CAPE FEAR RIVER BASIN

0209737400 BOLIN CREEK AT US 15-501 NEAR CHAPEL HILL, NC—Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD .--

WATER TEMPERATURE: August 2002 to April 2003.

INSTRUMENTATION.--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, 28.2°C, Aug. 22, 23, 2002; minimum recorded, 0.0°C, Jan. 19, 23, 24, 28 2003.

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

						.		a				Ammonia	
Date	Time	Medium code	Instantaneous discharge, cfs (00061)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved 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)
OCT 16	1245	9	38	744	9.1	95	7.1	111	16.0	5.55	11.2	0.57	< 0.04
DEC 16	1000	9	11	753	8.3	67	6.5	129	5.9	8.02	11.7	0.27	<0.04
FEB 25	0745	9	E13	758	11.0	92	7.4	138	7.4	10.9	11.1	0.27	<0.04
APR													
16 AUG	1230	9			8.8		7.4	131	17.6				
28 SEP	1200	9			5.4		7.1	288	25.6				
16	1130	9			7.1		7.5	212	21.2				
Date	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phos- phorus, 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)
OCT 16 DEC	1.16	0.26	0.30	0.131	0.040	<0.02	0.09	0.096	0.87	0.7	<0.1	0.7	9.2
16 FEB			0.34		< 0.008	< 0.02	0.03	0.025	0.61	0.3	< 0.1	0.3	5.8
25 APR			0.28		< 0.008	E.01	0.08	0.055	0.55	0.7	< 0.1	0.7	4.4
16 AUG													
28 SEP													
16													
Date	E coli, modif. m-TEC, water, col/ 100 mL (90902)	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)	Ala- chlor, water, fltrd, ug/L (46342)	Atrazine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)
OCT	1 200	< 0.09	<0.006	<0.1	< 0.005	<0.006	< 0.004	< 0.004	<0.006	< 0.006	<0.004	0.010	< 0.02
16 DEC	1,200		<0.006	<0.1		<0.006			<0.006		<0.004	0.010	
16 FEB	K68	<0.09	<0.006	<0.1	<0.005	<0.006	<0.004	<0.004	<0.006	<0.006	<0.004	E.006	<0.02
25 APR	200	< 0.09	< 0.006	< 0.1	< 0.005	E.002	< 0.004	< 0.004	< 0.006	< 0.006	< 0.004	0.008	< 0.02
16 AUG													
28 SEP													
16													

CAPE FEAR RIVER BASIN 201 0209737400 BOLIN CREEK AT US 15-501 NEAR CHAPEL HILL, NC—Continued

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

Date	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)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazi- non, water, fltrd, ug/L (39572)	Dicrotophos, water fltrd, ug/L (38454)
OCT 16	< 0.050	< 0.010	E.004	< 0.06	< 0.005	< 0.006	< 0.008	< 0.009	< 0.003	< 0.004		< 0.005	< 0.08
DEC 16	< 0.050	< 0.010	< 0.041	< 0.06	< 0.005	< 0.006	< 0.008	< 0.009	< 0.003	< 0.004	< 0.04	< 0.005	< 0.08
FEB 25	< 0.050	< 0.010	< 0.041	< 0.06	< 0.005	< 0.006	< 0.008	< 0.009	< 0.003	< 0.004	< 0.04	< 0.005	< 0.08
APR 16													
AUG 28 SEP 16													
SEP 16													
Date	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)	Fenami- phos 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)	Fipro- nil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)
OCT 16 DEC	< 0.005	< 0.006	< 0.03	< 0.004	< 0.008	< 0.03	< 0.03	< 0.009	E.002	< 0.005	0.036	< 0.002	< 0.003
16 FEB	< 0.005	< 0.006	< 0.03	< 0.004	< 0.008	< 0.03	< 0.03	< 0.009	< 0.005	< 0.005	E.010	< 0.002	< 0.003
25 APR	< 0.005	< 0.006	< 0.03	< 0.004	< 0.008	< 0.03	< 0.03	< 0.009	< 0.005	E.005	E.009	< 0.002	< 0.003
16 AUG													
28 SEP													
16													
Date	Ipro- dione, water, fltrd, ug/L (61593)	Isofen- phos, water, fltrd, ug/L (61594)	Mala- oxon, water, fltrd, ug/L (61652)	Mala- thion, 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)	Metri- buzin, water, fltrd, ug/L (82630)	Myclo- butanil water, fltrd, ug/L (61599)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)
OCT	₂ 1	<0.002	<0.000	<0.027	<0.005	<0.006	<0.02	<0.006	<0.012	<0.006	<0.000	<0.022	<0.10
16 DEC	<1	<0.003	<0.008	<0.027	<0.005	<0.006	<0.03	<0.006	<0.013	<0.006	<0.008	<0.022	<0.10
16 FEB	<1	<0.003	<0.008	<0.027	<0.005	<0.006	<0.03	<0.006	<0.013	<0.006	<0.008	<0.022	<0.10
25 APR	<1	< 0.003	< 0.008	< 0.027	< 0.005	<0.006	<0.03	< 0.006	< 0.013	< 0.006	< 0.008	< 0.022	< 0.10
16 AUG													
28 SEP													
16													

