

Water-Data Report 2008

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 pheophytin *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 2007 TO SEPTEMBER 2008**

Part 1 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and type	Color, water, filtrd, 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, unfiltrd field, std units (00400)
Oct									
05...	0915	Surface water, regular	25	1.0	1.30	757	7.7	101	7.3
05...	0916	QC - Surface water, replicate	--	--	1.30	--	--	--	--
05...	0917	QC - Surface water, replicate	--	--	1.30	--	--	--	--
05...	0920	Surface water, regular	--	5.0	--	757	1.5	15	6.0
05...	0925	Surface water, regular	--	10.0	--	757	2.3	21	6.0
Apr									
21...	0930	Surface water, regular	--	2.4	1.20	--	--	--	--
21...	0935	Surface water, regular	40	1.0	--	748	10.6	112	7.5
21...	0940	Surface water, regular	--	6.0	--	748	4.0	39	6.7
21...	0945	Surface water, regular	--	11.0	--	748	.4	4	7.0
Jun									
26...	0945	Surface water, regular	--	3.2	1.60	--	--	--	--
26...	0950	Surface water, regular	25	1.0	--	753	8.3	106	7.5
26...	0955	Surface water, regular	--	6.0	--	753	.2	2	6.6
26...	1000	Surface water, regular	--	12.0	--	753	.2	2	7.0
Aug									
04...	1145	Surface water, regular	--	3.2	1.60	--	--	--	--
04...	1150	Surface water, regular	25	1.0	--	752	8.2	110	8.0
04...	1155	Surface water, regular	--	6.0	--	752	.2	2	6.8
04...	1200	Surface water, regular	--	12.0	--	752	.2	2	6.8

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Specif-ic							ANC, wat unf	Bicar-bonate,			
	conduc-tance, wat unf $\mu\text{S}/\text{cm}$	Temper-ature, water, deg C	Hard-ness, water, mg/L as CaCO ₃	Calcium water, filtrd, (00900)	Magnes-ium, water, filtrd, (00915)	Potas-sium, water, filtrd, (00925)	Sodium, water, filtrd, (00935)	infl pt titr., field, CaCO ₃ (00930)	wat unf titr., field, (00419)	Chlor-ide, water, filtrd, (00450)	Fluor-ide, water, filtrd, (00940)	Silica, water, filtrd, SiO ₂ (00955)
Oct												
05...	79	29.3	25	5.78	2.60	2.22	4.73	23	28	5.77	E.07	6.09
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	102	14.5	--	--	--	--	--	--	--	--	--	--
05...	130	10.1	--	--	--	--	--	--	--	--	--	<.18
Apr												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	72	17.2	22	5.32	2.17	2.19	4.59	16	20	5.80	E.07	7.14
21...	78	13.1	--	--	--	--	--	--	--	--	--	--
21...	94	12.0	--	--	--	--	--	--	--	--	--	5.72
Jun												
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	78	27.3	23	5.33	2.26	2.38	4.43	18	22	6.09	<.12	7.77
26...	95	15.0	--	--	--	--	--	--	--	--	--	--
26...	123	12.5	--	--	--	--	--	--	--	--	--	.32
Aug												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	80	29.7	24	5.82	2.35	2.38	4.62	19.5	23.8	5.93	<.12	6.90
04...	110	15.1	--	--	--	--	--	--	--	--	--	--
04...	141	12.6	--	--	--	--	--	--	--	--	--	.20

