

CAPE FEAR RIVER BASIN

0209749990 UNIVERSITY LAKE AT INTAKES NEAR CHAPEL HILL, NC

LOCATION.--Lat 35°53'48", long 79°05'33", Orange County, Hydrologic Unit 03030002, at Orange Water and Sewage Authority intakes, and 1.8 mi southwest of Chapel Hill.

DRAINAGE AREA.--30 mi².

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

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll a and b analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAMPLING DEPTH (M) (00098)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BAROMETRIC PRESURE (MM HG) (00025)	TRANSPARENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS-SOLVED (PERCENT SATURATION) (00300)	OXYGEN, DIS-SOLVED (MG/L) (00301)	HARDNESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)
OCT													
30...	0920	1.0	93	6.9	16.8	20	761	.60	5.9	61	34	8.86	2.85
30...	0921	4.0	111	6.7	16.3	--	761	--	.6	6	--	--	--
30...	0922	7.9	467	7.2	14.8	--	761	--	.6	6	--	--	--
APR													
20...	1530	1.0	74	7.1	18.1	25	760	.90	8.3	88	25	6.38	2.21
20...	1535	3.0	74	6.9	18.0	--	760	--	8.1	86	--	--	--
20...	1540	5.0	66	6.0	9.8	--	760	--	1.2	11	--	--	--
JUN													
26...	1115	1.0	87	7.2	26.9	25	768	.90	6.6	82	27	7.10	2.30
26...	1120	4.3	123	6.6	16.0	--	768	--	.3	3	--	--	--
26...	1125	8.7	314	6.8	12.0	--	768	--	.4	3	--	--	--
AUG													
28...	0930	1.0	86	8.6	28.6	12	760	.60	8.1	105	28	6.94	2.54
28...	0935	4.0	202	7.0	17.6	--	760	--	.2	2	--	--	--
28...	0940	7.7	362	7.2	12.8	--	760	--	.5	5	--	--	--

DATE	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORPTION RATIO (00931)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	BICARBONATE, DIS-SOLVED (MG/L AS HCO3) (99440)	ANC WATER UNFLTRD FIELD (MG/L AS CaCO3) (00419)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT													
30...	5.7	25	.4	2.45	36	30	3.6	5.3	<.2	14.7	73	<.001	<.005
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
20...	4.8	28	.4	1.93	32	26	6.8	5.0	<.2	10.4	54	.001	<.005
20...	--	--	--	--	--	--	--	--	--	--	--	<.001	<.005
20...	--	--	--	--	--	--	--	--	--	--	--	.003	.136
JUN													
26...	5.0	27	.4	2.20	35	29	4.6	5.1	E.1	12.0	72	<.001	<.005
26...	--	--	--	--	--	--	--	--	--	--	--	.001	.006
26...	--	--	--	--	--	--	--	--	--	--	--	.001	<.005
AUG													
28...	5.3	27	.4	2.85	35	28	3.6	5.0	<.2	15.2	72	<.001	.005
28...	--	--	--	--	--	--	--	--	--	--	--	.005	.011
28...	--	--	--	--	--	--	--	--	--	--	--	.006	.007

DATE	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOROPHYLL-A (UG/L) (70953)	CHLOROPHYLL-B (UG/L) (70954)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM, TOTAL UNFLTRD (UG/L AS Cd) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS Cr) (01034)	COBALT, TOTAL RECOVERABLE (UG/L AS Co) (01037)
OCT													
30...	.012	.78	.79	--	E.051	<.007	2.7	<.1	E25	<2	<.11	<1	<2
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
20...	.006	.60	.60	--	E.033	<.007	2.6	E.1	65	E1	<.11	<1	<2
20...	<.002	--	.62	--	E.036	<.007	--	--	--	--	--	--	--
20...	.066	.44	.50	.64	E.031	<.007	--	--	--	--	--	--	--
JUN													
26...	.008	1.2	1.2	--	E.052	<.007	14.0	E.4	--	--	--	--	--
26...	.082	.62	.70	.71	E.037	<.007	--	--	--	--	--	--	--
26...	1.53	.59	2.1	--	.115	.088	--	--	--	--	--	--	--
AUG													
28...	.004	.83	.83	.84	E.052	<.007	13.0	E.2	--	--	--	--	--
28...	.119	2.7	2.9	2.9	.466	.029	--	--	--	--	--	--	--
28...	E6.84	--	9.1	9.1	.290	.155	--	--	--	--	--	--	--

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0209749990 UNIVERSITY LAKE AT INTAKES NEAR CHAPEL HILL, NC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)	ETHANE-HEXA-CHLORO-WATER UNFLTRD RECOVER (UG/L) (34396)	NAPHTH-ALENE TOTAL (UG/L) (34696)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	1,2-DIBROMO-ETHANE TOTAL (UG/L) (77651)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	DEETHYL-ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)
OCT													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
26...	<.03	<.03	<.1	<.2	<.2	<.2	<.03	<.05	<.04	<.011	E.009	E.003	<.018
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--