CAPE FEAR RIVER BASIN

0209737400 BOLIN CREEK AT US 15-501 NEAR CHAPEL HILL, NC—Continued

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

	Suspnd.	Sus-	
	sedi-	pended	Sus-
	ment,	sedi-	pended
	sieve	ment	sedi-
	diametr	concen-	ment
	percent	tration	load,
Date	<.063mm	mg/L	tons/d
	(70331)	(80154)	(80155)
OCT			
16	99	55	5.7
DEC			
16	91	8	0.25
FEB			
25	98	33	
APR			
16			
AUG			
28			
SEP			
16			

Remark codes used in this table:
< -- Less than
E -- Estimated value
M-- Presence verified, not quantified
K -- Counts outside the acceptable range

Medium codes used in this table:

9 -- Surface water

TEMPERATURE, WATER, DEGREES CELSIUS AUGUST TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
		JUNE			JULY		AUGUST			SEPTEMBER			
1										21.7	20.8	21.2	
2							27.4	25.3	26.1	21.4	20.6	21.0	
3							27.6	24.6	25.8	22.4	20.5	21.5	
4							27.0	24.1	25.4	24.0	21.9	23.0	
5							27.2	24.1	25.5	24.2	22.3	23.5	
6							26.2	24.3	25.1	23.6	21.2	22.4	
7							24.6	22.0	23.2	23.3	21.2	22.0	
8							24.1	20.6	22.0	23.1	20.8	21.7	
9							23.6	20.2	21.7	23.3	21.0	21.9	
10							23.9	19.9	21.8	23.9	21.6	22.5	
11							25.8	20.3	22.4	24.2	21.6	22.7	
12							26.7	21.0	23.6	23.1	20.4	21.6	
13							27.6	22.3	24.7	22.8	19.4	20.9	
14							26.0	22.5	24.3	23.6	20.5	21.8	
15							26.7	23.9	24.9	23.5	22.1	22.7	
16							25.1	24.2	24.7	23.3	22.2	22.7	
17							26.4	24.6	25.3	23.1	22.4	22.8	
18							26.3	24.6	25.3	23.3	22.7	22.9	
19							26.7	24.4	25.3	23.6	22.6	22.9	
20							26.3	24.3	25.1	23.9	21.9	22.8	
21							27.8	24.3	25.8	23.7	21.7	22.7	
22							28.2	24.5	26.1	24.3	21.9	22.9	
23							28.2	24.5	26.3	23.1	21.7	22.5	
24							27.9	24.9	26.3	22.4	20.4	21.3	
25							27.4	25.4	26.5	21.3	20.0	20.6	
26							27.0	24.4	25.6	20.8	20.0	20.4	
27							24.4	21.4	23.3	23.4	20.8	22.0	
28							21.8	21.4	21.7	23.2	21.8	22.7	
29							21.7	21.3	21.5	22.8	20.7	21.5	
30							22.0	20.7	21.2	22.3	19.6	20.8	
31							21.5	20.9	21.1				
MONTH										24.3	19.4	22.1	

