

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, flt'd, 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, unflt'd 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	Specific conductance, wat unf μ S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf infl pt titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unf infl pt titr., field, mg/L (00450)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO ₂ (00955)	Sulfate water, fltrd, mg/L (00945)
Oct													
05...	79	29.3	25	5.78	2.60	2.22	4.73	23	28	5.77	E.07	6.09	3.38
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	7.13
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	7.30
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	6.63
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. 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)	Nitrate + nitrite 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)	Phos- phorus, water, unfltrd mg/L as P (00665)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Chloro- phyll a phyto- plank- ton, fluoro, µg/L (70953)	Pheo- phytin a, phyto- plank- ton, µg/L (62360)	Alum- inum, water, unfltrd recover- able, µg/L (01105)	Arsenic water, unfltrd 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 µg/L (01027)	Chrom- ium, 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)	Lead, water, unfltrd recover- able, µg/L (01051)	Mangan- ese, water, unfltrd recover- able, µg/L (01055)	Mercury water, unfltrd recover- able, µg/L (71890)	Mercury water, unfltrd recover- able, µg/L (71900)	Molyb- denum, water, unfltrd recover- able, µg/L (01062)	Nickel, water, unfltrd recover- able, µg/L (01067)	Selen- ium, water, unfltrd µg/L (01147)	Silver, water, unfltrd recover- able, µg/L (01077)
Oct													
05...	<.01	<.40	.12	<1.2	90	<.06	67.8	<.010	<.010	.1	E.09	.15	<.02
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	<.02
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, unfltrd 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...	--