



Water-Data Report 2011

0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 35°43'39", long 79°02'34" referenced to North American Datum of 1983, Chatham County, NC, Hydrologic Unit 03030002, at Bells Landing and 2.0 mi southeast of Griffins Crossroads.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1991-95, 1999 to current year.

REMARKS.--Station operated to define water quality as part of a regional surface-water quality assessment. A GC/FID scan for trace organic compounds was performed on samples collected in November 1994 and May 1995. Results may be obtained from the USGS Water Science Center, Raleigh. 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.

0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 1 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; m, meters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than]

Date	Sample start time	Medium name	Sample type	Color, water, filtered, platinum cobalt units	Dissolved oxygen, water, unfiltered, mg/L	Dissolved oxygen, water, unfiltered, % saturation	pH, water, unfiltered, field, standard units
				Barometric pressure, mm Hg (00025)	(00080)	(00300)	(00400)
10-06-2010	0900	Surface water	Regular	--	--	--	--
10-06-2010	0905	Surface water	Regular	764	30	6.1	69
10-06-2010	0910	Surface water	Regular	764	--	6.0	68
10-06-2010	0915	Surface water	Regular	764	--	6.3	71
12-10-2010	0915	Surface water	Regular	--	--	--	--
12-10-2010	0920	Surface water	Regular	769	20	9.3	79
12-10-2010	0925	Surface water	Regular	769	--	9.2	78
12-10-2010	0930	Surface water	Regular	769	--	8.9	76
02-23-2011	1155	Surface water	Regular	--	--	--	--
02-23-2011	1200	Surface water	Regular	769	25	12.6	107
02-23-2011	1205	Surface water	Regular	769	--	12.3	104
02-23-2011	1210	Surface water	Regular	769	--	11.8	99
04-07-2011	1015	Surface water	Regular	--	--	--	--
04-07-2011	1020	Surface water	Regular	764	25	9.2	90
04-07-2011	1025	Surface water	Regular	764	--	9.0	87
04-07-2011	1030	Surface water	Regular	764	--	8.7	84
06-21-2011	0900	Surface water	Regular	--	--	--	--
06-21-2011	0901	QC sample - Surface water	Replicate	--	--	--	--
06-21-2011	0905	Surface water	Regular	761	15	8.8	112
06-21-2011	0906	QC sample - Surface water	Replicate	761	15	--	--
06-21-2011	0910	Surface water	Regular	761	--	8.0	101
06-21-2011	0915	Surface water	Regular	761	--	1.6	19
06-21-2011	1149	QC sample - Artificial	Blank	--	--	--	--
06-21-2011	1153	QC sample - Artificial	Blank	--	--	--	--
08-11-2011	0930	Surface water	Regular	--	--	--	--
08-11-2011	0935	Surface water	Regular	749	--	7.7	105
08-11-2011	0940	Surface water	Regular	749	--	7.7	104

0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; m, meters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than]

Date	Sample start time	Specific conduc-		Trans-		Dissolved		Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)
		conductance, water, unfiltered, µS/cm at 25 °C (00095)	temperature, water, °C (00010)	transparency, water, in situ, Secchi disc, m (00078)	Sampling depth, m (00098)	solids dried at 180 °C, water, filtered, mg/L (70300)	Hardness, water, mg/L as CaCO ₃ (00900)		
10-06-2010	0900	--	--	.80	1.6	--	--	--	--
10-06-2010	0905	175	21.7	--	1.0	108	31.7	7.82	2.96
10-06-2010	0910	175	21.7	--	3.0	--	--	--	--
10-06-2010	0915	167	21.5	--	7.0	--	--	--	--
12-10-2010	0915	--	--	.70	1.4	--	--	--	--
12-10-2010	0920	164	8.7	--	1.0	102	31.2	7.74	2.88
12-10-2010	0925	164	8.7	--	3.0	--	--	--	--
12-10-2010	0930	164	8.6	--	6.0	--	--	--	--
02-23-2011	1155	--	--	.90	1.8	--	--	--	--
02-23-2011	1200	168	9.0	--	1.0	98	32.4	8.05	2.98
02-23-2011	1205	168	8.7	--	3.0	--	--	--	--
02-23-2011	1210	169	8.4	--	6.0	--	--	--	--
04-07-2011	1015	--	--	.90	1.8	--	--	--	--
04-07-2011	1020	181	14.5	--	1.0	106	32.4	7.94	3.05
04-07-2011	1025	181	14.3	--	3.0	--	--	--	--
04-07-2011	1030	182	13.9	--	7.0	--	--	--	--
06-21-2011	0900	--	--	1.10	2.2	--	--	--	--
06-21-2011	0901	--	--	1.10	2.2	--	--	--	--
06-21-2011	0905	201	28.0	--	1.0	119	36.0	8.94	3.31
06-21-2011	0906	--	--	--	1.0	116	36.0	8.92	3.35
06-21-2011	0910	200	27.7	--	3.0	--	--	--	--
06-21-2011	0915	203	25.6	--	6.0	--	--	--	--
06-21-2011	1149	--	--	--	--	<.09	<.02	<.008	<.02
06-21-2011	1153	--	--	--	--	<.09	<.02	<.008	<.02
08-11-2011	0930	--	--	1.00	2.0	--	--	--	--
08-11-2011	0935	210	30.4	--	1.0	120	35.1	8.47	3.40
08-11-2011	0940	209	30.4	--	3.0	--	--	--	--

