CAPE FEAR RIVER BASIN

0209651815 BRANCH CREEK BELOW NC 54 NEAR GRAHAM, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 2002 to July 2003 (discontinued).

PERIOD OF DAILY RECORD .--

WATER TEMPERATURE: August 2002 to July 2003.

INSTRUMENTAION.--Logging pressure transducer with water temperature probe.

 $REMARKS.--Station\ operated\ as\ part\ of\ NAWQA\ Urban\ Land\ Use\ Gradient\ study.$

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 27.6°C, Sept. 17, 2002; minimum recorded, 0.0°C, Feb. 17, 2003.

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

						ъ.	**	G :C				Ammonia	
Date	Time	Medium code	Instantaneous discharge, cfs (00061)	Baro- metric pres- sure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
FEB 25	0930	9	E1.3	756	11.4	96	7.5	294	7.7	30.1	23.2	0.18	< 0.04
MAY													
20 JUN	0915	D	1.4		7.8		7.3	242					
13 JUL	0900	9			6.8		7.1	214	20.8				
10 11	1044 0930	9 9	E1.4	 746	7.5	 91	7.4	285	23.6	24.3	19.5	0.26	<0.04
Date	Nitrite + nitrate 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)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, unfltrd mg/L (00665)	Total nitro- gen, water, unfltrd mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Biomass peri- phyton, ashfree drymass g/m2 (49954)	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)
FEB 25 MAY	0.78	< 0.008	< 0.02	0.03	0.023	0.96	< 0.1	< 0.1	< 0.1	1.9			
20 JUN											2.2	70	72.50
13 JUL													
10													
11	0.52	E.004	E.01	0.06	0.042	0.78	0.4	< 0.1	0.4	3.1			
Date	Biomass chloro- phyll ratio, peri- phyton, number (70950)	Pheophytin a, periphyton, mg/m2 (62359)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	Chloro- phyll a peri- phyton, chromo- fluoro, mg/m2 (70957)	1-Naph- thol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2-[(2- Et-6-Me -Ph)- -amino] propan- 1-ol, ug/L (61615)	2Chloro -2,6'-' diethyl acet- anilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl -6- methyl- aniline water, fltrd, ug/L (61620)	3,4-Di- chloro- aniline water fltrd, ug/L (61625)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Aceto- chlor, water, fltrd, ug/L (49260)
FEB 25 MAY			150		< 0.09	< 0.006	< 0.1	< 0.005	< 0.006	< 0.004	< 0.004	< 0.006	< 0.006
20	447	1.8		4.9									
JUN 13 JUL													
10 11			7,700		< 0.09	<0.006	<0.1	<0.005	<0.006	<0.004	< 0.004	<0.006	< 0.006

CAPE FEAR RIVER BASIN 129 0209651815 BRANCH CREEK BELOW NC 54 NEAR GRAHAM, NC—Continued

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

			WAIEK-	QUALITI	DATA, W	AIEK IEA	K OCTOB	EK 2002 I	OSEPTEM	IDEK 2003			
Date	Ala- chlor, water, fltrd, ug/L (46342)	Atrazine, water, fltrd, ug/L (39632)	Azin- phos- methyl oxon, water, fltrd, ug/L (61635)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Chlor- pyrifos oxon, water, fltrd, ug/L (61636)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyflu- thrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf- inyl fipro- nil, water, fltrd, ug/L (62170)
FEB 25 MAY	< 0.004	< 0.007	< 0.02	< 0.050	< 0.010	E.004	< 0.06	< 0.005	< 0.006	< 0.008	< 0.009	< 0.003	< 0.004
20 JUN													
13													
JUL 10 11	<0.004	0.007	<0.02	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	<0.004
Date	Diaz- inon oxon, water, fltrd, ug/L (61638)	Diazi- non, water, fltrd, ug/L (39572)	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulf- oxide, water, fltrd, ug/L (61646)	Fenamiphos, water, fltrd, ug/L (61591)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)
FEB 25	< 0.04	E.003	< 0.08	< 0.005	< 0.006	< 0.03	< 0.004	< 0.008	< 0.03	< 0.03	< 0.009	< 0.005	< 0.005
MAY 20													
JUN 13													
JUL 10													
11	< 0.01	0.026	<0.08	< 0.005	< 0.006	<0.03	<0.004	< 0.008	<0.03	< 0.03	< 0.009	< 0.005	< 0.006
Date	Fipro- nil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexa- zinone, water, fltrd, ug/L (04025)	Ipro- dione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Mala- oxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Meta- laxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl para- oxon, water, fltrd, ug/L (61664)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)
FEB 25	E.007	< 0.002	< 0.003		<1	< 0.003	< 0.008	< 0.027	< 0.005	< 0.006	< 0.03	< 0.006	< 0.013
MAY 20													
JUN 13 JUL													
10 11	<0.007	<0.002	<0.003	0.023	 <1	<0.003	<0.008	<0.027	<0.005	<0.006	<0.03	<0.006	<0.013
Date	Metri- buzin, water, fltrd, ug/L (82630)	Myclo- butanil water, fltrd, ug/L (61599)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Pron- amide, water, fltrd 0.7u GF ug/L (82676)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Ter- bufos oxon sulfone water, fltrd, ug/L (61674)
	` /												
FEB		۰0 000	-0.022	-0.10	-0.011	-0.00	-0.000	E 01	-0.005	-0.004	E 002	0.00	-0.07
25 MAY	<0.006	<0.008	< 0.022	< 0.10	<0.011	< 0.06	< 0.008	E.01	< 0.005	< 0.004	E.003	0.06	< 0.07
25 MAY 20 JUN		<0.008	<0.022	<0.10	<0.011	<0.06	<0.008	E.01	<0.005	<0.004	E.003	0.06	<0.07
25 MAY 20		<0.008 	<0.022	<0.10	<0.011 	<0.06	<0.008	E.01 	<0.005 	<0.004	E.003	0.06 	<0.07

