



Water-Data Report 2007

0208524845 LITTLE RIVER RESERVOIR AT DAM NEAR BAHAMA, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 36°06'54", long 78°52'09" referenced to North American Datum of 1983, Durham County, NC, Hydrologic Unit 03020201, at dam 7.5 mi below U.S. Highway 501 and 4.0 mi south of Bahama.

DRAINAGE AREA.--97.7 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a regional surface-water quality assessment. Samples for nutrient, chlorophyll *a* and pheophytin *a* analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique. Prior to October 1, 2005, samples for chlorophyll *a* were analyzed using a high-performance liquid chromatography method.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	Sample type	Color, water, fltrd, Pt-Co units (00080)	Sam-pling depth, meters (00098)	Trans-parency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd std units (00400)	Specif-ic conduc-tance, wat unf 25 degC μS/cm (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)
Oct												
30...	1100	Environmental	30	1.0	1.20	759	5.9	62	6.8	79	17.7	25
30...	1101	Replicate	35	1.0	1.20	759	5.9	62	6.8	79	17.7	26
30...	1105	Environmental	--	11.0	--	759	5.2	53	6.7	79	16.8	--
30...	1110	Environmental	--	22.0	--	759	.1	.0	7.0	233	10.9	--
Apr												
05...	1145	Environmental	40	1.0	1.20	752	9.4	102	7.7	68	18.7	24
05...	1146	Replicate	40	1.0	1.20	752	9.4	102	7.7	68	18.7	23
05...	1150	Environmental	--	11.0	--	752	6.3	54	5.8	66	8.1	--
05...	1155	Environmental	--	22.0	--	752	3.9	33	5.7	71	7.2	--
Jun												
26...	1330	Environmental	25	1.0	1.80	763	7.9	103	8.0	78	29.7	24
26...	1335	Environmental	--	11.0	--	763	.1	.0	6.1	75	10.3	--
26...	1340	Environmental	--	22.0	--	763	.2	2	6.4	98	8.8	--
Aug												
28...	1130	Environmental	30	1.0	.80	759	--	--	--	82	27.6	26
28...	1135	Environmental	--	10.0	--	759	--	--	--	100	22.6	--
28...	1140	Environmental	--	20.0	--	759	--	--	--	142	9.5	--
28...	1221	Blank	--	--	--	--	--	--	--	--	--	--

0208524845 LITTLE RIVER RESERVOIR AT DAM NEAR BAHAMA, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 4

[Remark codes: <, less than; E, estimated.]

Date	Calcium water, flt'd, mg/L (00915)	Magnes- ium, water, flt'd, mg/L (00925)	Potas- sium, water, flt'd, mg/L (00935)	Sodium, water, flt'd, mg/L (00930)	ANC, wat unf incrm. titr., field, mg/L as CaCO3 (00419)	Bicar- bonate, wat unf incrm. titr., field, mg/L (00450)	Chlor- ide, water, flt'd, mg/L (00940)	Fluor- ide, water, flt'd, mg/L (00950)	Silica, water, flt'd, mg/L (00955)	Sulfate water, flt'd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unflt'd mg/L as N (00625)	Ammonia water, flt'd, mg/L as N (00608)
Oct													
30...	6.21	2.35	2.23	4.57	24	29	5.25	E.09	8.87	4.30	59	.43	.069
30...	6.30	2.40	2.24	4.66	24	29	5.25	E.08	8.98	4.29	55	.45	.069
30...	--	--	--	--	--	--	--	--	--	--	--	.45	.088
30...	--	--	--	--	--	--	--	--	--	--	--	3.8	3.46
Apr													
05...	5.68	2.32	1.68	4.98	19	23	5.72	<.10	8.13	5.48	65	.57	<.020
05...	5.50	2.24	1.64	4.86	18	22	5.71	E.05	8.04	5.45	68	.48	<.020
05...	--	--	--	--	--	--	--	--	--	--	--	.42	<.020
05...	--	--	--	--	--	--	--	--	--	--	--	.53	.049
Jun													
26...	5.83	2.32	1.73	4.81	22	27	5.41	E.06	6.05	4.30	49	.43	<.020
26...	--	--	--	--	--	--	--	--	--	--	--	.49	E.015
26...	--	--	--	--	--	--	--	--	--	--	--	.91	.429
Aug													
28...	6.32	2.49	1.86	4.67	23	29	5.12	E.05	8.43	3.68	57	.50	.021
28...	--	--	--	--	--	--	--	--	--	--	--	.44	.043
28...	--	--	--	--	--	--	--	--	--	2.19	--	1.6	1.02
28...	E.02	<.014	--	<.20	--	--	--	--	<.02	--	--	--	<.020

0208524845 LITTLE RIVER RESERVOIR AT DAM NEAR BAHAMA, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 4

[Remark codes: <, less than; E, estimated.]

