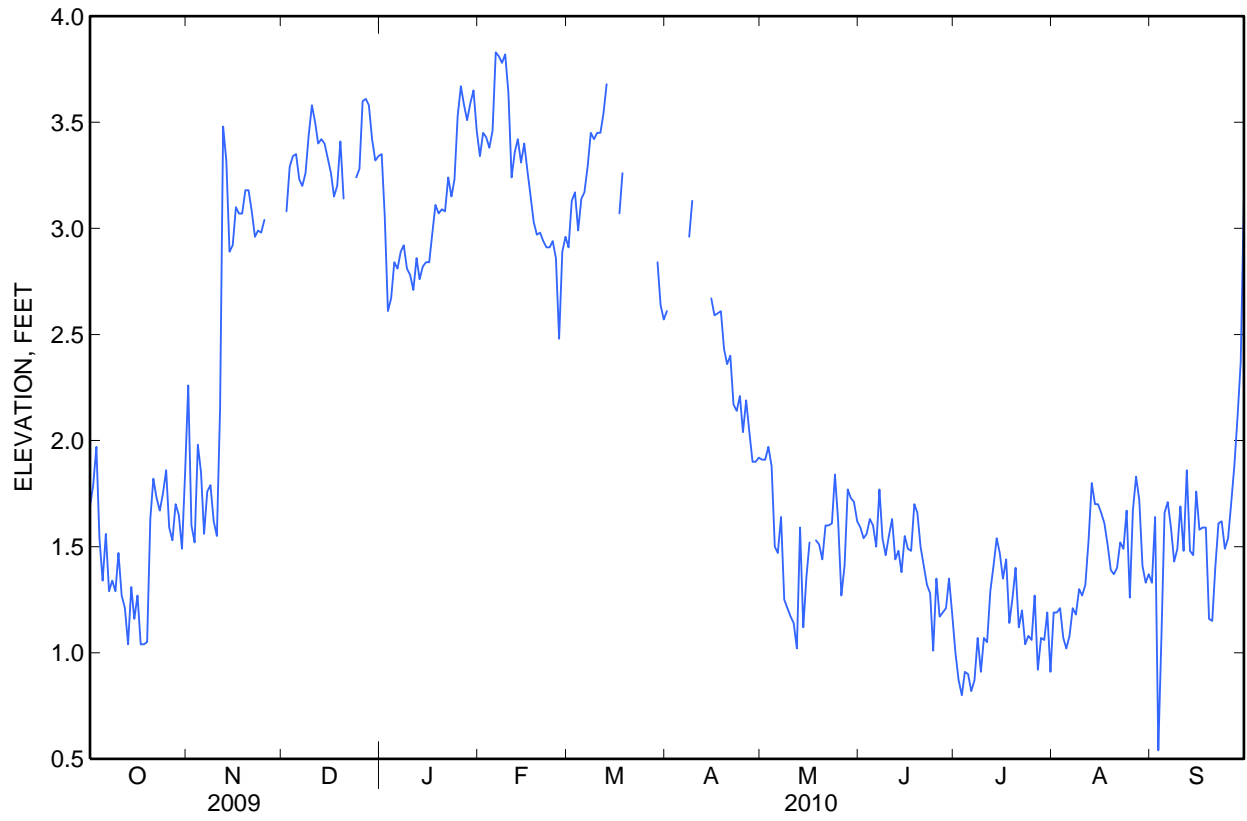
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 3.89 ft, February 9, 10; minimum elevation, -0.61 ft, September 3.

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

**ELEVATION, FEET**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.69	2.26	---	3.35	3.34	2.91	2.61	1.91	1.59	1.00	1.19	1.33
2	1.79	1.60	3.08	3.06	3.45	3.13	---	1.91	1.54	0.87	1.19	1.64
3	1.97	1.52	3.29	2.61	3.43	3.17	---	1.97	1.56	0.80	1.21	0.54
4	1.54	1.98	3.34	2.67	3.38	2.99	---	1.88	1.63	0.91	1.07	1.09
5	1.34	1.85	3.35	2.84	3.46	3.14	---	1.50	1.60	0.90	1.02	1.66
6	1.56	1.56	3.23	2.81	3.83	3.17	---	1.47	1.50	0.82	1.08	1.71
7	1.29	1.76	3.20	2.89	3.81	3.29	---	1.64	1.77	0.87	1.21	1.59
8	1.34	1.79	3.26	2.92	3.78	3.45	2.96	1.25	1.54	1.07	1.18	1.43
9	1.29	1.62	3.44	2.81	3.82	3.42	3.13	1.21	1.46	0.91	1.30	1.49
10	1.47	1.55	3.58	2.78	3.64	3.45	---	1.17	1.55	1.07	1.27	1.69
11	1.27	2.15	3.50	2.71	3.24	3.45	---	1.14	1.63	1.05	1.32	1.48
12	1.21	3.48	3.40	2.86	3.36	3.54	---	1.02	1.44	1.29	1.53	1.86
13	1.04	3.32	3.42	2.76	3.42	3.68	---	1.59	1.48	1.41	1.80	1.48
14	1.31	2.89	3.40	2.82	3.31	---	---	1.12	1.38	1.54	1.70	1.46
15	1.16	2.92	3.33	2.84	3.40	---	2.67	1.36	1.55	1.47	1.70	1.76
16	1.27	3.10	3.26	2.84	3.27	---	2.59	1.52	1.49	1.35	1.66	1.58
17	1.04	3.07	3.15	2.98	3.15	3.07	2.60	---	1.48	1.44	1.61	1.59
18	1.04	3.07	3.20	3.11	3.03	3.26	2.61	1.53	1.70	1.14	1.51	1.59
19	1.05	3.18	3.41	3.07	2.97	---	2.43	1.51	1.66	1.26	1.39	1.16
20	1.63	3.18	3.14	3.09	2.98	---	2.36	1.44	1.50	1.40	1.37	1.15
21	1.82	3.08	---	3.08	2.94	---	2.40	1.60	1.41	1.12	1.40	1.40
22	1.73	2.96	---	3.24	2.91	---	2.17	1.60	1.32	1.20	1.52	1.61
23	1.67	2.99	---	3.15	2.91	---	2.14	1.61	1.28	1.04	1.49	1.62
24	1.75	2.98	3.24	3.23	2.94	---	2.21	1.84	1.01	1.08	1.67	1.49
25	1.86	3.04	3.28	3.53	2.86	---	2.04	1.62	1.35	1.06	1.26	1.54
26	1.59	---	3.60	3.67	2.48	---	2.19	1.27	1.17	1.27	1.67	1.70
27	1.53	---	3.61	3.58	2.89	---	2.04	1.41	1.19	0.92	1.83	1.88
28	1.70	---	3.58	3.51	2.96	---	1.90	1.77	1.21	1.07	1.72	2.11
29	1.65	---	3.42	3.59	---	2.84	1.90	1.73	1.35	1.06	1.41	2.37
30	1.49	---	3.32	3.65	---	2.64	1.92	1.71	1.18	1.19	1.33	3.15
31	1.84	---	3.34	3.46	---	2.57	---	1.62	---	0.91	1.37	---
<b>Mean</b>	1.48	---	---	3.08	3.25	---	---	---	1.45	1.11	1.42	1.60
<b>Max</b>	1.97	---	---	3.67	3.83	---	---	---	1.77	1.54	1.83	3.15
<b>Min</b>	1.04	---	---	2.61	2.48	---	---	---	1.01	0.80	1.02	0.54