CAPE FEAR RIVER BASIN

0209651815 BRANCH CREEK BELOW NC 54 NEAR GRAHAM, NC—Continued

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

			Tri-		Suspnd.	Sus-
	Terbu-	Ter-	flur-	Di-	sedi-	pended
	fos,	buthyl-	alin,	chlor-	ment,	sedi-
	water,	azine,	water,	vos,	sieve	ment
	fltrd	water,	fltrd	water	diametr	concen-
	0.7u GF	fltrd,	0.7u GF	fltrd,	percent	tration
Date	ug/L	ug/L	ug/L	ug/L	<.063mm	mg/L
	(82675)	(04022)	(82661)	(38775)	(70331)	(80154)
FEB						
25	< 0.02	< 0.01	< 0.009	< 0.01	75	6
MAY						
20						
JUN						
13						
JUL						
10						
11	< 0.02	< 0.01	< 0.009	< 0.01	97	10

Remark codes used in this table: < -- Less than E -- Estimated value

Medium codes used in this table: 9 -- Surface water D -- Plant tissue

TEMPERATURE, WATER, DEGREES CELSIUS AUGUST TO SEPTEMBER 2002

					AUGUST	TO SEPTEM	IBER 2002							
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN		
		JUNE			JULY			AUGUST		S	SEPTEMBER			
1 2										21.6 21.9	19.7 20.0	20.7 20.8		
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15										23.3	21.5	22.4		
16										25.1	21.9	23.1		
17										27.6	20.4	23.3		
18										23.4	21.2	22.4		
19										24.6	21.5	23.1		
20										26.1	20.7	22.9		
21														
22														
23														
24										27.1	16.9	20.5		
25										22.5	18.2	20.0		
26							25.3	22.1	24.0	20.9	18.4	19.8		
27							24.0	21.5	22.5					
28							22.1	20.5	21.2					
29							22.4	19.8	20.8					
30							21.8	20.7	21.2					
31							21.1	19.5	20.7					
MONTH														

CAPE FEAR RIVER BASIN 131 0209651815 BRANCH CREEK BELOW NC 54 NEAR GRAHAM, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS WATER YEAR OCTOBER 2002 TO JULY 2003

