



Water-Data Report 2007

0209684980 CANE CREEK RESERVOIR AT DAM NEAR WHITE CROSS, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 35°57'00", long 79°14'28" referenced to North American Datum of 1983, Orange County, NC, Hydrologic Unit 03030002, above dam, 0.7 mi above North Carolina Highway 54, and 3.6 mi northwest of White Cross.

DRAINAGE AREA.--31.4 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 pheopytin *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 2006 TO SEPTEMBER 2007**

Part 1 of 4

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Time	Color, water, fltrd, 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 std units (00400)	Specif-ic conduc-tance, wat unf μS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)
Oct													
27...	1000	30	1.0	2.00	755	6.8	68	6.8	87	15.2	27	6.61	2.58
27...	1005	--	6.0	--	755	6.7	68	6.7	90	15.2	--	--	--
27...	1010	--	12.0	--	755	M	.0	6.3	162	11.0	--	--	--
Apr													
13...	1145	35	1.0	1.50	757	8.6	85	6.5	62	14.5	23	5.54	2.25
13...	1150	--	7.0	--	757	4.0	36	5.9	64	9.7	--	--	--
13...	1155	--	13.0	--	757	3.0	26	6.2	69	8.6	--	--	--
Jun													
01...	1000	50	1.0	.90	754	--		6.2	74	25.7	23	5.59	2.31
01...	1005	--	6.0	--	754	--		6.0	76	12.4	--	--	--
01...	1010	--	12.0	--	754	--		6.4	92	9.8	--	--	--
Aug													
31...	1045	20	1.0	1.50	749	--		--	79	29.3	24	5.49	2.43
31...	1050	--	6.0	--	749	--		--	105	12.6	--	--	--
31...	1055	--	11.0	--	749	--		--	130	10.0	--	--	--

0209684980 CANE CREEK RESERVOIR AT DAM NEAR WHITE CROSS, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 4

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Date	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf incrm. titr., field, mg/L as CaCO3 (00419)	Bicar- bonate, wat unf incrm. titr., field, mg/L (00450)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	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)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
Oct													
27...	2.27	4.58	28	34	5.96	E.08	7.72	3.00	71	.52	.129	.021	E.001
27...	--	--	--	--	--	--	--	--	--	.53	.124	.017	E.001
27...	--	--	--	--	--	--	--	--	--	2.7	2.48	<.016	.004
Apr													
13...	2.04	4.32	18	22	5.46	<.10	6.57	4.59	51	.54	.023	.183	.003
13...	--	--	--	--	--	--	--	--	--	.55	.136	.291	.008
13...	--	--	--	--	--	--	--	--	--	.71	.294	.278	.008
Jun													
01...	2.00	4.34	19	23	5.24	E.05	8.34	4.29	59	1.4	.159	E.012	E.002
01...	--	--	--	--	--	--	--	--	--	.62	.207	.253	.018
01...	--	--	--	--	--	--	--	--	--	1.0	.564	.047	.002
Aug													
31...	1.97	4.47	21	25	5.63	E.07	7.73	3.34	61	.63	E.010	<.016	<.002
31...	--	--	--	--	--	--	--	--	--	1.1	.621	<.016	E.001
31...	--	--	--	--	--	--	--	E.10	--	2.4	1.71	<.016	.004

0209684980 CANE CREEK RESERVOIR AT DAM NEAR WHITE CROSS, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 4

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Chlorophyll a phyton, fluoro, µg/L (70953)	Pheophytin a, phyton, µg/L (62360)	Aluminum, water, unfltrd recover-able, µg/L (01105)	Arsenic, water, unfltrd µg/L (01002)	Cadmium, water, unfltrd µg/L (01027)	Chromium, 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)
Oct													
27...	<.006	.009	--	7.4	8.8	4.9	8	.73	<.02	.68	.579	E.7	450
27...	E.003	.008	--	--	--	--	--	--	--	--	--	--	481
27...	.116	.173	--	--	--	--	--	--	--	--	--	--	12,400
Apr													
13...	<.006	.027	--	8.0	14.8	2.5	49	.31	<.02	<.60	.15	E1.2	321
13...	E.004	.024	--	--	--	--	--	--	--	--	--	--	460
13...	E.004	.027	--	--	--	--	--	--	--	--	--	--	694
Jun													
01...	E.004	.021	--	10.0	17.2	1.1	--	--	--	--	--	--	348
01...	E.004	.017	--	--	--	--	--	--	--	--	--	--	335
01...	E.005	.029	--	--	--	--	--	--	--	--	--	--	1,110
Aug													
31...	<.012	.020	6.4	8.1	15.4	2.4	--	--	--	--	--	--	97
31...	E.004	.029	--	--	--	--	--	--	--	--	--	--	2,530
31...	.138	.195	9.4	--	--	--	--	--	--	--	--	--	9,670

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Part 4 of 4

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Date	Lead,	Mangan-	Mercury	Molyb-	Nickel,	Selen-	Silver,	Zinc,	
	water,	ese,	water,	denum,	water,	ium,	water,	water,	
	unfltrd	water,	unfltrd	water,	unfltrd	unfltrd	unfltrd	unfltrd	
	recover	recover	recover	recover	recover	recover	recover	recover	
	-able,	-able,	fltrd,	-able,	-able,	-able,	-able,	-able,	
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
	(01051)	(01055)	(71890)	(71900)	(01062)	(01067)	(01147)	(01092)	
Oct									
27...	E.04	1,200	--	.013	.1	.31	.16	<.02	4
27...	--	1,200	--	--	--	--	--	--	--
27...	--	4,600	--	--	--	--	--	--	--
Apr									
13...	.10	61.4	--	<.010	.1	.20	.13	<.02	4.7
13...	--	185	--	--	--	--	--	--	--
13...	--	753	--	--	--	--	--	--	--
Jun									
01...	--	123	--	--	--	--	--	--	--
01...	--	553	--	--	--	--	--	--	--
01...	--	2,340	--	--	--	--	--	--	--
Aug									
31...	--	64.9	.021	.029	--	--	--	--	--
31...	--	4,200	--	--	--	--	--	--	--
31...	--	3,510	<.010	.011	--	--	--	--	--