

Water-Data Report 2009

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 2008 TO SEPTEMBER 2009**

Part 1 of 5

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

Date	Time	Medium name	Sample type	Baro-metric pressure, mm Hg (00025)	Color, water, fltrd, Pt-Co units (00080)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)
Oct								
21...	0930	Surface water	Regular	763	--	--	--	--
21...	0931	QC sample - Surface water	Replicate	--	--	--	--	--
21...	0932	QC sample - Surface water	Replicate	763	--	--	--	--
21...	0935	Surface water	Regular	763	30	6.0	64	6.9
21...	0940	Surface water	Regular	763	--	6.0	64	6.9
21...	0945	Surface water	Regular	763	--	6.0	64	6.9
Apr								
16...	1000	Surface water	Regular	--	--	--	--	--
16...	1005	Surface water	Regular	764	70	8.9	90	6.8
16...	1010	Surface water	Regular	764	--	8.7	88	6.8
16...	1015	Surface water	Regular	764	--	7.7	77	6.6
16...	1100	Bottom material	Regular	--	--	--	--	--
16...	1101	QC sample - Bottom material	Replicate	--	--	--	--	--
Jun								
19...	0945	Surface water	Regular	--	--	--	--	--
19...	0950	Surface water	Regular	755	25	9.0	114	7.8
19...	0955	Surface water	Regular	755	--	2.3	28	6.3
19...	1000	Surface water	Regular	755	--	.2	2	6.7
Aug								
20...	1045	Surface water	Regular	--	--	--	--	--
20...	1050	Surface water	Regular	758	30	8.4	111	8.4
20...	1055	Surface water	Regular	758	--	7.8	104	8.2
20...	1100	Surface water	Regular	758	--	.2	2	6.9

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 5

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

Date	Specif-ic		Dis-solved								ANC,		Bicar-
	conduc-tance, wat unf μS/cm @ 25 degC (00095)	Temper-ature, deg C (00010)	Trans-parency Secchi disc, (00078)	Sam-pling depth, meters (00098)	180degC wat flt (70300)	Hard-ness, water, mg/L CaCO3 (00900)	Magnes-ium, water, mg/L (00915)	Potas-sium, water, mg/L (00925)	Sodium, water, mg/L (00935)	infl pt titr., mg/L CaCO3 (00419)	wat unf infl pt titr., mg/L CaCO3 (00450)	bonate, wat unf infl pt titr., mg/L (00940)	Chlor-ide, water, fltrd, mg/L (00940)
Oct													
21...	--	--	.90	1.8	--	--	--	--	--	--	--	--	--
21...	--	--	.90	1.8	--	--	--	--	--	--	--	--	--
21...	--	--	.90	1.8	--	--	--	--	--	--	--	--	--
21...	67	18.6	--	1.0	46	20	5.36	1.67	2.99	3.86	21.2	25.9	4.18
21...	67	18.6	--	2.0	--	--	--	--	--	--	--	--	--
21...	67	18.6	--	4.0	--	--	--	--	--	--	--	--	--
Apr													
16...	--	--	.70	1.4	--	--	--	--	--	--	--	--	--
16...	74	16.1	--	1.0	55	19	5.00	1.56	2.21	5.29	10.4	12.7	7.42
16...	74	16.1	--	3.0	--	--	--	--	--	--	--	--	--
16...	76	15.9	--	5.0	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jun													
19...	--	--	.90	1.8	--	--	--	--	--	--	--	--	--
19...	73	27.1	--	1.0	70	20	5.21	1.67	2.49	4.78	18.1	22.1	6.22
19...	65	23.9	--	3.0	--	--	--	--	--	--	--	--	--
19...	123	19.8	--	5.0	--	--	--	--	--	--	--	--	--
Aug													
20...	--	--	.90	1.8	--	--	--	--	--	--	--	--	--
20...	76	29.8	--	1.0	54	19	5.01	1.69	2.63	4.69	20.8	25.4	5.92
20...	76	29.8	--	3.0	--	--	--	--	--	--	--	--	--
20...	240	20.2	--	6.0	--	--	--	--	--	--	--	--	--