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Residue on evap. 180degC wat flt	Ammonia + org-N, water, mg/L (70300)	Ammonia + water, filtrd, mg/L (00625)	Nitrate + nitrite water, filtrd, mg/L (00608)	Nitrite water, filtrd, mg/L (00631)	Ortho- phosphate, water, filtrd, mg/L (00613)	Phos- phorus, water, unfiltrd mg/L (00671)	Organic carbon, water, filtrd, mg/L (00665)	Organic carbon, water, unfiltrd mg/L (00681)	Chloro- phyll a, phyto- plankton, fluoro- ton, mg/L (00680)	Chloro- phyll a, phyto- plankton, fluoro- ton, μg/L (70953)	Pheo- phytin water, unfiltrd μg/L (62360)	Alum- inum, water, unfiltrd μg/L (01105)	Arsenic water, unfiltrd μg/L (01002)
Oct														
05...	60	.66	<.020	<.016	<.002	E.003	.019	6.7	9.0	--	--	15	E.55	
05...	--	--	--	--	--	--	--	--	--	24.3	2.0	--	--	
05...	--	--	--	--	--	--	--	--	--	25.6	1.8	--	--	
05...	--	1.3	.794	<.016	E.001	E.005	.030	--	--	--	--	--	--	
05...	--	2.7	1.97	<.016	.004	.124	.203	9.4	--	--	--	--	--	
Apr														
21...	--	1.1	.028	.153	.003	<.006	.033	--	--	39.7	4.3	--	--	
21...	66	--	--	--	--	--	--	6.3	10.8	--	--	34	E.31	
21...	--	.71	.219	.249	.004	<.006	.026	--	--	--	--	--	--	
21...	--	1.4	.842	.084	.028	<.006	.030	5.8	--	--	--	--	--	
Jun														
26...	--	.69	E.011	<.016	<.002	<.006	.023	--	--	10.5	3.0	--	--	
26...	69	--	--	--	--	--	--	8.4	10.0	--	--	--	--	
26...	--	1.0	.542	<.016	<.002	<.006	.024	--	--	--	--	--	--	
26...	--	2.7	2.08	<.016	E.002	.063	.103	7.5	--	--	--	--	--	
Aug														
04...	--	.68	<.020	<.016	<.002	E.004	.052	--	--	6.1	1.5	--	--	
04...	70	--	--	--	--	--	--	7.4	7.9	--	--	--	--	
04...	--	1.0	.316	<.016	<.002	E.006	.045	--	--	--	--	--	--	
04...	--	2.8	2.33	<.016	.002	.066	.114	8.9	--	--	--	--	--	

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Cadmium water, unfltrd	Chromium, water, unfltrd	Cobalt water, unfltrd	Copper, water, unfltrd	Iron, water, unfltrd	Lead, water, unfltrd	Manganese, water, unfltrd	Mercury, water, unfltrd	Molybdenum, water, unfltrd	Nickel, water, unfltrd	Selenium, water, unfltrd	Silver, water, unfltrd
	µg/L (01027)	µg/L (01034)	µg/L (01037)	µg/L (01042)	µg/L (01045)	µg/L (01051)	µg/L (01055)	µg/L (71890)	µg/L (71900)	µg/L (01062)	µg/L (01147)	µg/L (01077)
Oct												
05...	<.01	<.40	.12	<1.2	90	<.06	67.8	<.010	<.010	.1	E.09	.15
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	3,070	--	5,410	--	--	--	--	--
05...	--	--	--	--	10,500	--	3,700	<.010	<.010	--	--	--
Apr												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.01	<.40	.16	E.60	166	E.04	38.5	<.010	<.010	E.1	.14	.13
21...	--	--	--	--	206	--	229	--	--	--	--	--
21...	--	--	--	--	580	--	2,590	<.010	<.010	--	--	--
Jun												
26...	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	103	--	36.2	E.010	.028	--	--	--
26...	--	--	--	--	1,180	--	1,220	--	--	--	--	--
26...	--	--	--	--	5,940	--	3,710	<.010	.014	--	--	--
Aug												
04...	--	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	75	--	33.6	<.010	<.010	--	--	--
04...	--	--	--	--	1,140	--	2,710	--	--	--	--	--
04...	--	--	--	--	7,060	--	3,720	<.010	<.010	--	--	--

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

Date	Zinc, water, unfiltrd recover -able, μg/L (01092)
Oct	
05...	<2.0
05...	--
05...	--
05...	--
05...	--
Apr	
21...	--
21...	E1.3
21...	--
21...	--
Jun	
26...	--
26...	--
26...	--
26...	--
Aug	
04...	--
04...	--
04...	--
04...	--