02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued



**02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued**

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1955 to 1967, 1998 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1955 to September 1967, March 1998 to current year

pH: March 1998 to current year.

WATER TEMPERATURE: October 1955 to September 1967, 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 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.

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: Maximum recorded, 182 microsiemens, April 11, 1999; minimum recorded, 36 microsiemens, September 19, 20, 21, 1999.

pH: Maximum recorded, 7.7 standard units, June 14, 15, 16, 17, 2002, October 5, 2007; minimum recorded, 5.6 standard units, May 3, 1998, September 18, 19, 1999

WATER TEMPERATURE: Maximum recorded, 32.2°C, July 25, 26, 2010; minimum recorded, 1.8°C, January 11, 2010.

DISSOLVED OXYGEN: Maximum recorded, 14.3 mg/L, January 8, 1999; minimum recorded, <1.0 mg/L, September 21-30, 2003.

DISSOLVED OXYGEN, PERCENT SATURATION: Maximum recorded, 118%, October 5, 2007; minimum recorded, <10%, September 21-30, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 140 microsiemens, October 23, 24; minimum recorded, 79 microsiemens, February 6, 7.

pH: Maximum recorded, 7.3 standard units, on several days during the year; minimum recorded, 6.3 standard units, on several days during the year.

WATER TEMPERATURE: Maximum recorded, 32.2°C, July 25, 26; minimum recorded, 1.8°C, January 11.

DISSOLVED OXYGEN: Maximum recorded, 13.0 mg/L, February 18; minimum recorded, 5.1, November 25.

DISSOLVED OXYGEN, PERCENT SATURATION: Maximum recorded, 103%, February 21; minimum recorded, 49%, November 25, 27.

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>
	<b>October</b>			<b>November</b>			<b>December</b>			<b>January</b>		
<b>1</b>	130	120	124	135	129	130	104	102	103	94	92	93
<b>2</b>	131	127	129	136	133	134	103	99	101	94	93	93
<b>3</b>	128	115	119	135	128	132	100	96	97	94	93	93
<b>4</b>	122	116	117	135	128	131	97	96	97	94	93	94
<b>5</b>	124	120	122	139	135	137	97	94	96	94	93	94
<b>6</b>	126	120	124	139	136	138	95	94	94	94	93	94
<b>7</b>	123	119	121	136	133	135	95	94	94	94	93	93
<b>8</b>	122	118	121	135	133	134	95	94	95	93	93	93
<b>9</b>	124	119	122	135	126	130	95	91	92	93	92	93
<b>10</b>	124	119	122	134	130	133	93	91	92	93	92	93
<b>11</b>	126	124	125	131	122	125	94	93	94	93	92	92
<b>12</b>	125	124	125	128	118	124	95	94	95	93	92	92
<b>13</b>	125	123	124	118	101	109	96	95	95	93	92	92
<b>14</b>	126	123	124	112	103	108	96	95	96	93	92	92
<b>15</b>	127	125	126	103	95	98	96	95	96	93	92	92
<b>16</b>	128	126	127	100	96	97	96	95	96	93	92	93
<b>17</b>	127	123	124	99	98	99	96	95	96	93	89	91
<b>18</b>	124	123	124	99	98	99	96	95	95	91	89	90
<b>19</b>	127	123	125	100	98	99	95	93	94	92	90	91
<b>20</b>	128	127	127	102	97	100	94	93	93	92	92	92
<b>21</b>	129	127	128	103	100	102	94	93	94	92	90	92
<b>22</b>	138	128	133	105	102	104	94	94	94	91	87	88
<b>23</b>	140	137	139	105	104	105	95	94	94	90	88	88
<b>24</b>	140	136	138	105	103	105	95	94	94	91	89	90
<b>25</b>	136	134	135	107	105	105	95	91	94	91	87	89
<b>26</b>	135	127	131	106	105	106	91	90	90	88	87	87
<b>27</b>	135	124	129	107	105	106	92	90	91	88	87	88
<b>28</b>	136	127	132	106	101	105	93	92	93	88	87	88
<b>29</b>	136	128	131	105	103	104	94	93	93	87	87	87
<b>30</b>	135	126	129	105	103	104	94	93	94	87	84	85
<b>31</b>	137	131	134	---	---	---	94	93	93	85	84	84
<b>Month</b>	140	115	127	139	95	115	104	90	95	94	84	91

