

Water-Data Report 2008

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 2007 TO SEPTEMBER 2008

Part 1 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and type	Color, water, ftrd, 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 field, std units (00400)
Oct									
30...	1245	Surface water, regular	40	1.0	.80	766	5.9	63	7.1
30...	1246	QC - Surface water, replicate	--	--	.80	--	--	--	--
30...	1247	QC - Surface water, replicate	--	--	.80	--	--	--	--
30...	1250	Surface water, regular	--	8.0	--	766	5.1	55	7.1
30...	1255	Surface water, regular	--	16.0	--	766	.2	2	7.4
Apr									
24...	1230	Surface water, regular	--	2.4	1.20	--	--	--	--
24...	1235	Surface water, regular	50	1.0	--	760	7.3	78	7.3
24...	1240	Surface water, regular	--	12.0	--	760	1.5	13	6.3
24...	1245	Surface water, regular	--	23.0	--	760	.3	2	7.1
Jun									
03...	1230	Surface water, regular	--	3.8	1.90	--	--	--	--
03...	1235	Surface water, regular	40	1.0	--	756	8.7	110	7.3
03...	1240	Surface water, regular	--	11.0	--	756	.2	2	6.3
03...	1245	Surface water, regular	--	22.0	--	756	.3	3	6.7
Aug									
26...	1145	Surface water, regular	--	2.0	1.00	--	--	--	--
26...	1150	Surface water, regular	35	1.0	--	754	3.8	46	6.6
26...	1155	Surface water, regular	--	9.0	--	754	1.1	13	6.5
26...	1200	Surface water, regular	--	20.0	--	754	.2	2	7.0

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Specific conductance, wat unf μ S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf infl pt titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unf infl pt titr., field, mg/L (00450)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO ₂ (00955)	Sulfate water, fltrd, mg/L (00945)
Oct													
30...	83	19.4	25	6.05	2.31	1.88	4.60	24	30	5.28	E.06	9.08	3.67
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	84	19.1	--	--	--	--	--	--	--	--	--	--	--
30...	200	10.3	--	--	--	--	--	--	--	--	--	--	<.18
Apr													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	71	18.3	20	4.65	1.93	1.83	4.46	12	15	5.42	<.12	7.19	8.27
24...	78	10.9	--	--	--	--	--	--	--	--	--	--	--
24...	105	10.1	--	--	--	--	--	--	--	--	--	--	9.50
Jun													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	73	26.9	20	4.83	1.98	1.75	4.35	14	17	5.27	E.07	6.34	6.96
03...	81	11.7	--	--	--	--	--	--	--	--	--	--	--
03...	106	22.0	--	--	--	--	--	--	--	--	--	--	8.60
Aug													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	82	25.1	25	6.12	2.32	2.03	4.93	19.7	24.0	5.65	<.12	7.57	6.18
26...	84	24.1	--	--	--	--	--	--	--	--	--	--	--
26...	143	11.0	--	--	--	--	--	--	--	--	--	--	3.47

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L as P (00665)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Chloro- phyll a phyto- plank- ton, fluoro, µg/L (70953)	Pheo- phytin a, phyto- plank- ton, µg/L (62360)	Alum- inum, water, unfltrd recover- able, µg/L (01105)	Arsenic water, unfltrd µg/L (01002)
Oct													
30...	60	.52	.023	.081	.009	<.006	.033	5.5	7.0	22.4	10.6	25	E.51
30...	--	--	--	--	--	--	--	--	--	24.1	13.2	--	--
30...	--	--	--	--	--	--	--	--	--	11.9	4.7	--	--
30...	--	.48	.051	.083	.009	<.006	.028	--	--	--	--	--	--
30...	--	3.8	3.23	<.016	.005	E.003	.050	10.9	--	--	--	--	--
Apr													
24...	--	.75	<.020	.103	.004	E.004	.051	--	--	75.5	22.9	--	--
24...	65	--	--	--	--	--	--	7.5	9.6	--	--	83	E.38
24...	--	.38	<.020	.419	<.002	.007	.030	--	--	--	--	--	--
24...	--	.83	.248	.116	<.002	.017	.132	5.7	--	--	--	--	--
Jun													
03...	--	.58	E.019	<.016	<.002	E.005	.030	--	--	9.4	2.4	--	--
03...	61	--	--	--	--	--	--	8.5	9.4	--	--	--	--
03...	--	.43	.027	.220	.007	E.005	.024	--	--	--	--	--	--
03...	--	.77	.343	<.016	E.001	.025	.088	7.5	--	--	--	--	--
Aug													
26...	--	.48	.036	<.016	E.001	E.004	.021	--	--	6.7	4.2	--	--
26...	59	--	--	--	--	--	--	6.6	8.5	--	--	--	--
26...	--	.45	.047	<.016	E.001	E.004	.019	--	--	--	--	--	--
26...	--	1.8	1.19	<.016	.004	.043	.084	10.3	--	--	--	--	--

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Cadmium water, unfltrd μg/L (01027)	Chrom- ium, water, unfltrd recover- able, μg/L (01034)	Cobalt water, unfltrd recover- able, μg/L (01037)	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 ftrd, 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 μg/L (01147)	Silver, water, unfltrd recover- able, μg/L (01077)
Oct													
30...	E.01	<.40	.16	3.0	129	.06	544	E.009	.011	.1	.17	.14	<.02
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	164	--	834	--	--	--	--	--	--
30...	--	--	--	--	10,600	--	16,400	<.010	E.008	--	--	--	--
Apr													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	<.01	E.33	.05	1.4	233	.15	20.6	E.009	.017	E.1	.44	.12	<.02
24...	--	--	--	--	343	--	564	--	--	--	--	--	--
24...	--	--	--	--	4,490	--	2,350	<.010	.010	--	--	--	--
Jun													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
03...	--	--	--	--	170	--	18.1	<.010	<.010	--	--	--	--
03...	--	--	--	--	448	--	631	--	--	--	--	--	--
03...	--	--	--	--	3,730	--	2,360	<.010	<.010	--	--	--	--
Aug													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	314	--	321	<.010	<.010	--	--	--	--
26...	--	--	--	--	350	--	600	--	--	--	--	--	--
26...	--	--	--	--	11,400	--	3,940	<.010	<.010	--	--	--	--

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Date	Zinc, water, unfltrd recover -able, µg/L (01092)
Oct	
30...	2.0
30...	--
30...	--
30...	--
30...	--
Apr	
24...	--
24...	E1.5
24...	--
24...	--
Jun	
03...	--
03...	--
03...	--
03...	--
Aug	
26...	--
26...	--
26...	--
26...	--