

Water-Data Report 2008

02086569 LAKE BUTNER AT DAM NEAR BUTNER, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 36°10'01", long 78°46'20" referenced to North American Datum of 1983, Granville County, NC, Hydrologic Unit 03020201, above dam, 2.1 mi northwest of Butner.

DRAINAGE AREA.--29.371 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2007 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.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 4

[Remark codes: <, less than; E, estimated. Medium codes: WS, surface water; WSQ, surface water quality assurance.]

Date	Time	Medium code	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													
18...	0845	WS	9	20	1.0	2.50	755	8.4	95	7.4	60	20.8	18
18...	0846	WSQ	7	--	--	2.50	--	--	--	--	--	--	--
18...	0847	WSQ	7	--	--	2.50	--	--	--	--	--	--	--
18...	0850	WS	9	--	5.0	--	755	.8	8	6.2	59	14.8	--
18...	0855	WS	9	--	9.0	--	755	.3	3	6.3	64	9.3	--
Apr													
03...	1030	WS	9	--	2.4	1.20	--	--	--	--	--	--	--
03...	1035	WS	9	50	1.0	--	764	9.7	93	6.9	58	13.8	17
03...	1040	WS	9	--	5.0	--	764	8.9	83	6.7	58	12.4	--
03...	1045	WS	9	--	11.0	--	764	7.1	63	6.7	58	10.2	--
Jun													
16...	0945	WS	9	--	3.4	1.70	--	--	--	--	--	--	--
16...	0950	WS	9	40	1.0	--	751	7.7	102	7.3	62	29.1	17
16...	0955	WS	9	--	5.0	--	751	.6	6	6.0	61	13.7	--
16...	1000	WS	9	--	10.0	--	751	1.1	10	6.2	62	11.0	--
Aug													
12...	0930	WS	9	--	4.6	2.30	--	--	--	--	--	--	--
12...	0935	WS	9	25	1.0	--	753	7.3	94	7.2	61	27.6	18
12...	0940	WS	9	--	5.0	--	753	.3	3	6.1	65	15.6	--
12...	0945	WS	9	--	10.0	--	753	.3	2	6.1	65	10.7	--

02086569 LAKE BUTNER AT DAM NEAR BUTNER, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

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 infl pt titr., field, mg/L as CaCO3 (00419)	Bicar- bonate, wat unf infl pt titr., field, mg/L (00450)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (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													
18...	4.19	1.79	.79	4.13	14	17	3.57	<.12	5.61	4.76	43	.37	E.013
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	.40	E.014
18...	--	--	--	--	--	--	--	--	--	4.73	--	.55	.158
Apr													
03...	--	--	--	--	--	--	--	--	--	--	--	.47	.029
03...	4.02	1.70	1.42	3.85	9	10	3.80	<.12	7.04	7.81	51	--	--
03...	--	--	--	--	--	--	--	--	--	--	--	.46	.036
03...	--	--	--	--	--	--	--	--	--	7.27	--	.43	.045
Jun													
16...	--	--	--	--	--	--	--	--	--	--	--	.50	<.020
16...	4.00	1.67	1.32	3.85	9	12	3.61	<.12	4.76	7.35	49	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	.49	E.016
16...	--	--	--	--	--	--	--	--	--	7.58	--	.39	E.020
Aug													
12...	--	--	--	--	--	--	--	--	--	--	--	.39	<.020
12...	4.36	1.72	1.15	3.99	12.0	14.7	3.84	<.12	4.84	7.14	55	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	.38	<.020
12...	--	--	--	--	--	--	--	--	--	7.40	--	.43	.065

02086569 LAKE BUTNER AT DAM NEAR BUTNER, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 4

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

Date	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)	Cadmium water, unfltrd µg/L (01027)	Chrom- ium, water, unfltrd recover- able, µg/L (01034)	Cobalt water, unfltrd recover- able, µg/L (01037)
Oct													
18...	<.016	<.002	<.006	.010	6.2	7.6	1.9	.9	16	E.37	<.01	E.24	.05
18...	--	--	--	--	--	--	1.9	.8	--	--	--	--	--
18...	--	--	--	--	--	--	1.6	.7	--	--	--	--	--
18...	<.016	E.001	E.005	.027	--	--	--	--	--	--	--	--	--
18...	<.016	.002	.019	.058	7.5	--	--	--	--	--	--	--	--
Apr													
03...	.220	.002	E.004	.022	--	--	2.5	1.5	--	--	--	--	--
03...	--	--	--	--	6.8	9.0	--	--	138	E.33	<.01	.42	.14
03...	.220	.002	E.004	.022	--	--	--	--	--	--	--	--	--
03...	.271	E.002	E.005	.023	6.3	--	--	--	--	--	--	--	--
Jun													
16...	<.016	<.002	<.006	.025	--	--	6.3	3.1	--	--	--	--	--
16...	--	--	--	--	9.2	10.6	--	--	--	--	--	--	--
16...	.047	E.001	<.006	.023	--	--	--	--	--	--	--	--	--
16...	.325	<.002	E.004	.024	7.6	--	--	--	--	--	--	--	--
Aug													
12...	<.016	<.002	E.004	.015	--	--	2.7	1.8	--	--	--	--	--
12...	--	--	--	--	8.4	9.7	--	--	--	--	--	--	--
12...	<.016	<.002	E.005	.014	--	--	--	--	--	--	--	--	--
12...	.189	<.002	.006	.015	7.7	--	--	--	--	--	--	--	--

02086569 LAKE BUTNER AT DAM NEAR BUTNER, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

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 (01055)	Mercury water, unfltrd recover- able, µg/L (01055)	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												
18...	E.67	190	.32	65.3	<.010	<.010	.1	.27	.13	<.02	4.3	01
18...	--	--	--	--	--	--	--	--	--	--	--	04
18...	--	--	--	--	--	--	--	--	--	--	--	04
18...	--	1,190	--	1,060	--	--	--	--	--	--	--	01
18...	--	3,360	--	862	<.010	<.010	--	--	--	--	--	01
Apr												
03...	--	--	--	--	--	--	--	--	--	--	--	01
03...	1.3	498	.34	52.1	.014	.020	E.1	.58	.14	<.02	2.7	01
03...	--	514	--	52.6	--	--	--	--	--	--	--	01
03...	--	588	--	63.8	E.008	E.006	--	--	--	--	--	01
Jun												
16...	--	--	--	--	--	--	--	--	--	--	--	01
16...	--	446	--	39.7	.016	.013	--	--	--	--	--	01
16...	--	545	--	488	--	--	--	--	--	--	--	01
16...	--	824	--	514	<.010	E.005	--	--	--	--	--	01
Aug												
12...	--	--	--	--	--	--	--	--	--	--	--	01
12...	--	319	--	26.5	.017	.032	--	--	--	--	--	01
12...	--	358	--	359	--	--	--	--	--	--	--	01
12...	--	1,480	--	721	<.010	.013	--	--	--	--	--	01