

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1999 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1999 to current year.

pH: April 1999 to September 2002.

WATER TEMPERATURE: April 1999 to current year.

DISSOLVED OXYGEN: April 1999 to September 2002.

DISSOLVED OXYGEN, PERCENT SATURATION: April 1999 to September 2002.

INSTRUMENTATION.-- Water-quality monitor with radio telemetry.

REMARKS.--Station operated in cooperation with Mecklenburg County Department of Environmental Protection to characterize water-quality conditions in Briar Creek basin. Dissolved oxygen, percent saturation, computed using barometric pressure of 740 mm Hg. Water-quality data deleted during periods of zero flow, Oct. 5, 16, Nov. 6-10, June 21-26, 28-30, July 1-3, 5-13, 21-24, 27-31, Aug. 1-15, 19-24, 30-31, Sept. 8-14, 23-25.

EXTREMES FOR PERIOD OF DAILY RECORD.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	1600, January 4, 2002	15, August 2, 2002
pH, standard units	9.3, August 8, 1999	5.7, April 27, 1999, August 2, 2002
WATER TEMPERATURE, °C	35.2, July 21, 2002	0.2, January 28, 2000, January 3-4, 2001
DISSOLVED OXYGEN, mg/L	17.3, February 23, 2002	0.1, November 15, 2001
DISSOLVED OXYGEN, PERCENT SATURATION,%	200, April 25, 1999	0, November 15, 2001

EXTREMES FOR CURRENT YEAR.--Extremes listed below may have been exceeded during periods of missing record.

CONSTITUENT	MAXIMUM RECORDED	MINIMUM RECORDED
SPECIFIC CONDUCTANCE, microsiemens	1600, January 4	15, August 2
pH, standard units	9.1, February 23, 26	5.7, August 2
WATER TEMPERATURE, °C	35.2, July 21	0.4, January 3
DISSOLVED OXYGEN, mg/L	17.3, February 23	0.1, November 15
DISSOLVED OXYGEN, PERCENT SATURATION,%	163, February 21	0, November 15

