02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 36°09′03″, long 78°49′48″ referenced to North American Datum of 1983, Durham County, NC, Hydrologic Unit 03020201, at dam, 3.0 mi southeast of Bahama.

DRAINAGE AREA.--167 mi^2.

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 near-surface nutrient and chlorophyll-a analyses were collected through a zone equal to double the secchi disk depth using the depth-integration sampling technique. Prior to October 1, 2005, samples for chlorophyll were analyzed using a high-performance liquid chromatography method.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 1 of 6

[%, percent; ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; m, meters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Color, water, filtered, platinum cobalt units (00080)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conduc-tance, water, unfiltered, µS/cm at 25°C (00095)
10-20-2011	0945	Surface water	Regular	--	--	--	--	--	--
10-20-2011	0950	Surface water	Regular	744	25	3.9	43	6.7	69
10-20-2011	0955	Surface water	Regular	744	--	.4	4	6.7	99
04-12-2012	0915	Surface water	Regular	--	--	--	--	--	--
04-12-2012	0920	Surface water	Regular	760	--	7.2	75	6.9	66
04-12-2012	0925	Surface water	Regular	760	--	2.4	21	6.7	80
06-25-2012	1015	Surface water	Regular	--	--	--	--	--	--
06-25-2012	1020	Surface water	Regular	752	--	6.6	85	7.2	77
06-25-2012	1025	Surface water	Regular	752	--	M	.0	6.7	84
08-22-2012	0930	Surface water	Regular	--	--	--	--	--	--
08-22-2012	0935	Surface water	Regular	757	--	5.2	66	7.0	75
08-22-2012	0940	Surface water	Regular	757	--	.1	.0	6.6	98

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 02086490, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/02086490.2012.pdf

02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 6

[%, percent; ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; m, meters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Temperature, water, °C (00010)	Transparency, water, in situ, Secchi disc, m (00078)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Depth to 1 percent of surface light, meters (85328)	Sampling depth, m (00098)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)
10-20-2011	0945	--	0.80	--	1.8	1.6	--	--	--
10-20-2011	0950	19.2	--	8.2	--	1.0	59	4.92	2.26
10-20-2011	0955	9.7	--	--	--	10.0	--	--	--
04-12-2012	0915	--	.90	--	2.0	1.8	--	--	--
04-12-2012	0920	17.4	--	5.5	--	1.0	49	4.69	2.14
04-12-2012	0925	8.7	--	--	--	13.0	--	--	--
06-25-2012	1015	--	2.20	--	2.4	4.4	--	--	--
06-25-2012	1020	28.1	--	5.5	--	1.0	50	5.61	2.54
06-25-2012	1025	10.0	--	--	--	11.0	--	--	--
08-22-2012	0930	--	1.00	--	1.2	2.0	--	--	--
08-22-2012	0935	27.6	--	5.9	--	1.0	52	5.28	2.61
08-22-2012	0940	12.2	--	--	--	8.0	--	--	--

02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 3 of 6

[%, percent; ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; m, meters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, inflection-point, incremental titration method, field, mg/L as $CaCO_3$ (00419)	Bi-carbonate, water, unfiltered, inflection-point, incremental titration method, field, mg/L (00450)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO_2 (00955)	Sulfate, water, filtered, mg/L (00945)
10-20-2011	0945	--	--	--	--	--	--	--	--
10-20-2011	0950	2.42	4.17	20.8	25.4	4.92	.07	8.31	2.91
10-20-2011	0955	--	--	--	--	--	--	--	--
04-12-2012	0915	--	--	--	--	--	--	--	--
04-12-2012	0920	1.97	4.43	17.2	21.0	5.23	< .04	9.07	4.32
04-12-2012	0925	--	--	--	--	--	--	--	--
06-25-2012	1015	--	--	--	--	--	--	--	--
06-25-2012	1020	2.35	5.06	20.4	24.8	5.42	.08	8.05	2.82
06-25-2012	1025	--	--	--	--	--	--	--	--
08-22-2012	0930	--	--	--	--	--	--	--	--
08-22-2012	0935	2.48	4.75	22.8	27.8	4.83	.07	8.46	2.75
08-22-2012	0940	--	--	--	--	--	--	--	--