CAPE FEAR RIVER BASIN 203

TEMPERATURE, WATER, DEGREES CELSIUS OCTOBER 2002 TO APRIL 2003

 $0209737400\ BOLIN\ CREEK\ AT\ US\ 15\text{-}501\ NEAR\ CHAPEL\ HILL,\ NC\text{---Continued}$

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			OVEMBE			ECEMBE			JANUARY	
1 2 3 4 5	22.5 23.1 23.6 24.2 24.5	20.1 20.3 21.1 21.5 22.1	21.1 21.5 22.2 22.7 23.1	12.8 12.5 11.8 12.9 12.9	11.7 10.9 10.8 11.7 12.6	12.3 11.5 11.3 12.2 12.8	9.0 7.3 7.3 6.9 4.5	7.3 6.3 6.8 4.2 2.0	8.0 6.8 7.1 5.7 3.7	12.0 10.5 10.0 8.4 6.3	8.7 8.9 8.4 5.6 4.3	10.8 9.6 9.6 6.9 5.3
6 7 8 9 10	23.0 23.1 20.8 19.7 20.2	20.5 20.4 18.8 18.1 17.8	21.8 21.5 19.5 18.8 18.7	13.2 12.2 11.6 12.8 15.0	12.2 10.8 9.8 10.7 12.7	12.8 11.4 10.7 11.6 13.6	6.3 6.1 7.2 7.1 6.6	4.5 4.4 5.6 6.6 6.1	5.5 5.3 6.3 6.8 6.4	6.4 5.2 6.3 8.2 8.0	5.0 3.0 3.7 5.4 6.5	5.6 3.9 4.8 6.7 7.4
11 12 13 14 15	20.1 21.0 20.4 20.2 17.1	19.6 20.0 19.8 17.1 15.5	19.8 20.4 20.1 18.5 16.0	16.7 17.0 15.3 14.0 13.5	15.0 15.3 14.0 12.3 12.3	16.0 16.4 14.8 13.2 13.0	6.7 8.4 8.3 8.2 8.1	6.1 6.7 6.7 7.0 7.1	6.4 7.6 7.5 7.5 7.6	6.5 4.3 3.5 4.5 4.5	4.3 2.4 1.7 2.2 2.7	5.0 3.2 2.7 3.3 3.5
16 17 18 19 20	16.6 16.2 15.5 16.2 16.6	15.4 14.8 13.8 12.7 15.6	16.1 15.6 14.5 14.0 16.1	15.0 15.0 12.9 12.2 12.4	13.5 12.9 12.0 10.7 11.1	14.1 14.1 12.4 11.5 11.8	8.4 7.1 7.2 8.5 11.9	7.1 5.5 5.3 6.9 8.5	7.6 6.3 6.2 7.5 10.5	3.1 3.1 2.1 1.1 3.5	1.6 2.1 0.3 0.0 0.4	2.4 2.6 1.0 0.6 1.9
21 22 23 24 25	16.7 15.2 14.9 14.8 14.6	15.2 13.8 13.4 14.4 14.2	16.1 14.5 14.2 14.6 14.3	13.1 13.0 12.4 11.9 12.1	11.9 12.4 11.0 10.7 11.2	12.4 12.8 11.5 11.3 11.6	9.4 8.1 7.4 7.5 7.4	6.9 5.4 5.7 6.6 6.0	7.8 6.8 6.7 7.0 6.9	3.2 2.9 2.7 0.6 0.9	2.4 1.3 0.0 0.0 0.1	2.7 2.3 1.2 0.2 0.5