SANTEE RIVER BASIN

0214642825 BRIAR CREEK NEAR CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	109	101	104	141	133	136	146	141	143	137	135	136
2	113	109	111	144	87	120	147	142	144	135	131	134
3	114	112	113	107	93	99	142	139	140	1190	124	272
4	115	113	114	119	107	115	140	136	137	1600	603	834
5	---	---	---	132	119	125	138	135	137	1090	702	940
6	118	66	82	---	---	---	139	136	138	702	129	353
7	88	76	83	---	---	---	140	138	139	214	185	206
8	94	88	91	---	---	---	141	139	140	215	204	210
9	99	94	96	---	---	---	142	140	141	210	203	205
10	106	99	102	150	143	148	140	41	112	214	210	212
11	113	106	108	147	144	146	89	47	73	210	192	200
12	118	113	115	149	146	147	109	89	100	192	154	166
13	124	118	120	154	149	151	120	109	114	335	165	230
14	137	104	123	165	154	159	127	120	124	359	239	300
15	116	102	108	168	162	165	131	126	128	239	208	225
16	---	---	---	184	168	171	131	128	129	208	187	197
17	121	118	120	184	174	181	146	74	127	187	177	182
18	123	121	122	177	173	175	124	84	105	177	170	174
19	126	123	124	175	173	174	134	124	131	170	55	125
20	132	126	129	175	174	174	132	130	131	131	67	106
21	137	132	134	174	173	174	131	128	130	138	91	115
22	138	136	137	174	172	173	131	128	129	138	110	130
23	140	138	139	174	157	173	132	129	130	139	42	83
24	147	139	142	167	109	119	137	123	129	139	105	125
25	147	60	92	132	116	124	140	133	137	128	77	103
26	113	92	101	138	132	136	133	125	128	143	128	137
27	119	111	115	140	138	139	134	131	132	148	143	147
28	120	115	117	141	140	140	136	132	134	156	148	153
29	126	117	121	144	140	142	137	133	134	159	155	157
30	130	126	127	144	142	143	135	133	134	155	151	154
31	134	129	131	---	---	---	136	133	134	154	151	153
MONTH	---	---	---	---	---	---	147	41	129	1600	42	221
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	156	148	152	163	152	159	130	61	97	156	148	152
2	153	148	151	160	52	120	152	130	141	158	139	154
3	154	152	153	115	59	89	159	152	155	159	144	152
4	155	152	154	147	115	132	162	154	159	153	64	95
5	154	151	152	150	137	147	162	154	159	127	87	108
6	155	99	148	153	150	152	162	154	159	143	97	134
7	104	65	88	156	151	154	161	156	159	150	143	145
8	130	90	115	156	152	154	164	156	160	153	144	149
9	144	128	138	159	151	156	164	156	160	165	151	156
10	270	124	144	163	152	157	163	153	158	156	125	148
11	145	138	142	167	155	159	164	153	160	150	96	129
12	150	145	148	173	76	124	163	151	159	144	130	135
13	153	148	151	124	78	104	160	152	156	147	71	129
14	155	151	153	150	124	138	164	158	161	124	79	103
15	156	152	153	157	150	152	168	153	162	141	123	132
16	159	154	156	164	156	160	166	156	162	149	125	144
17	161	153	157	168	70	117	169	152	164	150	143	147
18	166	154	160	144	104	129	171	158	164	148	87	110
19	170	159	165	155	144	150	171	160	167	126	101	113
20	165	156	161	158	152	156	170	158	165	---	---	---
21	171	161	166	154	76	106	172	165	168	---	---	---
22	173	163	166	150	123	140	173	161	167	144	139	141
23	182	163	174	155	150	152	168	144	162	146	141	144
24	175	167	171	158	155	156	163	151	160	148	143	146
25	174	166	171	160	156	158	165	155	162	151	144	147
26	173	164	169	164	150	158	163	151	157	152	144	148
27	172	161	168	161	150	155	156	150	153	152	146	149
28	180	158	169	159	150	155	157	150	154	153	147	149
29	---	---	---	160	153	157	157	135	154	154	147	150
30	---	---	---	161	124	142	157	150	154	158	50	124
31	---	---	---	127	61	112	---	---	---	118	71	96
MONTH	270	65	153	173	52	142	173	61	157	---	---	---