WATER YEAR OCTOBER 2002 TO JULY 2003													
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
		OCTOBER		NOVEMBER			D	ЕСЕМВЕ	I.R	JANUARY			
1 2 3 4 5	 	 	 	 	 	 	7.2 6.5 7.7 4.7 4.9	4.2 2.9 4.0 1.0 0.7	5.7 4.8 5.6 3.1 2.8	13.4 11.2 10.7 8.8 6.8	9.8 9.3 8.8 6.3 5.0	12.1 10.3 10.2 7.3 6.0	
6 7 8 9 10	 	 	 	12.3 13.5 15.9	9.1 9.6 12.2	10.6 11.4 14.2	6.2 6.9 7.2 7.0 6.3	4.4 3.3 3.7 5.8 5.2	5.2 4.9 5.5 6.4 5.7	7.4 5.7 7.0 9.5 9.3	5.6 3.5 4.4 6.5 6.9	6.4 4.5 5.7 8.0 8.1	
11 12 13 14 15	 	 	 	17.8 17.0 14.3 12.5 12.8	15.8 14.0 11.9 9.9 9.9	17.0 15.7 13.7 11.4 11.6	6.8 9.2 7.9 9.0 8.0	3.7 6.6 5.6 6.9 5.5	5.8 7.8 6.8 7.8 6.9	6.9 4.9 4.7 5.4 5.5	4.7 2.9 2.2 2.7 3.1	5.7 3.9 3.4 4.0 4.2	
16 17 18 19 20	 	 	 	13.6 12.7 11.8 11.0 11.3	12.2 11.0 9.5 8.2 8.6	12.9 12.0 10.6 9.8 10.1	8.9 7.9 8.1 9.0 12.8	5.8 6.1 6.2 7.9 9.0	7.4 7.0 7.2 8.3 11.3	4.4 4.9 3.3 3.0 5.3	2.8 2.4 0.9 0.6 1.7	3.4 3.5 2.0 1.7 3.2	
21 22 23 24 25	 	 	 	12.0 11.6 9.7 10.5 11.4	10.4 8.6 7.1 6.6 7.3	11.2 10.3 8.3 8.3 9.1	9.6 8.7 8.6 7.9 7.8	6.9 6.0 6.1 7.2 5.6	7.9 7.4 7.4 7.4 6.8	4.1 4.8 3.2 1.4 3.0	3.1 1.8 0.5 0.4 0.4	3.6 3.1 1.8 0.8 1.4	
26 27 28 29 30 31	 	 	 	11.0 9.4 7.5 7.0 9.5	7.4 6.6 4.6 3.2 5.9	9.0 8.4 5.8 5.0 7.4	6.9 6.4 6.1 7.3 7.6 9.8	5.0 4.0 3.6 4.3 5.1 6.5	5.9 5.3 5.0 5.9 6.4 8.0	3.5 2.8 3.3 6.1 6.2 5.2	0.8 0.6 0.6 2.6 3.6 4.0	2.0 1.6 1.8 3.9 4.9 4.6	
MONTH							12.8	0.7	6.4	13.4	0.4	4.6	
	F	EBRUAR	Y		MARCH			APRIL			MAY		
1 2 3 4 5	7.2 7.3 8.8 11.7 8.9	5.2 4.9 5.4 8.8 5.6	6.1 6.1 7.1 10.1 7.2	7.7 9.9 9.8 10.1 12.7	4.8 6.2 5.8 5.8 8.9	6.2 7.7 7.8 8.0 10.6	10.6 17.5 18.8 18.0 17.2	7.3 9.4 11.7 12.9 14.2	8.9 13.1 15.3 15.7 15.6	 	 	 	
6 7 8 9 10	6.0 6.1 5.8 5.9 6.3	2.7 2.2 3.2 2.9 4.8	4.8 4.1 4.5 4.4 5.4	12.4 10.7 10.8 13.2 11.4	10.7 6.5 4.9 8.6 8.3	11.5 8.2 7.8 10.8 9.8	17.1 14.9 10.0 9.2 8.8	12.3 8.6 8.4 7.6 7.3	14.8 10.2 9.3 8.4 7.9	 	 	 	
11 12 13 14 15	6.4 7.2 6.0 5.9 7.0	3.0 3.9 2.5 3.8 5.6	4.9 5.3 4.4 4.8 6.3	8.9 11.2 13.5 12.9 10.8	6.7 5.9 8.8 10.8 8.5	7.5 8.5 11.1 12.0 9.2	10.7 15.2 15.9 16.7 18.0	8.5 9.0 10.2 10.9 12.7	9.3 11.7 13.0 13.8 15.3	 	 	 	
16 17 18 19 20	5.6 1.9 4.7 7.7 8.2	0.2 0.0 1.9 2.9 5.7	3.2 0.9 3.4 5.0 6.9	9.9 12.3 13.1 12.6 10.2	8.0 9.9 11.1 10.2 7.8	9.0 11.0 12.0 11.3 8.9	18.6 18.1 	13.8 14.3 	16.2 16.3 	 	 	 	
21 22 23 24 25	7.5 8.1 9.7 9.9 9.0	6.0 6.7 7.0 5.1 6.8	6.9 7.1 8.6 7.5 8.0	11.0 11.8 11.4 11.4 11.9	9.2 9.8 9.2 9.6 9.2	10 10.8 10.4 10.6 10.5	 	 	 	 	 	 	
26 27 28 29 30 31	7.8 4.4 5.1 	4.4 2.6 3.2 	6.0 3.3 4.4 	13.1 12.5 13.3 15.2 14.5 10.1	10.9 11.4 10.9 13.3 10.1 8.1	11.9 11.9 12.1 14.2 11.9 8.9	 	 	 	 	 	 	
MONTH	11.7	0.0	5.6	15.2	4.8	10.1							

CAPE FEAR RIVER BASIN

0209651815 BRANCH CREEK BELOW NC 54 NEAR GRAHAM, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED WATER YEAR OCTOBER 2002 TO JULY 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
		JUNE			JULY			AUGUST		SEPTEMBER			
1 2				21.9	21.3	21.6							
3													
4													
5	22.2	18.2	20.0										
6	22.4	16.7	19.5										
7	22.6	19.5	21.0										
8	21.5	19.4	20.3										
9	23.1	19.5	20.9										
10	23.8	19.0	20.8										
11	24.7	19.1	21.4										
12	24.1	20.7	22.2										
13	24.6	20.7	22.3										
14	26.1	21.2	22.8										
15	26.0	21.6	23.2										
16	23.3	21.3	22.1										
17	21.3	20.4	20.7										
18	21.1	19.9	20.4										
19	21.3	20.6	20.9										
20	21.5	20.4	20.8										
21	20.8	18.8	19.5										
22	19.6	18.0	18.8										
23	20.3	18.4	19.2										
24	20.9	18.7	19.7										
25	21.6	19.5	20.5										
26	22.1	20.1	21.0										
27	22.4	20.9	21.6										
28	21.9	21.2	21.4										
29	22.2	20.4	21.2										
30	22.3	21.0	21.6										
31													
MONTH													