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>
	<b>February</b>			<b>March</b>			<b>April</b>			<b>May</b>		
<b>1</b>	86	84	85	86	85	86	87	83	87	103	102	103
<b>2</b>	86	84	85	86	84	86	90	87	88	103	99	102
<b>3</b>	85	85	85	85	83	83	91	89	90	104	99	102
<b>4</b>	---	---	---	84	83	83	92	90	91	105	102	103
<b>5</b>	88	83	87	85	83	84	94	92	93	105	104	105
<b>6</b>	83	79	81	85	84	85	94	93	94	107	101	105
<b>7</b>	82	79	81	86	85	85	96	89	94	106	105	105
<b>8</b>	83	82	82	87	85	86	95	93	94	106	105	105
<b>9</b>	83	82	83	87	86	87	94	92	93	106	104	105
<b>10</b>	82	82	82	89	87	88	93	92	92	106	104	105
<b>11</b>	82	82	82	89	88	88	94	92	93	106	104	105
<b>12</b>	83	82	83	88	87	88	94	93	94	106	105	106
<b>13</b>	84	83	83	88	87	88	---	---	---	106	105	106
<b>14</b>	85	83	84	89	88	88	95	93	94	107	105	106
<b>15</b>	86	85	86	89	88	89	95	94	95	107	106	106
<b>16</b>	87	86	87	89	88	89	96	95	95	107	105	106
<b>17</b>	88	87	88	90	89	90	97	95	96	---	---	---
<b>18</b>	89	88	88	91	90	90	97	96	97	106	103	105
<b>19</b>	89	88	89	92	90	91	97	97	97	103	102	103
<b>20</b>	89	88	89	93	91	92	98	97	98	103	102	102
<b>21</b>	89	88	89	94	92	93	99	98	98	103	102	103
<b>22</b>	89	87	89	94	93	94	101	99	99	103	99	100
<b>23</b>	88	87	88	94	93	94	101	100	100	103	100	101
<b>24</b>	88	87	87	94	93	94	102	100	101	104	102	103
<b>25</b>	87	86	86	95	93	94	102	101	101	105	103	104
<b>26</b>	86	86	86	95	92	94	103	101	102	105	101	103
<b>27</b>	86	85	86	96	90	94	103	102	103	103	101	101
<b>28</b>	86	85	86	95	94	94	104	97	103	102	101	102
<b>29</b>	---	---	---	96	91	93	103	102	103	103	102	102
<b>30</b>	---	---	---	92	91	92	104	102	103	104	103	103
<b>31</b>	---	---	---	92	87	90	---	---	---	104	102	103
<b>Month</b>	---	---	---	96	83	89	---	---	---	---	---	---

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
<b>1</b>	103	102	103	113	112	112	117	109	114	126	116	121
<b>2</b>	103	101	102	113	109	111	117	107	113	125	114	118
<b>3</b>	103	101	102	112	110	111	114	103	108	129	118	124
<b>4</b>	102	101	102	112	110	111	114	106	110	129	126	127
<b>5</b>	102	100	101	112	111	111	107	105	106	126	115	119
<b>6</b>	101	99	100	112	110	111	122	107	116	124	115	121
<b>7</b>	101	99	100	115	111	113	124	121	122	124	115	120
<b>8</b>	101	100	101	121	114	118	123	120	121	125	116	119
<b>9</b>	101	99	100	121	119	120	120	111	114	125	114	118
<b>10</b>	101	98	100	120	116	118	118	110	115	126	117	120
<b>11</b>	100	98	99	118	107	113	116	109	113	131	126	130
<b>12</b>	100	98	99	110	107	108	117	107	112	131	128	130
<b>13</b>	100	98	99	110	105	109	120	112	115	129	116	121
<b>14</b>	101	99	100	110	103	105	123	120	121	126	118	123
<b>15</b>	102	100	101	115	110	113	121	113	117	125	114	119
<b>16</b>	103	101	102	121	111	117	120	111	116	127	118	122
<b>17</b>	102	101	102	121	118	119	120	110	116	132	117	126
<b>18</b>	102	99	101	122	120	121	121	113	117	131	117	126
<b>19</b>	104	99	101	121	119	120	122	111	117	122	114	118
<b>20</b>	104	97	100	121	111	117	126	111	120	118	113	114
<b>21</b>	102	97	99	118	111	115	127	125	126	120	116	119
<b>22</b>	105	96	99	116	108	111	126	115	121	126	115	121
<b>23</b>	107	102	105	117	111	114	122	114	119	125	115	120
<b>24</b>	107	101	103	121	114	119	122	114	119	129	117	122
<b>25</b>	115	107	111	120	112	118	124	115	119	131	124	129
<b>26</b>	115	113	114	121	112	117	123	116	120	128	118	122
<b>27</b>	115	114	115	122	120	121	125	114	118	128	115	122
<b>28</b>	115	111	113	120	111	116	128	125	127	124	113	119
<b>29</b>	113	111	112	117	108	113	127	117	122	117	105	112
<b>30</b>	113	111	112	120	106	112	125	117	122	106	95	102
<b>31</b>	---	---	---	120	111	117	126	117	123	---	---	---
<b>Month</b>	115	96	103	122	103	115	128	103	117	132	95	121

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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



## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	June			July			August			September		
1	6.9	6.8	6.9	6.9	6.8	6.8	7.2	7.1	7.2	7.2	7.2	7.2
2	7.0	6.9	6.9	6.9	6.8	6.9	7.2	7.0	7.1	7.2	7.1	7.2
3	7.0	6.9	6.9	7.0	6.8	6.9	7.1	7.0	7.1	7.2	7.1	7.1
4	7.0	6.9	7.0	7.0	6.9	7.0	7.1	7.0	7.1	7.2	7.1	7.1
5	7.0	6.9	7.0	7.0	6.9	7.0	7.2	7.0	7.1	7.2	7.1	7.2
6	7.0	6.9	7.0	7.0	6.9	7.0	7.2	7.1	7.2	7.2	7.1	7.2
7	7.0	6.9	7.0	7.0	6.9	7.0	7.3	7.2	7.2	7.2	7.1	7.1
8	7.0	6.9	7.0	7.1	7.0	7.1	7.3	7.2	7.2	7.2	7.1	7.1
9	7.0	6.9	7.0	7.2	7.1	7.2	7.2	7.1	7.2	7.2	7.1	7.1
10	7.0	6.8	6.9	7.2	7.1	7.1	7.2	7.1	7.2	7.2	7.1	7.2
11	6.9	6.9	6.9	7.2	7.1	7.1	7.2	7.1	7.1	7.2	7.2	7.2
12	6.9	6.9	6.9	7.2	7.1	7.1	7.2	7.1	7.2	7.2	7.1	7.2
13	6.9	6.9	6.9	7.1	7.0	7.1	7.2	7.1	7.2	7.1	7.1	7.1
14	6.9	6.9	6.9	7.1	7.0	7.1	7.2	7.2	7.2	7.1	7.0	7.1
15	6.9	6.8	6.9	7.1	7.0	7.1	7.2	7.1	7.2	7.1	7.1	7.1
16	6.9	6.8	6.9	7.2	7.1	7.1	7.2	7.1	7.2	7.2	7.1	7.1
17	6.9	6.8	6.9	7.2	7.1	7.1	7.2	7.1	7.2	7.2	7.1	7.2
18	7.0	6.8	7.0	7.2	7.1	7.2	7.2	7.1	7.2	7.2	7.1	7.1
19	7.0	6.9	6.9	7.2	7.1	7.2	7.2	7.1	7.2	7.2	7.1	7.1
20	6.9	6.8	6.9	7.2	7.1	7.1	7.2	7.2	7.2	7.1	7.1	7.1
21	6.8	6.8	6.8	7.2	7.0	7.1	7.3	7.1	7.2	7.2	7.1	7.1
22	6.8	6.8	6.8	7.1	7.0	7.1	7.2	7.2	7.2	7.2	7.1	7.1
23	6.8	6.8	6.8	7.1	7.1	7.1	7.2	7.1	7.2	7.2	7.1	7.1
24	6.9	6.8	6.8	7.2	7.1	7.1	7.2	7.1	7.2	7.2	7.1	7.1
25	6.9	6.8	6.8	7.2	7.1	7.1	7.2	7.1	7.1	7.2	7.1	7.2
26	6.9	6.8	6.8	7.2	7.1	7.1	7.2	7.2	7.2	7.2	7.1	7.2
27	6.9	6.8	6.8	7.2	7.1	7.1	7.3	7.2	7.2	7.2	7.1	7.1
28	6.9	6.8	6.8	7.2	7.0	7.1	7.2	7.2	7.2	7.1	7.0	7.1
29	6.9	6.8	6.8	7.2	7.1	7.1	7.3	7.2	7.2	7.1	7.0	7.1
30	6.8	6.8	6.8	7.2	7.1	7.2	7.3	7.2	7.2	7.1	6.5	7.0
31	---	---	---	7.2	7.1	7.2	7.3	7.2	7.2	---	---	---
<b>Max</b>	7.0	6.9	7.0	7.2	7.1	7.2	7.3	7.2	7.2	7.2	7.2	7.2
<b>Min</b>	6.8	6.8	6.8	6.9	6.8	6.8	7.1	7.0	7.1	7.1	6.5	7.0

