

Water-Data Report 2008

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 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)
Nov									
01...	0930	Surface water, regular	30	1.0	.80	761	4.8	51	6.9
01...	0931	QC - Surface water, replicate	--	--	.80	--	--	--	--
01...	0932	QC - Surface water, replicate	--	--	.80	--	--	--	--
01...	0935	Surface water, regular	--	3.0	--	761	4.7	50	6.9
01...	0940	Surface water, regular	--	6.0	--	761	4.8	51	7.0
01...	1424	QC - Artificial, blank	--	--	--	--	--	--	--
Apr									
28...	0915	Surface water, regular	--	2.4	1.20	--	--	--	--
28...	0916	QC - Surface water, replicate	--	2.4	--	--	--	--	--
28...	0920	Surface water, regular	25	1.0	--	755	8.9	103	7.3
28...	0921	QC - Surface water, replicate	15	1.0	--	--	--	--	--
28...	0925	Surface water, regular	--	3.0	--	755	5.5	59	6.6
28...	0930	Surface water, regular	--	6.0	--	755	.3	4	6.5
28...	1034	QC - Artificial, blank	--	--	--	--	--	--	--
Jun									
25...	1000	Surface water, regular	--	2.2	1.10	--	--	--	--
25...	1005	Surface water, regular	40	1.0	--	765	9.0	115	9.0
25...	1010	Surface water, regular	--	3.0	--	765	2.5	31	6.8
25...	1015	Surface water, regular	--	5.0	--	765	.3	4	6.9
Aug									
21...	0915	Surface water, regular	--	1.8	.90	--	--	--	--
21...	0920	Surface water, regular	30	1.0	--	762	5.9	74	7.4
21...	0925	Surface water, regular	--	3.0	--	762	1.4	17	6.9
21...	0930	Surface water, regular	--	6.0	--	762	.2	2	7.2

02087588 LAKE WHEELER ON SWIFT CREEK NEAR RALEIGH, 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, mg/L as CaCO ₃ (00930)	wat unf titr., field, mg/L as CaCO ₃ (00419)	Chlor-ide, water, filtrd, mg/L (00450)	Fluor-ide, water, filtrd, mg/L (00940)	Silica, water, filtrd, mg/L SiO ₂ (00955)
Nov												
01...	79	18.1	23	6.11	1.95	2.92	4.65	23	29	5.20	E.09	6.38
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	79	18.1	--	--	--	--	--	--	--	--	--	--
01...	79	18.1	--	--	--	--	--	--	--	--	--	3.66
01...	--	--	--	--	--	--	--	--	--	--	--	--
Apr												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	72	22.1	18	4.66	1.56	2.25	4.71	14	18	6.09	E.06	6.95
28...	--	--	18	4.61	1.54	2.24	4.76	14	18	6.05	<.12	6.91
28...	74	18.4	--	--	--	--	--	--	--	--	--	--
28...	80	15.5	--	--	--	--	--	--	--	--	--	6.90
28...	--	--	--	<.04	<.020	<.02	E.07	--	--	<.12	<.12	.08
Jun												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	81	28.5	22	5.69	1.95	2.67	5.05	21	24	6.01	E.07	6.20
25...	79	26.6	--	--	--	--	--	--	--	--	--	--
25...	119	21.0	--	--	--	--	--	--	--	--	--	2.13
Aug												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	84	26.6	26	6.79	2.14	3.01	5.41	24.3	29.6	5.93	E.11	7.33
21...	84	26.4	--	--	--	--	--	--	--	--	--	--
21...	243	20.6	--	--	--	--	--	--	--	--	--	1.23