SANTEE RIVER BASIN

0214642825 BRIAR CREEK NEAR CHARLOTTE, NC--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN									
1	136	108	127	---	---	---	55	50	53	---	---	---
2	143	123	134	---	---	---	77	15	51	---	---	---
3	146	140	143	---	---	---	---	---	---	93	89	92
4	148	125	143	101	87	93	---	---	---	90	85	88
5	149	124	146	---	---	---	---	---	---	87	84	86
6	154	109	149	---	---	---	---	---	---	85	80	82
7	114	97	104	---	---	---	---	---	---	80	76	78
8	126	114	120	---	---	---	---	---	---	---	---	---
9	136	126	131	---	---	---	---	---	---	---	---	---
10	142	136	138	---	---	---	---	---	---	---	---	---
11	144	138	142	---	---	---	---	---	---	---	---	---
12	146	140	143	---	---	---	---	---	---	---	---	---
13	149	143	145	---	---	---	---	---	---	---	---	---
14	151	143	148	83	50	67	---	---	---	---	---	---
15	155	144	149	92	80	83	---	---	---	81	43	53
16	153	145	148	92	84	88	85	26	74	80	44	63
17	151	146	149	98	83	88	72	27	60	96	79	86
18	154	149	151	93	81	87	---	---	---	100	94	97
19	170	152	166	---	---	---	---	---	---	100	92	96
20	---	---	---	---	---	---	---	---	---	101	98	100
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	77	47	68	100	62	71	---	---	---
26	---	---	---	83	67	77	90	80	85	---	---	---
27	123	114	118	84	79	82	136	80	89	87	73	79
28	---	---	---	84	72	78	---	---	---	101	80	92
29	---	---	---	76	64	71	---	---	---	---	---	---
30	---	---	---	68	56	62	---	---	---	---	---	---
31	---	---	---	59	52	56	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN									
1	7.1	6.9	7.0	7.0	6.8	6.9	7.2	7.0	7.1	7.5	7.3	7.4
2	7.3	7.0	7.1	7.0	6.8	6.9	7.2	7.1	7.2	7.5	7.3	7.4
3	7.3	7.2	7.2	6.8	6.7	6.7	7.3	7.1	7.2	7.5	7.3	7.4
4	7.4	7.2	7.3	6.8	6.7	6.8	7.3	7.2	7.2	7.3	7.1	7.2
5	---	---	---	6.8	6.8	6.8	7.3	7.2	7.2	7.3	7.1	7.2
6	7.1	6.7	6.8	---	---	---	7.3	7.1	7.2	7.3	6.9	7.1
7	6.8	6.7	6.7	---	---	---	7.2	7.0	7.1	7.1	7.0	7.1
8	6.8	6.7	6.8	---	---	---	7.2	7.0	7.1	7.2	7.1	7.2
9	6.9	6.8	6.8	---	---	---	7.2	7.0	7.1	7.3	7.2	7.2
10	7.0	6.9	6.9	6.5	6.4	6.5	7.2	6.7	7.0	7.3	7.2	7.2
11	7.1	6.9	7.0	6.6	6.4	6.5	6.9	6.8	6.8	7.4	7.2	7.3
12	7.1	7.0	7.0	6.5	6.5	6.5	7.0	6.9	7.0	7.4	7.2	7.3
13	7.1	7.0	7.0	6.5	6.3	6.4	7.1	6.9	7.0	7.3	7.2	7.2
14	7.1	6.9	7.0	6.4	6.3	6.3	7.0	6.9	6.9	7.3	7.2	7.2
15	6.9	6.8	6.8	6.6	6.3	6.5	7.0	6.9	7.0	7.3	7.2	7.3
16	---	---	---	6.8	6.6	6.7	7.1	7.0	7.0	7.5	7.2	7.3
17	7.1	6.9	7.0	6.8	6.7	6.7	7.1	6.8	7.0	7.5	7.3	7.4
18	7.1	7.0	7.0	6.8	6.7	6.8	6.9	6.7	6.8	7.5	7.2	7.3
19	7.1	7.0	7.0	6.9	6.8	6.8	7.1	6.9	7.0	7.4	6.7	7.1
20	7.0	7.0	7.0	6.9	6.8	6.9	7.2	7.0	7.1	7.0	6.8	6.9
21	7.0	7.0	7.0	7.0	6.8	6.9	7.2	7.1	7.1	7.0	6.9	7.0
22	7.0	7.0	7.0	7.0	6.9	7.0	7.2	7.1	7.2	7.0	6.9	7.0
23	7.1	7.0	7.0	7.1	7.0	7.0	7.2	7.0	7.1	7.1	6.7	6.9
24	7.0	6.9	7.0	7.1	6.7	6.8	7.2	7.0	7.1	7.1	7.0	7.0
25	7.1	6.7	6.8	6.9	6.8	6.8	7.2	7.1	7.1	7.0	6.9	7.0
26	6.9	6.8	6.8	6.9	6.8	6.9	7.2	7.0	7.0	7.0	6.9	6.9
27	6.9	6.8	6.8	7.0	6.9	6.9	7.2	7.0	7.1	7.0	6.9	7.0
28	6.9	6.8	6.9	7.1	6.9	7.0	7.2	7.1	7.2	7.0	6.9	6.9
29	6.9	6.6	6.8	7.1	7.0	7.1	7.2	7.1	7.2	7.0	6.9	6.9
30	6.8	6.6	6.7	7.1	7.0	7.1	7.2	7.0	7.1	7.1	6.9	7.0
31	6.9	6.7	6.8	---	---	---	7.5	7.1	7.3	7.2	7.0	7.1
MONTH	---	---	---	---	---	---	7.5	6.7	7.1	7.5	6.7	7.1