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>
	<b>October</b>			<b>November</b>			<b>December</b>			<b>January</b>		
<b>1</b>	23.2	22.7	22.8	18.2	17.6	18.0	12.1	11.3	11.7	6.5	6.2	6.4
<b>2</b>	22.9	22.5	22.7	17.6	17.1	17.3	12.0	11.1	11.4	6.4	4.6	5.5
<b>3</b>	23.0	22.5	22.7	17.5	17.0	17.2	13.1	12.0	12.7	4.6	3.5	3.9
<b>4</b>	22.8	22.3	22.5	17.4	17.1	17.2	12.9	12.2	12.4	3.5	3.0	3.2
<b>5</b>	22.3	21.9	22.1	17.2	16.9	17.1	12.2	11.6	12.0	3.2	2.8	3.0
<b>6</b>	22.0	21.8	21.9	17.0	16.3	16.6	11.6	10.2	10.7	3.0	2.5	2.8
<b>7</b>	22.1	21.8	21.9	16.3	15.4	15.8	10.2	9.6	9.9	3.1	2.5	2.8
<b>8</b>	21.9	21.6	21.8	15.4	14.9	15.0	10.0	9.7	9.8	3.6	3.1	3.3
<b>9</b>	21.9	21.4	21.7	15.2	14.9	15.0	12.1	9.9	11.0	3.2	2.6	2.8
<b>10</b>	22.4	21.9	22.1	15.3	15.0	15.1	12.2	11.0	11.8	2.6	2.1	2.3
<b>11</b>	22.0	21.8	21.8	15.2	15.1	15.2	11.0	8.6	9.6	2.4	1.8	2.1
<b>12</b>	21.8	21.2	21.5	15.2	14.8	15.0	8.6	7.9	8.2	2.9	2.4	2.6
<b>13</b>	21.6	21.1	21.3	14.8	14.4	14.6	9.5	8.2	8.8	2.8	2.3	2.6
<b>14</b>	21.3	20.6	21.0	14.5	13.9	14.2	10.0	9.5	9.7	3.0	2.3	2.6
<b>15</b>	20.6	20.1	20.3	14.5	13.7	14.1	10.1	9.8	9.9	3.5	2.7	3.1
<b>16</b>	20.1	19.4	19.8	14.6	14.1	14.3	10.1	9.1	9.7	4.2	3.3	3.7
<b>17</b>	19.4	18.5	18.9	14.7	14.3	14.5	9.1	8.0	8.4	5.8	4.2	4.9
<b>18</b>	18.5	17.5	18.0	15.0	14.6	14.8	8.0	7.6	7.7	6.4	5.8	6.0
<b>19</b>	17.5	16.9	17.1	15.5	15.0	15.2	8.0	7.4	7.8	6.4	5.7	6.1
<b>20</b>	16.9	16.4	16.6	15.5	15.3	15.4	7.4	6.6	7.0	6.9	6.1	6.4
<b>21</b>	16.4	15.9	16.0	15.3	14.2	14.7	6.6	6.1	6.3	6.7	6.3	6.4
<b>22</b>	15.9	15.5	15.6	14.2	13.6	13.8	6.4	5.9	6.2	6.5	6.3	6.5
<b>23</b>	15.7	15.3	15.5	14.1	13.6	13.9	6.4	5.9	6.2	6.4	5.8	6.0
<b>24</b>	16.5	15.7	16.0	14.1	13.9	14.0	6.3	5.9	6.2	6.8	5.7	6.1
<b>25</b>	16.9	16.5	16.7	14.0	13.7	13.9	7.2	5.9	6.3	8.8	6.8	8.1
<b>26</b>	17.1	16.8	16.9	13.9	13.4	13.7	8.0	7.2	7.7	8.7	7.8	8.1
<b>27</b>	17.6	17.1	17.3	13.7	12.3	13.0	7.9	7.6	7.8	7.8	6.9	7.3
<b>28</b>	18.4	17.6	17.9	12.3	11.4	11.7	7.6	7.2	7.4	7.4	6.6	7.0
<b>29</b>	18.4	18.1	18.2	11.6	11.0	11.3	7.2	6.2	6.6	7.4	6.5	6.9
<b>30</b>	18.4	17.9	18.0	12.2	11.5	11.8	6.2	5.4	5.7	6.5	3.7	4.7
<b>31</b>	18.5	18.0	18.2	---	---	---	6.2	5.6	5.8	3.7	3.0	3.4
<b>Month</b>	23.2	15.3	19.5	18.2	11.0	14.8	13.1	5.4	8.8	8.8	1.8	4.7

