



Water-Data Report 2007

02087588 LAKE WHEELER ON SWIFT CREEK NEAR RALEIGH, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 35°41'40", long 78°41'38" referenced to North American Datum of 1983, Wake County, NC, Hydrologic Unit 03020201, 0.05 mi above dam, 6.8 mi southwest of Raleigh.

DRAINAGE AREA.--35.8 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2005 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 2006 TO SEPTEMBER 2007

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	Sample type	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 field, std units (00400)	Specif-ic conduc-tance, wat unf 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)
Oct												
26...	0945	Environmental	40	1.0	.80	753	6.7	68	6.5	58	15.9	17
26...	0950	Environmental	--	3.0	--	753	6.5	67	6.4	58	15.9	--
26...	0955	Environmental	--	6.0	--	753	7.2	74	6.4	58	15.9	--
Apr												
26...	0900	Environmental	50	1.0	1.10	757	8.1	92	6.6	71	21.6	20
26...	0905	Environmental	--	3.0	--	757	5.9	62	5.8	70	17.1	--
26...	0910	Environmental	--	6.0	--	757	3.2	32	5.6	74	15.0	--
26...	1005	Blank	--	--	--	--	--	--	--	--	--	--
Jun												
21...	1100	Environmental	30	1.0	1.20	759	8.3	104	8.4	76	27.0	22
21...	1105	Environmental	--	3.0	--	759	.6	7	6.3	73	24.5	--
21...	1110	Environmental	--	6.0	--	759	.3	3	6.8	133	18.1	--
Aug												
29...	0845	Environmental	35	1.0	.70	760	--	--	--	80	29.2	22
29...	0850	Environmental	--	3.0	--	760	--	--	--	81	29.0	--
29...	0855	Environmental	--	6.0	--	760	--	--	--	260	19.5	--

02087588 LAKE WHEELER ON SWIFT CREEK NEAR RALEIGH, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 4

[Remark codes: <, less than; E, estimated.]

Date	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	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)
Oct													
26...	4.29	1.48	2.62	3.18	18	22	3.40	.11	6.72	3.37	48	.74	.134
26...	--	--	--	--	--	--	--	--	--	--	--	.71	.138
26...	--	--	--	--	--	--	--	--	--	--	--	.68	.139
Apr													
26...	5.14	1.62	2.27	4.51	15	18	5.37	E.06	6.38	5.21	52	.56	<.020
26...	--	--	--	--	--	--	--	--	--	--	--	.55	<.020
26...	--	--	--	--	--	--	--	--	--	--	--	.52	.075
26...	.02	<.014	--	<.20	--	--	--	--	.02	--	--	--	<.020
Jun													
21...	5.84	1.92	2.31	5.02	20	24	5.52	E.08	5.87	4.58	57	.60	<.020
21...	--	--	--	--	--	--	--	--	--	--	--	.55	<.020
21...	--	--	--	--	--	--	--	--	--	--	--	.94	.352
Aug													
29...	5.46	2.07	2.56	4.88	21	26	5.63	E.08	6.87	3.39	50	.82	<.020
29...	--	--	--	--	--	--	--	--	--	--	--	.77	E.010
29...	--	--	--	--	--	--	--	--	--	<.18	--	3.5	2.73

02087588 LAKE WHEELER ON SWIFT CREEK NEAR RALEIGH, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 4

[Remark codes: <, less than; E, estimated.]

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	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 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)	Cadmium water, unfltrd µg/L (01027)	Chrom-ium, water, unfltrd recover-able, µg/L (01034)	Cobalt water, unfltrd recover-able, µg/L (01037)
Oct													
26...	.031	<.002	<.006	.050	--	7.3	24.3	17.1	75	1.5	<.02	.80	.287
26...	.029	<.002	<.006	.048	--	--	--	--	--	--	--	--	--
26...	.029	<.002	E.003	.050	--	--	--	--	--	--	--	--	--
Apr													
26...	<.016	<.002	<.006	.038	--	8.6	16.6	7.1	51	.57	E.01	<.60	.16
26...	E.010	<.002	<.006	.037	--	--	--	--	--	--	--	--	--
26...	.022	<.002	<.006	.037	--	--	--	--	--	--	--	--	--
26...	<.016	<.002	<.006	--	--	--	--	--	--	--	--	--	--
Jun													
21...	<.016	<.002	E.003	.039	--	8.3	34.9	10.3	--	--	--	--	--
21...	<.016	<.002	E.004	.035	--	--	--	--	--	--	--	--	--
21...	<.016	.002	<.006	.039	--	--	--	--	--	--	--	--	--
Aug													
29...	<.016	<.002	E.003	.038	5.6	8.9	39.3	9.2	--	--	--	--	--
29...	<.016	<.002	<.006	.041	--	--	--	--	--	--	--	--	--
29...	<.016	.005	<.006	.054	10.2	--	--	--	--	--	--	--	--

02087588 LAKE WHEELER ON SWIFT CREEK NEAR RALEIGH, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 4

[Remark codes: <, less than; E, estimated.]

Date	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 recover- able, µg/L (01147)	Silver, water, unfltrd recover- able, µg/L (01077)	Zinc, water, unfltrd recover- able, µg/L (01092)	Data base number
Oct												
26...	E.8	501	.23	163	--	1.52	.2	.57	.10	<.02	2	01
26...	--	508	--	183	--	--	--	--	--	--	--	01
26...	--	537	--	192	--	--	--	--	--	--	--	01
Apr												
26...	1.6	259	.17	58.3	--	.146	.2	.31	.12	<.02	3.3	01
26...	--	292	--	63.1	--	--	--	--	--	--	--	01
26...	--	385	--	150	--	--	--	--	--	--	--	01
26...	--	--	--	--	--	<.010	--	--	--	--	--	04
Jun												
21...	--	130	--	83.4	--	--	--	--	--	--	--	01
21...	--	184	--	159	--	--	--	--	--	--	--	01
21...	--	8,220	--	3,090	--	--	--	--	--	--	--	01
Aug												
29...	--	167	--	141	<.010	E.009	--	--	--	--	--	01
29...	--	157	--	257	--	--	--	--	--	--	--	01
29...	--	23,400	--	5,230	<.010	.011	--	--	--	--	--	01