SANTEE RIVER BASIN

0214642825 BRIAR CREEK NEAR CHARLOTTE, NC--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.3	13.7	16.6	15.1	10.2	12.6	18.6	14.5	15.9	6.5	2.7	4.5
2	21.2	14.5	17.6	16.5	12.3	14.3	15.9	11.9	13.7	3.6	1.3	2.2
3	22.2	15.6	18.7	19.5	14.9	16.7	14.3	9.5	11.6	1.4	0.4	0.9
4	22.4	16.4	19.2	18.5	13.9	15.9	13.6	7.3	10.3	3.9	0.5	1.9
5	---	---	---	16.3	11.9	13.8	14.6	7.8	10.9	5.1	0.6	2.5
6	19.7	16.3	18.6	---	---	---	15.9	9.7	12.6	4.0	2.0	2.9
7	18.1	13.8	15.7	---	---	---	16.8	11.4	13.8	5.9	2.5	4.0
8	16.6	11.9	14.3	---	---	---	17.1	13.0	14.9	6.1	1.6	3.6
9	16.7	11.3	13.9	---	---	---	14.8	12.1	13.5	7.2	1.6	4.1
10	17.0	12.0	14.4	16.5	8.9	12.4	12.1	8.6	10.1	10.2	4.2	6.8
11	18.2	13.6	15.7	15.7	9.3	12.2	11.5	8.7	10.1	12.3	7.8	9.4
12	18.9	15.9	17.3	14.3	9.2	11.3	11.7	10.7	11.2	7.8	4.6	6.5
13	20.6	16.1	18.3	12.9	7.7	10	13.1	11.5	12.2	9.6	4.9	6.8
14	20.3	17.9	18.6	12.5	7.8	9.8	15.8	12.8	14.2	6.2	3.4	4.9
15	20.6	16.1	18.2	15.2	8.7	11.1	15.2	11.1	13.1	9.9	3.9	6.4
16	---	---	---	16.4	7.9	11.6	12.7	8.7	10.4	7.4	3.5	5.5
17	17.7	12.5	14.9	16.8	9.7	12.7	13.5	9.7	11.4	8.8	3.2	5.8
18	16.9	11.3	14.0	15.8	10.0	12.4	14.9	10.5	12.7	11.3	6.7	8.3
19	17.8	11.1	14.2	16.7	10.6	13.2	12.2	8.0	9.9	7.8	4.7	5.9
20	19.3	12.9	15.7	14.2	11.1	12.6	11.2	6.8	8.7	8.0	4.2	5.9
21	20.4	13.9	16.8	12.9	8.1	10.2	9.5	4.2	6.6	7.9	5.6	6.5
22	21.8	15.9	18.5	12.2	6.5	9.4	8.8	3.6	5.9	9.3	3.8	6.5
23	23.2	17.4	19.8	12.8	7.7	10.2	10.1	4.5	6.9	8.6	6.5	7.5
24	22.0	17.8	19.7	14.6	11.0	13.2	12.4	7.2	10.0	11.4	8.6	10.2
25	20.7	16.7	18.9	18.0	14.1	16.0	8.1	4.2	6.3	11.1	7.4	10.1
26	18.1	13.6	15.5	19.7	14.4	16.3	8.7	4.1	5.9	10.1	4.8	7.3
27	13.6	10.4	12.0	18.8	13.8	16.0	6.6	1.8	4.1	11.1	4.9	7.9
28	14.1	8.2	10.8	18.8	14.0	16.2	7.4	2.4	4.7	13.3	8.6	10.4
29	14.7	7.9	10.9	18.8	14.4	16.4	10.0	5.0	6.9	14.9	8.7	11.6
30	14.5	8.4	11.2	17.1	16.2	16.7	7.9	3.9	5.7	17.1	10.9	13.7
31	14.6	8.9	11.7	---	---	---	5.8	3.2	4.6	16.9	12.6	14.5