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
<b>1</b>	3.8	2.9	3.3	6.7	5.5	6.1	15.0	13.3	14.0	19.0	18.1	18.5
<b>2</b>	3.6	3.2	3.4	6.6	5.9	6.1	15.7	14.2	14.8	19.8	18.9	19.4
<b>3</b>	4.5	3.6	4.0	5.9	4.8	5.1	16.3	14.9	15.5	20.4	19.7	20.2
<b>4</b>	---	---	---	6.2	4.8	5.4	17.1	15.6	16.3	20.9	20.3	20.7
<b>5</b>	4.9	4.4	4.5	6.4	5.3	5.9	17.9	16.4	17.0	21.7	20.7	21.2
<b>6</b>	5.1	4.7	5.0	7.0	5.7	6.3	18.6	17.1	17.7	22.4	21.4	21.9
<b>7</b>	4.7	3.9	4.3	7.4	6.0	6.7	18.9	17.5	18.2	22.6	21.9	22.2
<b>8</b>	4.5	3.6	4.1	8.1	6.7	7.4	19.0	17.9	18.4	23.0	22.1	22.5
<b>9</b>	4.2	3.8	4.0	8.8	7.2	8.0	18.7	17.4	18.1	22.5	21.8	22.3
<b>10</b>	4.4	3.7	4.2	9.4	8.2	8.8	17.4	16.3	16.8	22.4	21.4	21.8
<b>11</b>	4.2	3.2	3.7	9.5	9.1	9.3	17.2	15.8	16.5	21.9	20.7	21.3
<b>12</b>	4.1	3.4	3.8	9.9	9.4	9.6	17.7	16.3	16.9	21.6	20.2	20.8
<b>13</b>	3.9	3.1	3.3	11.1	9.8	10.3	---	---	---	21.5	20.6	20.9
<b>14</b>	3.5	2.5	3.0	10.8	10.2	10.5	17.5	16.0	16.7	21.4	20.2	20.8
<b>15</b>	4.2	3.0	3.5	10.7	10.1	10.5	16.3	15.3	15.8	21.8	20.7	21.2
<b>16</b>	4.4	3.6	4.0	10.5	10.0	10.2	17.1	15.7	16.3	22.5	21.4	21.9
<b>17</b>	4.1	3.3	3.8	10.6	9.4	10.0	17.6	16.8	17.1	---	---	---
<b>18</b>	4.5	3.3	3.9	10.6	9.9	10.3	17.2	16.4	16.7	21.9	21.7	21.8
<b>19</b>	5.0	3.8	4.4	11.5	9.8	10.5	16.6	15.8	16.2	21.7	21.3	21.5
<b>20</b>	5.4	4.2	4.8	12.3	10.6	11.3	16.8	15.7	16.2	21.6	20.6	21.0
<b>21</b>	5.9	4.6	5.3	12.3	11.3	11.8	16.5	16.0	16.1	20.6	19.9	20.3
<b>22</b>	6.3	5.4	5.9	12.4	11.9	12.1	16.6	15.8	16.2	21.3	20.1	20.7
<b>23</b>	6.7	6.2	6.4	12.1	11.2	11.6	16.7	16.0	16.4	22.2	21.2	21.7
<b>24</b>	6.6	6.2	6.3	12.3	10.9	11.5	16.8	16.4	16.6	22.5	21.9	22.2
<b>25</b>	6.2	5.5	5.9	12.8	11.6	12.1	17.8	16.8	17.2	22.6	21.9	22.2
<b>26</b>	5.7	4.6	5.2	13.2	12.6	12.8	18.6	17.8	18.2	22.4	21.7	22.0
<b>27</b>	6.1	4.9	5.5	12.7	11.6	12.1	18.5	18.2	18.3	23.2	21.8	22.5
<b>28</b>	6.4	5.3	5.8	12.8	11.5	12.1	18.2	17.6	17.9	23.4	22.4	22.9
<b>29</b>	---	---	---	13.0	12.6	12.8	18.0	17.6	17.7	24.0	23.1	23.5
<b>30</b>	---	---	---	13.5	12.7	13.0	18.4	17.7	18.0	24.6	23.4	23.9
<b>31</b>	---	---	---	14.0	12.5	13.2	---	---	---	25.2	23.7	24.4
<b>Month</b>	---	---	---	14.0	4.8	9.8	---	---	---	---	---	---

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
<b>1</b>	24.9	24.0	24.4	30.5	29.9	30.3	29.5	28.9	29.1	29.4	28.5	29.0
<b>2</b>	25.2	24.2	24.6	30.0	29.4	29.6	29.6	28.8	29.1	29.3	28.6	28.8
<b>3</b>	26.1	24.9	25.4	29.4	28.8	29.1	29.7	28.9	29.2	28.8	28.2	28.5
<b>4</b>	26.4	25.8	26.1	29.6	28.8	29.1	29.6	29.1	29.3	28.8	28.2	28.5
<b>5</b>	26.9	26.1	26.5	30.1	28.7	29.1	29.6	28.9	29.3	28.4	27.8	28.0
<b>6</b>	26.8	26.6	26.7	30.0	29.0	29.4	29.9	29.1	29.5	28.3	27.5	27.8
<b>7</b>	27.2	26.6	26.9	29.9	29.3	29.5	30.1	29.5	29.8	27.9	27.2	27.4
<b>8</b>	26.8	26.3	26.6	29.8	29.1	29.5	30.4	29.8	30.1	27.5	27.2	27.3
<b>9</b>	26.7	26.2	26.5	30.3	29.5	29.9	30.5	30.0	30.2	27.3	27.0	27.2
<b>10</b>	27.2	26.2	26.7	30.3	29.9	30.1	31.0	30.0	30.4	27.2	26.8	26.9
<b>11</b>	26.8	26.4	26.6	30.2	29.5	29.9	31.2	30.4	30.8	26.9	26.3	26.5
<b>12</b>	27.0	26.4	26.7	30.1	29.6	29.8	31.2	30.8	31.0	26.6	25.8	26.1
<b>13</b>	27.7	26.8	27.2	30.1	29.6	29.8	31.3	31.0	31.1	25.9	25.5	25.7
<b>14</b>	28.5	27.5	28.0	29.9	29.5	29.7	31.1	30.6	30.9	26.3	25.4	25.6
<b>15</b>	28.4	27.7	28.0	30.4	29.7	30.0	31.0	30.4	30.7	25.7	25.4	25.6
<b>16</b>	28.4	27.5	28.0	30.4	29.8	30.2	31.2	30.5	30.7	25.8	25.2	25.5
<b>17</b>	29.4	28.2	28.8	30.4	30.1	30.3	31.2	30.6	30.8	26.0	25.3	25.7
<b>18</b>	29.1	28.4	28.9	30.5	29.9	30.3	31.0	30.7	30.9	26.4	25.8	26.1
<b>19</b>	28.4	27.7	28.0	31.0	30.2	30.5	31.0	30.5	30.6	26.4	25.7	26.1
<b>20</b>	28.1	27.3	27.7	31.6	30.4	30.8	30.7	30.4	30.5	26.4	25.7	26.0
<b>21</b>	28.9	27.8	28.3	31.2	30.5	30.8	30.7	30.2	30.5	26.5	25.9	26.1
<b>22</b>	29.5	28.5	29.0	31.0	30.2	30.6	30.5	30.0	30.3	26.2	25.6	25.9
<b>23</b>	29.7	29.1	29.4	31.5	30.7	30.9	30.1	29.7	29.9	26.4	25.7	26.0
<b>24</b>	30.3	29.2	29.7	31.6	30.7	31.1	29.7	29.2	29.5	26.4	26.1	26.2
<b>25</b>	31.0	30.2	30.5	32.2	31.3	31.7	29.3	28.8	29.1	26.6	25.8	26.3
<b>26</b>	31.0	30.4	30.7	32.2	31.7	32.0	29.4	29.0	29.2	26.7	26.2	26.5
<b>27</b>	31.5	31.0	31.2	32.0	31.4	31.6	29.4	29.0	29.2	26.6	26.1	26.4
<b>28</b>	31.3	30.8	31.1	31.6	31.0	31.3	29.1	28.7	28.9	26.2	25.9	26.1
<b>29</b>	31.4	31.2	31.3	31.2	30.8	30.9	29.0	28.5	28.6	25.9	24.9	25.4
<b>30</b>	31.3	30.5	30.8	31.0	30.5	30.8	28.8	28.1	28.4	24.9	23.1	24.2
<b>31</b>	---	---	---	30.5	29.5	30.0	29.3	28.3	28.7	---	---	---
<b>Month</b>	31.5	24.0	28.0	32.2	28.7	30.3	31.3	28.1	29.9	29.4	23.1	26.6