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Chlorophyll a phyton, fluoro, µg/L (70953)	Pheophytin a, phyton, µg/L (62360)	Aluminum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, unfltrd µg/L (01002)	Cadmium water, unfltrd µg/L (01027)	Chromium, water, unfltrd recover-able, µg/L (01034)	Cobalt water, unfltrd recover-able, µg/L (01037)
Oct													
30...	.112	<.002	<.006	.021	--	7.0	8.5	5.8	19	.61	<.02	.66	.119
30...	.106	<.002	E.003	.022	--	6.9	8.7	5.9	16	.70	<.02	E.51	.117
30...	.107	<.002	E.003	.022	--	--	--	--	--	--	--	--	--
30...	E.009	<.002	E.004	.056	--	--	--	--	--	--	--	--	--
Apr													
05...	.078	.006	E.003	.034	--	8.5	15.5	8.1	46	.34	E.01	<.60	.103
05...	.074	.006	E.003	.026	--	8.4	16.8	8.5	50	.37	<.02	<.60	.100
05...	.398	<.002	.007	.038	--	--	--	--	--	--	--	--	--
05...	.449	E.002	.014	.079	--	--	--	--	--	--	--	--	--
Jun													
26...	<.016	<.002	E.003	.018	--	7.8	3.1	1.1	--	--	--	--	--
26...	.300	.006	.006	.028	--	--	--	--	--	--	--	--	--
26...	E.015	.004	.029	.093	--	--	--	--	--	--	--	--	--
Aug													
28...	<.016	<.002	E.004	.029	5.7	8.4	23.3	7.9	--	--	--	--	--
28...	<.016	<.002	E.004	.031	--	--	--	--	--	--	--	--	--
28...	E.010	.005	.046	.090	9.5	--	--	--	--	--	--	--	--
28...	<.016	<.002	<.006	--	1.1	--	--	--	--	--	--	--	--

0208524845 LITTLE RIVER RESERVOIR AT DAM NEAR BAHAMA, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 4

[Remark codes: <, less than; E, estimated.]

Date	Copper, water, unfltrd recover- able, µg/L (01042)	Iron, water, unfltrd recover- able, µg/L (01045)	Lead, water, unfltrd recover- able, µg/L (01051)	Mangan- ese, water, unfltrd recover- able, µg/L (01055)	Mercury water, unfltrd recover- able, µg/L (71890)	Mercury water, unfltrd recover- able, µg/L (71900)	Molyb- denum, water, unfltrd recover- able, µg/L (01062)	Nickel, water, unfltrd recover- able, µg/L (01067)	Selen- ium, water, unfltrd recover- able, µg/L (01147)	Silver, water, unfltrd recover- able, µg/L (01077)	Zinc, water, unfltrd recover- able, µg/L (01092)	Data base number
Oct												
30...	E.7	127	E.04	223	--	<.010	.1	E.12	.21	<.02	<2	01
30...	E.7	127	.10	226	--	<.010	.1	E.10	.23	<.02	<2	04
30...	--	163	--	291	--	--	--	--	--	--	--	01
30...	--	5,810	--	22,400	--	--	--	--	--	--	--	01
Apr												
05...	1.8	263	.13	28.2	--	.060	.1	.34	.12	<.02	3	01
05...	1.3	262	.14	27.8	--	.012	.1	.31	.12	<.02	4	04
05...	--	582	--	76.9	--	--	--	--	--	--	--	01
05...	--	1,330	--	1,010	--	--	--	--	--	--	--	01
Jun												
26...	--	63	--	25.7	--	--	--	--	--	--	--	01
26...	--	772	--	988	--	--	--	--	--	--	--	01
26...	--	3,820	--	2,080	--	--	--	--	--	--	--	01
Aug												
28...	--	225	--	425	<.010	<.010	--	--	--	--	--	01
28...	--	237	--	2,770	--	--	--	--	--	--	--	01
28...	--	10,600	--	4,760	E.005	.018	--	--	--	--	--	01
28...	--	--	--	--	<.010	<.010	--	--	--	--	--	04