02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 6

[%, percent; ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; m, meters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Orthophos-phate, water, filtered, mg/L as P (00671)	Phosphorus, water, unfiltered, mg/L as P (00665)	Chloro-phyll a, phyto-plankton, chromato-graphic-fluoro-metric method, µg/L (70953)	Aluminum, water, unfiltered, recover-able, µg/L (01105)	Cadmium, water, unfiltered, µg/L (01027)
10-20-2011	**0945**	0.73	0.086	< .01	< .004	0.031	10.1	--	--
10-20-2011	**0950**	--	--	--	--	--	--	50.9	< .016
10-20-2011	**0955**	.88	.347	< .01	.005	.037	--	--	--
04-12-2012	**0915**	.74	.070	.11	.004	.048	8.5	--	--
04-12-2012	**0920**	--	--	--	--	--	--	142	< .016
04-12-2012	**0925**	.39	.011	.31	.004	.021	--	--	--
06-25-2012	**1015**	.66	< .010	< .01	< .004	.034	9.9	--	--
06-25-2012	**1020**	--	--	--	--	--	--	--	--
06-25-2012	**1025**	.54	.108	.06	.005	.027	--	--	--
08-22-2012	**0930**	.91	.066	.01	< .004	.054	11.0	--	--
08-22-2012	**0935**	--	--	--	--	--	--	--	--
08-22-2012	**0940**	.98	.385	.01	< .004	.041	--	--	--

02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; ANC, acid neutralizing capacity; $CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; m, meters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; M, presence verified but not quantified]

Date	Sample start time	Chromium, water, unfiltered, recoverable, µg/L (01034)	Cobalt, water, unfiltered, recoverable, µg/L (01037)	Copper, water, unfiltered, recoverable, µg/L (01042)	Iron, water, unfiltered, recoverable, µg/L (01045)	Lead, water, unfiltered, recoverable, µg/L (01051)	Manganese, water, unfiltered, recoverable, µg/L (01055)	Mercury, water, unfiltered, recoverable, µg/L (71900)	Molybdenum, water, unfiltered, recoverable, µg/L (01062)	Nickel, water, unfiltered, recoverable, µg/L (01067)
10-20-2011	0945	--	--	--	--	--	--	--	--	--
10-20-2011	0950	.31	.24	.80	299	.13	227	.008	.12	.26
10-20-2011	0955	--	--	--	3,060	--	1,000	--	--	--
04-12-2012	0915	--	--	--	--	--	--	--	--	--
04-12-2012	0920	< .30	.15	2.4	583	.32	44.6	.184	.10	.68
04-12-2012	0925	--	--	--	518	--	173	--	--	--
06-25-2012	1015	--	--	--	--	--	--	--	--	--
06-25-2012	1020	--	--	--	217	--	27.5	--	--	--
06-25-2012	1025	--	--	--	995	--	594	--	--	--
08-22-2012	0930	--	--	--	--	--	--	--	--	--
08-22-2012	0935	--	--	--	87.7	--	67.8	--	--	--
08-22-2012	0940	--	--	--	4,600	--	1,300	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 6 of 6

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Date	Sample start time	Silver, water, unfiltered, recoverable, µg/L (01077)	Zinc, water, unfiltered, recoverable, µg/L (01092)	Arsenic, water, unfiltered, µg/L (01002)	Selenium, water, unfiltered, µg/L (01147)	Organic carbon, water, unfiltered, mg/L (00680)
10-20-2011	0945	--	--	--	--	--
10-20-2011	0950	< .015	< 3.0	.56	.173	7.9
10-20-2011	0955	--	--	--	--	--
04-12-2012	0915	--	--	--	--	--
04-12-2012	0920	< .015	6.2	.46	.170	14.4
04-12-2012	0925	--	--	--	--	--
06-25-2012	1015	--	--	--	--	--
06-25-2012	1020	--	--	--	--	10.4
06-25-2012	1025	--	--	--	--	--
08-22-2012	0930	--	--	--	--	--
08-22-2012	0935	--	--	--	--	8.2
08-22-2012	0940	--	--	--	--	--