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 5

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

Date	Fluor-ide, water, filtrd, mg/L (00950)	Silica, water, filtrd, mg/L as SiO2 (00955)	Sulfate water, unfiltrd, mg/L (00945)	Ammonia		Nitrate		Ortho-phos-phate, water, filtrd, mg/L (00613)	Phos-phorus, water, unfiltrd mg/L (00665)	Chloro-phyll a, phyto-plank-ton, fluoro, mg/L (70953)	Pheo-phytin a, phyto-plank-ton, mg/L (62360)	Mercury bed sedimnt total digest µg/g (01385)	Alum-inum, water, unfiltrd recover-able, µg/L (01105)
				+ org-N, water, unfiltrd mg/L (00625)	Ammonia water, filtrd, mg/L (00608)	+ nitrite water, filtrd, mg/L (00631)	Nitrite water, filtrd, mg/L (00613)						
Oct													
21...	--	--	--	.72	.145	E.010	<.002	<.008	.038	23.5	13.4	--	
21...	--	--	--	--	--	--	--	--	--	24.0	13.7	--	
21...	--	--	--	--	--	--	--	--	--	24.0	13.2	--	
21...	E.04	6.89	3.66	--	--	--	--	--	--	--	--	28	
21...	--	--	--	.71	.141	E.010	<.002	<.008	.037	--	--	--	
21...	--	--	3.62	.71	.148	E.013	<.002	E.004	.039	--	--	--	
Apr													
16...	--	--	--	.65	E.018	<.016	<.002	<.008	.052	33.4	13.8	--	
16...	E.05	7.04	5.73	--	--	--	--	--	--	--	--	72	
16...	--	--	--	.64	.021	<.016	<.002	<.008	.056	--	--	--	
16...	--	--	5.72	.65	E.020	<.016	E.001	E.005	.055	--	--	--	
16...	--	--	--	--	--	--	--	--	--	--	--	.09	
16...	--	--	--	--	--	--	--	--	--	--	--	.09	
Jun													
19...	--	--	--	.59	<.020	.021	<.002	E.004	.045	23.5	7.6	--	
19...	E.06	5.61	3.82	--	--	--	--	--	--	--	--	--	
19...	--	--	--	.59	.065	.082	.004	E.005	.059	--	--	--	
19...	--	--	1.25	1.0	.325	<.016	E.002	E.004	.052	--	--	--	
Aug													
20...	--	--	--	.74	<.020	<.016	<.002	E.005	.037	25.1	6.0	--	
20...	E.04	6.17	3.01	--	--	--	--	--	--	--	--	--	
20...	--	--	--	.74	<.020	<.016	<.002	E.005	.036	--	--	--	
20...	--	--	--	3.2	2.35	<.016	E.005	E.005	.075	--	--	--	

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 5

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

Date	Cadmium water, unfltrd water, unfltrd -able, -able,	Chrom- ium, water, unfltrd recover	Cobalt water, unfltrd recover	Copper, water, unfltrd recover	Iron, water, unfltrd recover	Lead, water, unfltrd recover	Mangan- ese, water, unfltrd recover	Mercury Mercury water, unfltrd recover	Molyb- denum, water, unfltrd recover	Nickel, water, unfltrd recover	Silver, water, unfltrd recover	Zinc, water, unfltrd recover	
	Cadmium μg/L (01027)	Cadmium μg/L (01034)	Cadmium μg/L (01037)	Cadmium μg/L (01042)	Cadmium μg/L (01045)	Cadmium μg/L (01051)	Cadmium μg/L (01055)	Cadmium μg/L (71890)	Cadmium μg/L (71900)	Cadmium μg/L (01062)	Cadmium μg/L (01067)	Cadmium μg/L (01077)	Cadmium μg/L (01092)
Oct													
21...	--	--	--	--	--	--	--	--	--	--	--	--	
21...	--	--	--	--	--	--	--	--	--	--	--	--	
21...	--	--	--	--	--	--	--	--	--	--	--	--	
21...	<.06	<.40	.15	<4.0	236	E.09	256	E.008	.352	.3	.32	<.06	
21...	--	--	--	--	238	--	246	--	--	--	--	--	
21...	--	--	--	--	233	--	247	<.010	<.010	--	--	--	
Apr													
16...	--	--	--	--	--	--	--	--	--	--	--	--	
16...	<.06	<.40	.19	<4.0	416	.35	79.7	<.010	.011	.1	.34	<.06	
16...	--	--	--	--	487	--	107	--	--	--	--	--	
16...	--	--	--	--	609	--	149	<.010	E.008	--	--	--	
16...	--	--	--	--	--	--	--	--	--	--	--	--	
16...	--	--	--	--	--	--	--	--	--	--	--	--	
Jun													
19...	--	--	--	--	--	--	--	--	--	--	--	--	
19...	--	--	--	--	262	--	74.5	E.009	.016	--	--	--	
19...	--	--	--	--	635	--	133	--	--	--	--	--	
19...	--	--	--	--	6,320	--	2,660	<.010	.024	--	--	--	
Aug													
20...	--	--	--	--	--	--	--	--	--	--	--	--	
20...	--	--	--	--	171	--	135	--	--	--	--	--	
20...	--	--	--	--	187	--	136	--	--	--	--	--	
20...	--	--	--	--	21,800	--	4,770	--	--	--	--	--	

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 5

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

Date	Arsenic water, unfltrd µg/L (01002)	Selen- ium, water, unfltrd µg/L (01147)	Organic carbon, bed sedimnt percent (01395)	Organic carbon, water, filtrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Bed sediment, wet sieved, <.062mm percent (69589)	Data base number	Medium code
Oct								
21...	--	--	--	--	--	--	01	WS
21...	--	--	--	--	--	--	04	WSQ
21...	--	--	--	--	--	--	04	WSQ
21...	1.1	.12	--	5.4	8.0	--	01	WS
21...	--	--	--	--	--	--	01	WS
21...	--	--	--	5.4	--	--	01	WS
Apr								
16...	--	--	--	--	--	--	01	WS
16...	.54	E.10	--	5.9	8.8	--	01	WS
16...	--	--	--	--	--	--	01	WS
16...	--	--	--	5.9	--	--	01	WS
16...	--	--	3.8	--	--	94	01	SB
16...	--	--	3.7	--	--	93	04	SBQ
Jun								
19...	--	--	--	--	--	--	01	WS
19...	--	--	--	6.2	9.1	--	01	WS
19...	--	--	--	--	--	--	01	WS
19...	--	--	--	7.4	--	--	01	WS
Aug								
20...	--	--	--	--	--	--	01	WS
20...	--	--	--	--	9.0	--	01	WS
20...	--	--	--	--	--	--	01	WS
20...	--	--	--	--	--	--	01	WS