26 27 28 29 30 31	15.6 15.6 16.2 15.2 13.4 13.1	14.0 15.0 15.2 13.4 12.9 12.3	14.7 15.3 15.6 14.2 13.1 12.7	12.0 10.2 9.6 7.8 9.1	10.2 9.5 7.6 6.4 7.5	11.3 9.8 8.1 7.0 8.2	6.2 5.5 5.3 6.3 6.8 8.7	5.0 3.8 3.2 3.7 4.3 5.7	5.7 4.7 4.3 4.9 5.6 7.0	2.1 1.7 1.5 4.2 4.5 4.3	0.3 0.1 0.0 1.4 3.7 3.6	1.1 0.8 0.6 2.6 4.1 4.0
MONTH	24.5	12.3	17.5	17.0	6.4	12.1	11.9	2.0	6.6	12.0	0.0	3.8
		FEBRUARY	•		MARCH			APRIL			MAY	
1 2 3 4 5	6.2 6.5 7.9 11.2 8.3	4.3 4.0 4.4 7.8 5.8	5.1 5.1 6.1 9.3 6.9	 	 	 	 	 		 	 	
6 7 8 9 10	6.3 6.1 6.1	4.1	5.0									
	6.2 6.1	4.0 4.3 3.6 4.9	5.0 5.0 5.1 4.7 5.4	 	 	 	 	 	 	 		
11 12 13 14 15	6.2	4.3 3.6	5.0 5.1 4.7			 	 	 	 	 	 	
12 13 14	6.2 6.1 6.7 7.0 5.9 5.9	4.3 3.6 4.9 3.6 4.1 2.9 3.8	5.0 5.1 4.7 5.4 5.1 5.5 4.5 4.9	 	 	 	 	 	 		 	
12 13 14 15 16 17 18 19	6.2 6.1 6.7 7.0 5.9 5.9 7.0 6.0 2.4 5.2 6.7	4.3 3.6 4.9 3.6 4.1 2.9 3.8 5.9 0.8 0.1 2.4 3.6	5.0 5.1 4.7 5.4 5.1 5.5 4.5 4.9 6.4 3.6 1.2 3.6 4.9	 	 		18.6 19.6 19.5 17.3 13.5	 14.1 15.4 15.8 13.3 12.6	 16.2 17.4 17.6 14.4 13.1		 	
12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	6.2 6.1 6.7 7.0 5.9 7.0 6.0 2.4 5.2 6.7 8.4 7.6 9.2 9.8 10.0 9.5 8.3 5.4	4.3 3.6 4.9 3.6 4.1 2.9 3.8 5.9 0.8 0.1 2.4 3.6 5.5 6.2 7.5 7.5 6.0	5.0 5.1 4.7 5.4 5.1 5.5 4.5 4.9 6.4 3.6 4.9 6.8 7.0 8.8 7.9	 			18.6 19.6 19.5 17.3 13.5 15.5 15.9 17.7 16.8 16.1 15.5 17.7	 14.1 15.4 15.8 13.3 12.6 12.7 13.8 15.3 13.4 12.6	 16.2 17.4 17.6 14.4 13.1 13.9 14.8 16.3 15.1 14.5			
12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	6.2 6.1 6.7 7.0 5.9 7.0 6.0 2.4 5.2 6.7 8.4 7.6 9.2 9.8 10.0 9.5 8.3 5.4	4.3 3.6 4.9 3.6 4.1 2.9 3.8 5.9 0.8 0.1 2.4 3.6 5.5 6.2 7.5 7.5 6.0 7.2 5.4 3.9	5.0 5.1 4.7 5.4 5.1 5.5 4.5 4.9 6.4 3.6 4.9 6.8 7.0 8.0 8.8 7.9 8.4 6.6 4.5 				18.6 19.6 19.5 17.3 13.5 15.5 15.9 17.7 16.8 16.1 15.5 17.7	15.4 15.8 13.3 12.6 12.7 13.8 15.3 13.4 12.6 14.5	17.4 17.6 14.4 13.1 13.9 14.8 16.3 15.1 14.5 15.0 16.1 16.3 16.8			