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	6.9	6.6	6.8	8.0	7.2	7.7	6.3	5.9	6.1	9.9	9.5	9.7
2	6.9	6.6	6.7	7.8	7.3	7.5	6.6	6.2	6.3	10.2	9.5	9.8
3	6.8	6.6	6.7	7.7	7.3	7.5	6.8	5.8	6.4	10.8	10.1	10.4
4	7.0	6.7	6.9	8.0	7.2	7.6	5.8	5.6	5.7	11.1	10.6	10.8
5	6.9	6.1	6.8	8.0	7.3	7.8	6.2	5.7	6.1	11.3	10.8	11.0
6	7.0	6.3	6.8	8.3	8.0	8.1	6.5	6.1	6.2	11.6	11.1	11.3
7	6.9	6.1	6.7	8.8	8.3	8.5	6.7	6.4	6.5	11.8	11.3	11.5
8	7.0	6.8	6.9	8.8	8.5	8.7	6.9	6.6	6.7	11.8	11.3	11.5
9	7.0	6.6	6.9	8.9	8.7	8.8	7.3	6.8	7.1	12.0	11.4	11.7
10	7.1	6.7	6.9	8.9	8.6	8.8	6.8	6.4	6.5	12.2	11.7	11.9
11	7.1	6.8	7.0	9.0	8.6	8.9	7.2	6.5	6.8	12.4	11.9	12.1
12	7.1	6.9	7.0	9.4	8.8	9.2	7.7	7.2	7.4	12.4	11.9	12.1
13	7.2	6.9	7.1	8.8	7.1	7.6	7.6	7.4	7.5	12.5	11.9	12.2
14	7.2	6.9	7.1	7.3	6.8	7.1	7.6	7.2	7.4	12.6	12.0	12.3
15	7.2	6.8	7.0	6.8	6.5	6.6	7.4	7.2	7.3	12.5	11.9	12.2
16	7.3	6.9	7.0	6.7	6.6	6.6	7.6	7.2	7.4	12.5	11.8	12.1
17	7.4	7.0	7.2	6.6	6.2	6.4	8.1	7.5	7.7	12.1	11.5	11.8
18	7.6	7.0	7.4	6.2	5.6	6.0	8.2	7.9	8.0	11.5	10.8	11.1
19	7.9	7.4	7.7	5.7	5.3	5.6	8.3	8.1	8.2	11.3	10.5	10.9
20	8.2	7.3	7.9	5.4	5.2	5.3	8.7	8.2	8.4	11.2	10.3	10.8
21	8.3	7.9	8.1	5.7	5.4	5.6	9.1	8.6	8.8	10.9	10.2	10.5
22	8.5	8.2	8.4	5.8	5.3	5.7	9.3	8.8	9.0	10.5	10.0	10.2
23	8.8	8.4	8.6	5.8	5.4	5.7	9.4	9.0	9.2	10.8	9.8	10.2
24	8.9	8.3	8.7	5.4	5.2	5.3	9.6	9.1	9.3	11.0	10.3	10.6
25	8.8	8.4	8.7	5.3	5.1	5.2	9.7	9.2	9.4	10.6	9.9	10.3
26	8.7	8.3	8.5	5.4	5.2	5.3	9.6	8.9	9.2	10.1	9.3	9.7
27	8.3	8.1	8.2	5.8	5.2	5.6	9.1	8.6	8.8	10.5	9.6	10
28	8.2	7.8	8.0	6.2	5.8	6.0	9.3	8.7	8.9	10.5	9.6	10.1
29	8.0	7.4	7.8	6.3	6.1	6.2	9.6	8.9	9.2	10.5	9.6	10.0
30	7.8	7.4	7.7	6.2	5.9	6.1	10.0	9.3	9.6	10.5	10.1	10.3
31	7.7	7.2	7.5	---	---	---	10.1	9.7	9.9	11.4	10.4	10.9
Month	8.9	6.1	7.4	9.4	5.1	6.9	10.1	5.6	7.8	12.6	9.3	11.0

