

02085500 FLAT RIVER AT BAHAMA, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment and to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

COOPERATION.--For the period February 1988 through June 1989 the inorganic-chemical data and trace-metal data were analyzed by the city of Durham's Brown Water Treatment Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Color, water, fltrd, Pt-Co units (00080)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT													
16...	1615	765	125	742	8.6	88	6.7	72	15.6	21	4.78	2.14	2.63
16...	1630	771	--	742	8.6	88	6.7	72	15.6	--	--	--	--
DEC													
17...	1345	165	--	751	12.5	101	6.3	66	5.9	--	--	--	--
JAN													
31...	1300	747	--	764	13.3	98	6.3	73	2.9	--	--	--	--
FEB													
27...	1600	380	--	756	13.1	102	6.5	57	4.7	--	--	--	--
MAR													
20...	1315	7,420	--	748	11.1	96	5.8	32	8.4	--	--	--	--
20...	1330	7,750	225	748	11.1	96	5.8	32	8.4	12	2.68	1.25	1.92
MAY													
16...	1300	180	--	754	8.7	93	6.4	56	18.2	--	--	--	--
22...	1330	2,750	--	761	10.0	100	6.2	45	15.6	--	--	--	--
JUN													
25...	1400	80	--	756	7.7	90	6.6	78	23.0	--	--	--	--
JUL													
30...	1430	41	--	757	6.7	82	6.9	78	25.0	--	--	--	--
AUG													
21...	1400	40	--	756	7.3	91	6.6	81	26.1	--	--	--	--
SEP													
04...	1300	35	--	751	6.7	84	6.6	56	25.9	--	--	--	--
Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd, field, mg/L as CaCO3 (00419)	Bicarbonate, wat unfltrd, field, mg/L (00450)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat fltrd mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water, fltrd, mg/L as N (00631)
OCT													
16...	3.98	14	17	4.87	<0.17	10.6	7.2	66	--	0.76	0.022	0.50	0.51
16...	--	--	--	--	--	--	--	--	0.44	0.77	<0.04	--	0.48
DEC													
17...	--	--	--	--	--	--	--	--	0.27	0.34	E.02	--	0.42
JAN													
31...	--	--	--	--	--	--	--	--	0.49	0.76	0.05	--	0.36
FEB													
27...	--	--	--	--	--	--	--	--	0.23	0.31	<0.04	--	0.41
MAR													
20...	--	--	--	--	--	--	--	--	0.44	1.0	0.05	--	0.16
20...	1.77	--	--	1.86	<0.17	4.4	3.7	39	--	0.94	0.056	0.15	0.16
MAY													
16...	--	--	--	--	--	--	--	--	0.20	0.34	<0.04	--	0.34
22...	--	--	--	--	--	--	--	--	0.59	1.1	E.04	--	0.30
JUN													
25...	--	--	--	--	--	--	--	--	0.30	0.29	<0.04	--	0.42
JUL													
30...	--	--	--	--	--	--	--	--	0.28	0.37	<0.04	--	0.31
AUG													
21...	--	--	--	--	--	--	--	--	0.23	0.29	<0.04	--	<0.60
SEP													
04...	--	--	--	--	--	--	--	--	0.39	0.45	<0.04	--	0.31

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, fltrd, mg/L (00607)	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, fltrd, mg/L (00602)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Aluminum, water, unfltrd recover-able, ug/L (01105)	Arsenic water unfltrd ug/L (01002)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recover-able, ug/L (01034)
OCT 16...	0.006	--	0.73	0.020	--	--	--	1.3	12.2	620	<2	0.6	E.7
16...	E.006	--	--	0.02	E.04	0.11	0.92	1.3	--	--	--	--	--
DEC 17...	<0.008	--	--	<0.02	E.02	E.03	0.69	0.75	--	--	--	--	--
JAN 31...	<0.008	0.44	0.71	E.01	E.03	0.11	0.85	1.1	--	--	--	--	--
FEB 27...	<0.008	--	--	E.01	0.04	0.06	0.64	0.71	--	--	--	--	--
MAR 20...	<0.008	0.39	0.97	0.04	0.06	0.24	0.60	1.2	--	--	--	--	--
20...	0.004	--	0.88	0.036	--	0.20	--	1.1	14.0	1,090	<2	<0.2	1.0
MAY 16...	<0.008	--	--	<0.02	E.03	E.03	0.54	0.67	--	--	--	--	--
22...	E.005	--	--	0.02	0.04	0.18	0.90	1.4	--	--	--	--	--
JUN 25...	<0.008	--	--	E.01	E.03	0.04	0.73	0.72	--	--	--	--	--
JUL 30...	<0.008	--	--	E.01	E.02	0.04	0.59	0.68	--	--	--	--	--
AUG 21...	E.004	--	--	<0.18	E.03	E.03	--	--	--	--	--	--	--
SEP 04...	<0.008	--	--	E.01	E.02	0.05	0.70	0.75	--	--	--	--	--

Date	Cobalt water, unfltrd recover-able, ug/L (01037)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Molybdenum, water, unfltrd recover-able, ug/L (01062)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selenium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT 16...	<3.4	5.1	1,490	2	203	E.01	<2	<2.0	<3	<0.3	<25	75	156
16...	--	--	--	--	--	--	--	--	--	--	--	76	158
DEC 17...	--	--	--	--	--	--	--	--	--	--	--	10	4.5
JAN 31...	--	--	--	--	--	--	--	--	--	--	--	81	163
FEB 27...	--	--	--	--	--	--	--	--	--	--	--	31	32
MAR 20...	--	--	--	--	--	--	--	--	--	--	--	220	4,410
20...	<3.4	3.0	1,590	3	241	0.02	<2	<2.0	<3	<0.3	<25	124	2,600
MAY 16...	--	--	--	--	--	--	--	--	--	--	--	13	6.2
22...	--	--	--	--	--	--	--	--	--	--	--	172	1,280
JUN 25...	--	--	--	--	--	--	--	--	--	--	--	6	1.3
JUL 30...	--	--	--	--	--	--	--	--	--	--	--	6	0.70
AUG 21...	--	--	--	--	--	--	--	--	--	--	--	6	0.63
SEP 04...	--	--	--	--	--	--	--	--	--	--	--	8	0.72