02087588 LAKE WHEELER ON SWIFT CREEK NEAR RALEIGH, 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, fltrd, mg/L (00625)	Nitrate + nitrite water, fltrd, mg/L (00608)	Nitrite water, fltrd, mg/L (00631)	Ortho- phos- phate, water, fltrd, mg/L (00613)	Phos- phorus, water, unfltrd mg/L (00671)	Organic carbon, water, fltrd, mg/L (00665)	Organic carbon, water, unfltrd mg/L (00681)	Chloro- phyll a, phyto- plankton, water, fluoro- ton, mg/L (00680)	Chloro- phyll a, phyto- plankton, water, fluoro- ton, μg/L (70953)	Pheo- phytin a, phyto- plankton, water, fluoro- ton, μg/L (62360)	Alum- inum, water, unfltrd recover- able, μg/L (01105)	Arsenic water, unfltrd μg/L (01002)
Nov														
01...	57	.81	.218	.069	.003	E.003	.044	5.5	6.9	9.5	7.7	86	1.1	
01...	--	--	--	--	--	--	--	--	--	9.0	7.1	--	--	
01...	--	--	--	--	--	--	--	--	--	7.7	6.3	--	--	
01...	--	.94	.224	.071	.003	E.003	.045	--	--	--	--	--	--	
01...	--	.83	.224	.069	.003	<.006	.045	5.6	--	--	--	--	--	
01...	--	--	<.020	<.016	<.002	<.006	--	--	--	--	--	--	--	
Apr														
28...	--	.52	<.020	<.016	<.002	<.006	.029	--	--	10.6	4.6	--	--	
28...	--	.54	<.020	<.016	<.002	E.003	.031	--	--	10.2	4.7	--	--	
28...	58	--	--	--	--	--	--	4.8	7.0	--	--	26	E.56	
28...	59	--	--	--	--	--	--	4.7	7.0	--	--	27	E.58	
28...	--	.52	<.020	<.016	<.002	E.004	.032	--	--	--	--	--	--	
28...	--	.56	.073	<.016	E.001	E.003	.040	4.7	--	--	--	--	--	
28...	--	--	<.020	<.016	<.002	<.006	--	.5	--	--	--	--	--	
Jun														
25...	--	.66	<.020	<.016	<.002	E.003	.034	--	--	--	--	--	--	
25...	60	--	--	--	--	--	--	6.0	8.6	--	--	--	--	
25...	--	.59	<.020	<.016	<.002	E.004	.031	--	--	--	--	--	--	
25...	--	.96	.306	<.016	E.002	E.004	.047	7.0	--	--	--	--	--	
Aug														
21...	--	.71	<.020	<.016	<.002	E.004	.034	--	--	34.9	13.3	--	--	
21...	66	--	--	--	--	--	--	5.6	8.4	--	--	--	--	
21...	--	.66	E.013	<.016	<.002	E.005	.034	--	--	--	--	--	--	
21...	--	1.9	1.11	<.016	E.001	E.004	.053	6.6	--	--	--	--	--	

02087588 LAKE WHEELER ON SWIFT CREEK NEAR RALEIGH, 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 (01067)	µg/L (01147)
Nov												
01...	<.01	<.40	.15	<1.2	355	.14	230	<.010	<.010	.3	.21	.13
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	359	--	261	--	--	--	--	--
01...	--	--	--	--	347	--	254	<.010	<.010	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
Apr												
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.01	E.23	.18	1.5	118	.10	54.1	<.010	<.010	.1	.29	.10
28...	<.01	E.25	.05	E.85	115	.07	54.4	<.010	<.010	.1	.29	.12
28...	--	--	--	--	147	--	72.7	--	--	--	--	--
28...	--	--	--	--	558	--	637	<.010	<.010	--	--	--
28...	--	--	--	--	--	--	--	<.010	<.010	--	--	--
Jun												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	113	--	86.9	<.010	<.010	--	--	--
25...	--	--	--	--	149	--	198	--	--	--	--	--
25...	--	--	--	--	6,030	--	2,460	<.010	<.010	--	--	--
Aug												
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	175	--	114	<.010	<.010	--	--	--
21...	--	--	--	--	149	--	200	--	--	--	--	--
21...	--	--	--	--	5,430	--	5,290	<.010	<.010	--	--	--

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO
SEPTEMBER 2008

Part 5 of 5

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

Date	Zinc, water, unfltrd recover -able, μg/L (01092)	Data base number	Medium code
Nov			
01...	2.3	01	WS
01...	--	04	<i>WSQ</i>
01...	--	04	<i>WSQ</i>
01...	--	01	WS
01...	--	01	WS
01...	--	04	<i>OAQ</i>
Apr			
28...	--	01	WS
28...	--	04	<i>WSQ</i>
28...	2.1	01	WS
28...	3.6	04	<i>WSQ</i>
28...	--	01	WS
28...	--	01	WS
28...	--	04	<i>OAQ</i>
Jun			
25...	--	01	WS
25...	--	01	WS
25...	--	01	WS
25...	--	01	WS
Aug			
21...	--	01	WS
21...	--	01	WS
21...	--	01	WS
21...	--	01	WS