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	11.9	11.1	11.4	12.0	11.0	11.5	8.7	7.7	8.1	7.6	7.4	7.5
2	11.8	11.3	11.5	11.6	10.9	11.2	8.7	7.5	8.0	7.6	7.4	7.5
3	11.9	11.1	11.5	11.0	10.5	10.7	8.3	7.2	7.7	7.5	7.0	7.3
4	---	---	---	11.6	10.5	11.0	8.3	7.1	7.6	7.1	6.6	6.9
5	12.2	11.5	11.7	11.8	10.8	11.3	8.1	6.8	7.4	6.8	6.4	6.6
6	11.6	11.0	11.2	11.9	10.9	11.4	7.9	6.4	7.1	6.7	6.3	6.5
7	11.8	10.9	11.3	11.9	10.9	11.4	7.9	6.2	7.0	6.9	6.4	6.7
8	12.2	11.3	11.7	11.8	10.8	11.3	7.7	6.2	6.9	7.0	6.7	6.9
9	11.9	11.4	11.6	11.7	10.6	11.2	7.0	5.7	6.1	7.3	6.8	7.0
10	12.0	11.2	11.6	11.3	10.4	10.9	7.1	5.2	6.0	7.4	6.9	7.1
11	12.4	11.6	11.9	10.8	9.9	10.3	7.8	6.0	6.8	7.5	6.9	7.2
12	12.5	11.7	12.1	10.1	9.4	9.7	7.8	6.0	6.9	7.6	7.0	7.3
13	12.4	11.8	12.1	10.2	8.8	9.4	---	---	---	7.6	7.2	7.4
14	12.9	11.9	12.3	10.1	9.0	9.6	7.0	5.8	6.4	7.7	7.3	7.5
15	12.9	12.1	12.5	9.9	8.9	9.4	7.9	6.0	6.8	7.6	7.2	7.4
16	12.9	11.9	12.4	9.5	8.6	9.1	8.1	6.5	7.2	7.6	7.2	7.4
17	12.9	12.1	12.5	10.1	8.6	9.2	7.5	6.4	6.9	---	---	---
18	13.0	12.0	12.5	10.0	9.0	9.5	7.8	6.3	6.9	7.2	6.9	7.0
19	12.9	12.0	12.4	10.3	9.0	9.6	7.7	6.4	7.0	6.9	6.6	6.7
20	12.9	11.9	12.4	10.2	9.1	9.6	7.7	6.5	7.0	6.8	6.6	6.7
21	12.8	11.8	12.3	10.0	9.0	9.4	7.1	6.2	6.5	6.8	6.6	6.8
22	12.4	11.5	11.9	9.6	8.9	9.2	6.9	5.9	6.3	6.7	6.4	6.5
23	11.7	10.8	11.2	10.0	8.8	9.3	6.8	6.2	6.5	6.7	6.4	6.5
24	11.3	10.7	11.0	10.2	9.2	9.6	6.8	6.3	6.6	6.9	6.5	6.6
25	11.5	10.6	11.0	10.2	9.2	9.6	6.7	6.2	6.5	7.0	6.6	6.8
26	11.9	10.9	11.4	9.8	9.0	9.4	6.8	6.3	6.5	7.1	6.6	6.9
27	12.0	11.1	11.6	9.7	8.6	9.1	6.6	6.2	6.5	6.7	6.3	6.6
28	12.0	11.0	11.5	9.8	8.8	9.3	7.0	6.5	6.8	6.7	6.3	6.5
29	---	---	---	9.5	8.6	9.0	7.3	7.0	7.1	6.8	6.4	6.6
30	---	---	---	8.9	7.9	8.4	7.5	7.2	7.4	6.8	6.4	6.7
31	---	---	---	8.9	8.0	8.4	---	---	---	6.8	6.4	6.6
Month	---	---	---	12.0	7.9	9.9	---	---	---	---	---	---

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	6.8	6.2	6.5	6.1	5.8	5.9	6.8	6.3	6.7	7.0	6.4	6.7
2	6.7	6.4	6.5	6.3	5.7	6.0	6.7	6.1	6.5	7.0	6.6	6.8
3	6.7	6.3	6.5	6.5	5.4	6.1	6.7	5.7	6.2	6.9	6.6	6.8
4	6.8	6.3	6.5	6.5	5.8	6.1	6.6	5.7	6.3	6.8	6.3	6.5
5	6.7	6.4	6.5	6.6	5.7	6.2	6.7	6.1	6.6	6.9	6.6	6.7
6	6.5	6.2	6.4	6.5	5.9	6.2	7.1	6.5	6.8	7.1	6.4	6.8
7	6.4	6.2	6.3	6.6	5.7	6.2	7.1	6.7	6.9	7.1	6.0	6.8
8	6.4	6.2	6.3	6.7	6.2	6.5	7.1	6.6	6.8	6.8	6.4	6.7
9	6.5	6.2	6.3	6.8	6.4	6.6	7.0	6.2	6.6	7.1	6.7	6.8
10	6.4	6.3	6.3	6.4	5.9	6.3	7.1	6.4	6.6	7.2	6.9	7.1
11	6.6	6.3	6.5	6.6	6.0	6.3	6.7	6.1	6.4	7.3	6.9	7.1
12	6.6	6.2	6.5	6.6	5.8	6.2	6.8	6.5	6.6	7.0	6.7	6.8
13	6.5	6.3	6.4	6.5	5.9	6.2	7.0	6.5	6.8	6.9	6.6	6.8
14	6.5	6.1	6.3	6.5	6.1	6.3	6.9	6.6	6.8	7.1	6.5	6.8
15	6.5	5.8	6.3	6.7	6.0	6.3	6.8	6.4	6.6	7.2	6.9	7.0
16	6.5	6.2	6.3	6.7	6.2	6.4	6.8	6.3	6.5	7.5	7.0	7.2
17	6.6	6.2	6.3	6.9	6.5	6.7	6.8	6.2	6.4	7.5	7.2	7.3
18	6.6	6.2	6.3	7.0	6.4	6.7	6.6	6.2	6.4	7.3	7.1	7.2
19	6.5	5.9	6.2	7.2	6.5	6.7	6.6	6.3	6.5	7.3	6.9	7.1
20	6.0	5.8	6.0	7.3	6.3	6.7	6.8	6.4	6.6	7.2	6.7	7.1
21	6.0	5.7	5.8	6.8	6.1	6.5	6.9	6.2	6.5	7.6	6.8	7.1
22	6.1	5.7	5.9	7.1	6.1	6.6	6.8	6.3	6.5	7.3	6.8	7.2
23	6.1	5.6	5.9	7.2	6.4	6.8	6.6	6.2	6.4	7.3	7.0	7.2
24	6.3	5.6	6.0	6.9	6.4	6.7	6.9	6.2	6.5	7.4	7.0	7.2
25	6.2	5.8	6.0	7.1	6.3	6.6	6.7	6.0	6.4	7.4	7.0	7.2
26	6.0	5.4	5.8	7.1	6.3	6.7	6.7	6.3	6.5	7.3	7.0	7.1
27	6.0	5.3	5.7	6.7	6.2	6.4	6.8	6.3	6.6	7.1	6.7	6.9
28	6.2	5.7	5.9	6.7	6.0	6.3	6.8	6.1	6.5	6.9	6.4	6.7
29	6.2	5.8	6.0	6.8	6.0	6.3	6.9	6.3	6.6	7.4	6.6	6.9
30	6.1	5.7	5.9	6.9	6.3	6.6	7.0	6.4	6.7	7.6	6.4	7.1
31	---	---	---	7.0	6.5	6.8	7.1	6.4	6.8	---	---	---
Month	6.8	5.3	6.2	7.3	5.4	6.4	7.1	5.7	6.6	7.6	6.0	7.0



## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	81	77	79	84	77	82	58	55	56	80	77	78
2	80	77	78	82	76	78	61	56	58	81	75	78
3	80	76	78	80	76	78	64	55	60	82	77	79
4	81	77	80	84	75	79	55	52	54	84	79	81
5	80	70	78	83	76	81	58	53	56	85	80	82
6	80	72	78	85	82	83	58	55	56	86	82	84
7	79	70	76	88	84	86	59	56	58	88	83	85
8	80	77	78	88	84	87	61	58	59	89	85	87
9	80	75	78	89	86	88	67	60	65	89	84	86
10	81	77	79	89	86	87	63	59	60	90	85	87
11	81	78	80	90	86	89	63	58	60	91	86	88
12	81	78	80	94	87	91	65	61	63	92	87	89
13	82	78	80	87	70	75	66	64	65	93	87	90
14	81	77	80	72	66	70	67	63	65	94	88	91
15	80	75	78	66	63	65	66	64	65	94	88	91
16	80	76	77	66	64	65	67	63	65	96	89	92
17	79	75	78	65	61	63	69	64	66	95	90	92
18	80	74	79	61	56	59	69	66	68	94	87	90
19	82	77	80	57	53	56	70	68	69	92	84	88
20	85	75	81	54	52	53	72	67	69	92	83	88
21	84	80	82	56	53	55	74	69	71	89	83	86
22	86	82	84	56	51	55	76	71	73	86	81	83
23	89	84	86	56	53	55	76	72	74	87	79	82
24	91	85	88	53	51	52	78	73	75	90	82	86
25	91	87	89	52	49	50	80	74	76	90	85	87
26	90	86	88	52	50	51	80	75	78	86	79	83
27	87	84	86	55	49	53	77	72	74	88	79	83
28	86	82	84	57	54	56	78	72	75	88	78	83
29	85	79	83	58	56	57	78	72	75	86	79	83
30	83	78	81	57	55	56	80	74	76	84	78	80
31	82	77	80	---	---	---	82	77	79	86	78	82
Month	91	70	81	94	49	68	82	52	67	96	75	85

02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	91	82	86	98	87	93	86	74	79	82	79	80
2	89	85	87	95	88	90	88	73	79	84	81	82
3	92	84	88	88	82	85	85	71	78	82	78	80
4	---	---	---	94	82	87	86	72	78	80	74	77
5	95	89	91	96	85	91	86	70	77	77	73	75
6	91	86	88	98	87	92	85	67	75	77	71	75
7	91	83	87	99	88	93	85	65	74	80	74	77
8	95	86	90	100	89	94	83	66	74	82	77	80
9	91	87	89	101	88	94	75	60	65	85	78	81
10	93	86	89	99	88	94	74	53	62	85	78	82
11	95	87	90	95	86	90	81	61	69	85	79	81
12	96	88	92	89	82	85	82	61	71	87	78	82
13	93	88	91	93	78	85	---	---	---	85	81	83
14	97	87	92	91	80	86	73	60	66	87	81	84
15	99	90	95	89	79	84	81	60	69	87	82	84
16	100	90	95	85	77	81	84	66	74	88	82	84
17	99	91	95	91	75	82	79	66	72	---	---	---
18	101	90	95	90	80	85	81	65	72	82	79	80
19	101	91	96	95	80	86	79	65	71	79	75	76
20	102	91	97	96	82	88	80	66	72	77	74	75
21	103	92	97	94	82	88	73	63	66	76	73	75
22	99	92	95	90	83	86	71	60	64	75	71	73
23	96	87	91	93	80	86	70	63	66	77	72	75
24	92	87	89	96	83	89	70	65	68	80	74	76
25	93	85	89	97	85	90	71	64	68	81	76	78
26	95	85	90	93	85	89	72	67	70	82	76	79
27	97	87	92	92	79	85	70	66	69	78	74	76
28	98	87	92	93	81	87	74	68	72	79	73	76
29	---	---	---	90	82	85	77	74	75	81	75	78
30	---	---	---	86	75	80	80	76	78	82	75	79
31	---	---	---	87	75	80	---	---	---	83	76	79
Month	---	---	---	101	75	87	---	---	---	---	---	---

## 02081094 ROANOKE RIVER AT JAMESVILLE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	82	74	78	81	77	79	90	82	87	92	83	88
2	82	77	79	83	75	79	88	80	85	91	86	89
3	83	76	79	85	70	79	88	74	82	89	85	87
4	85	78	81	86	76	80	87	75	83	88	81	85
5	84	79	82	87	75	81	88	80	86	89	84	86
6	81	78	80	86	77	81	94	85	89	91	82	87
7	81	78	80	87	75	82	94	88	92	91	76	86
8	80	77	79	89	81	85	95	87	90	86	81	85
9	81	77	79	91	84	87	94	82	88	90	84	87
10	81	78	80	85	79	84	96	86	88	91	87	89
11	82	79	81	88	79	83	91	82	86	92	86	88
12	82	78	81	88	77	82	92	88	90	88	83	85
13	83	79	80	86	78	82	95	88	92	85	81	83
14	83	78	81	86	80	83	93	89	91	88	80	84
15	84	74	81	90	79	84	92	86	89	89	84	86
16	84	79	81	90	82	86	92	85	87	92	85	89
17	87	80	82	92	86	89	92	83	87	92	88	90
18	86	80	83	94	85	90	89	83	87	91	88	89
19	84	75	80	97	87	90	89	84	87	91	85	88
20	77	74	76	100	85	90	91	86	89	90	83	87
21	78	73	75	92	82	88	93	83	87	95	84	88
22	80	74	77	96	81	88	91	84	87	91	84	88
23	81	73	77	98	86	92	88	82	85	91	87	89
24	84	73	79	94	87	91	91	82	86	92	87	90
25	84	77	81	98	86	91	88	78	83	93	87	90
26	81	72	78	98	87	92	88	82	85	91	87	89
27	82	72	77	92	84	88	89	83	86	89	83	86
28	84	77	80	91	81	85	89	79	84	86	79	83
29	84	79	81	92	81	86	90	82	86	90	81	85
30	83	77	80	93	85	89	91	82	87	91	75	85
31	---	---	---	93	86	90	93	83	88	---	---	---
Month	87	72	80	100	70	86	96	74	87	95	75	87