MONTH	---	---	---	---	---	---	18.6	1.8	10.0	17.1	0.4	6.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	17.1	13.9	15.6	10.7	2.4	6.5	21.2	13.1	16.2	23.2	17.2	20.0
2	13.9	8.4	11.3	8.6	5.9	7.2	22.2	12.0	16.6	25.6	19.4	21.9
3	8.4	6.6	7.6	10.8	8.0	9.2	24.6	15.1	18.9	22.4	18.7	20.7
4	10.3	5.2	7.4	10.7	5.5	7.6	19.8	12.3	15.5	18.7	14.4	15.9
5	7.4	2.5	5.1	10.8	2.5	6.4	19.7	10.2	14.2	22.9	13.7	17.1
6	6.6	4.7	5.7	12.8	4.3	8.2	18.6	10.2	13.7	24.6	14.8	19.0
7	7.4	5.5	6.4	14.9	6.2	10.1	18.9	8.8	13.2	27.0	17.4	21.6
8	11.1	5.2	7.9	16.6	7.6	11.8	20.4	11.2	15.3	27.2	19.9	23.3
9	11.9	5.1	8.3	17.0	11.8	14.1	18.2	14.8	16.6	28.0	21.2	24.1
10	10.3	8.3	9.3	17.0	10.9	13.6	22.6	15.8	18.0	24.9	20.7	22.7
11	12.5	7.6	9.7	14.8	7.2	10.7	23.7	15.6	18.9	22.2	19.1	20.6
12	11.4	4.8	7.9	10.8	9.6	10.2	17.9	16.0	16.5	26.5	18.6	21.9
13	11.1	5.8	8.3	11.9	10.4	11.0	20.4	15.6	17.8	25.8	20.4	22.4
14	11.5	5.5	8.1	18.4	10.0	13.7	22.8	15.7	19.1	24.2	17.0	19.8
15	12.2	5.5	8.6	21.0	12.8	16.3	25.0	17.6	20.7	24.0	14.8	18.9
16	14.2	8.0	10.5	20.3	14.2	17.1	27.9	17.9	22.2	25.2	15.9	20.1
17	11.1	6.8	8.8	17.2	12.0	14.6	28.2	19.2	23.0	26.6	18.2	21.8
18	10.9	4.0	7.1	14.7	10.7	12.3	28.5	19.4	23.1	22.2	16.2	19.9
19	11.1	4.2	7.5	15.0	11.6	13.2	27.8	20.1	23.5	20.8	13.7	16.5
20	12.2	8.4	10.4	15.8	12.4	13.9	27.3	20.5	23.2	---	---	---
21	16.6	10.8	13.0	15.2	12.3	13.7	28.5	20.3	23.8	---	---	---
22	12.8	8.5	10.9	15.3	8.3	11.3	25.4	19.6	22.4	20.3	11.9	15.4
23	11.3	7.7	9.4	15.4	6.0	10.2	23.9	16.3	19.5	22.0	12.2	16.5
24	13.1	5.5	8.9	17.5	7.5	12.0	21.6	14.5	17.9	24.6	14.3	18.8
25	13.8	5.7	9.5	20.6	10.8	15.2	24.4	17.1	20.0	26.0	17.1	20.9
26	14.8	8.2	10.9	19.7	14.3	16.7	19.0	14.8	16.9	26.8	18.4	22.2
27	11.0	5.5	8.5	21.5	13.6	16.7	21.7	14.9	17.6	27.3	19.9	22.9
28	9.6	3.1	5.9	17.8	9.8	13.2	23.4	17.7	20.1	27.1	19.3	22.8
29	---	---	---	20.1	10.7	14.6	26.6	18.9	21.8	27.1	20.3	23.4
30	---	---	---	17.3	14.3	15.7	23.5	15.9	19.2	25.6	21.4	22.9
31	---	---	---	17.8	14.4	15.9	---	---	---	28.4	21.1	24.0
MONTH	17.1	2.5	8.9	21.5	2.4	12.4	28.5	8.8	18.8	---	---	---