0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; m, meters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than]

Date	Sample start time	Bi-		ANC, water, carbonate, unfiltered, water, inflection-point, unfiltered, inflection-point, incremental titration titration method, field, mg/L as CaCO ₃ (00419)		Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)
		Sodium, water, filtered, mg/L (00930)	method, field, mg/L as CaCO ₃ (00450)						
10-06-2010	0900	--	--	--	--	--	--	--	.71
10-06-2010	0905	20.4	40.8	49.8	18.5	.17	4.38	13.3	--
10-06-2010	0910	--	--	--	--	--	--	--	.72
10-06-2010	0915	--	--	--	--	--	--	--	.77
12-10-2010	0915	--	--	--	--	--	--	--	.59
12-10-2010	0920	18.9	32.6	39.7	18.0	.17	5.37	14.4	--
12-10-2010	0925	--	--	--	--	--	--	--	.60
12-10-2010	0930	--	--	--	--	--	--	--	.62
02-23-2011	1155	--	--	--	--	--	--	--	.67
02-23-2011	1200	20.3	33.0	40.2	18.4	.18	3.25	16.2	--
02-23-2011	1205	--	--	--	--	--	--	--	1.2
02-23-2011	1210	--	--	--	--	--	--	--	.66
04-07-2011	1015	--	--	--	--	--	--	--	.74
04-07-2011	1020	20.8	33.2	40.4	20.0	.15	.63	17.2	--
04-07-2011	1025	--	--	--	--	--	--	--	.72
04-07-2011	1030	--	--	--	--	--	--	--	.68
06-21-2011	0900	--	--	--	--	--	--	--	.57
06-21-2011	0901	--	--	--	--	--	--	--	.53
06-21-2011	0905	23.4	39.0	45.2	22.4	.19	1.20	17.7	--
06-21-2011	0906	23.4	38.8	45.3	22.3	.20	1.20	17.7	--
06-21-2011	0910	--	--	--	--	--	--	--	.56
06-21-2011	0915	--	--	--	--	--	--	--	.70
06-21-2011	1149	<.06	--	--	<.06	<.04	<.03	<.09	<.05
06-21-2011	1153	<.06	--	--	1.23	<.04	<.03	<.09	.08
08-11-2011	0930	--	--	--	--	--	--	--	.67
08-11-2011	0935	23.7	44.1	53.4	23.1	.18	1.93	16.0	--
08-11-2011	0940	--	--	--	--	--	--	--	.62

0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 4 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; m, meters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than]

Date	Sample start time	Nitrate plus nitrite, water, filtered, mg/L as N (00608)		Orthophosphate, water, filtered, mg/L as P (00613)		Phosphorus, water, unfiltered, mg/L as P (00665)		Aluminum, water, recoverable, µg/L (01105)		Chromium, water, Cadmium, water, unfiltered, µg/L (01027)	
		Ammonia, water, filtered, mg/L as N (00631)	Nitrite, water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, unfiltered, mg/L as P (00665)	Aluminum, water, recoverable, µg/L (01105)	Chromium, water, recoverable, µg/L (01034)	Cadmium, water, unfiltered, µg/L (01027)	Chromium, water, recoverable, µg/L (01034)	Cadmium, water, unfiltered, µg/L (01027)	Chromium, water, recoverable, µg/L (01034)
10-06-2010	0900	.223	.125	.013	.004	.040	--	--	--	--	--
10-06-2010	0905	--	--	--	--	--	77	<.05	<.21		
10-06-2010	0910	.231	.119	.012	.004	.040	--	--	--	--	--
10-06-2010	0915	.192	.083	.009	<.004	.053	--	--	--	--	--
12-10-2010	0915	.025	.289	.023	.005	.037	--	--	--	--	--
12-10-2010	0920	--	--	--	--	--	--	--	--	--	--
12-10-2010	0925	.022	.288	.024	.005	.037	--	--	--	--	--
12-10-2010	0930	.028	.288	.026	.005	.038	--	--	--	--	--
02-23-2011	1155	<.010	.195	.003	<.004	.037	--	--	--	--	--
02-23-2011	1200	--	--	--	--	--	--	--	--	--	--
02-23-2011	1205	<.010	.199	.003	<.004	.036	--	--	--	--	--
02-23-2011	1210	<.010	.209	.003	<.004	.040	--	--	--	--	--
04-07-2011	1015	.112	.160	.006	<.004	.048	--	--	--	--	--
04-07-2011	1020	--	--	--	--	--	146	<.05	.26		
04-07-2011	1025	.115	.159	.005	<.004	.039	--	--	--	--	--
04-07-2011	1030	.131	.159	.005	.004	.037	--	--	--	--	--
06-21-2011	0900	.012	<.008	.002	<.004	.033	--	--	--	--	--
06-21-2011	0901	.015	<.008	.002	<.004	.021	--	--	--	--	--
06-21-2011	0905	--	--	--	--	--	--	--	--	--	--
06-21-2011	0906	--	--	--	--	--	--	--	--	--	--
06-21-2011	0910	.021	<.008	.002	<.004	.019	--	--	--	--	--
06-21-2011	0915	.224	.013	.003	<.004	.037	--	--	--	--	--
06-21-2011	1149	.022	<.008	<.001	<.004	<.004	<3	<.05	<.21		
06-21-2011	1153	.020	<.008	<.001	<.004	<.004	4	<.05	<.21		
08-11-2011	0930	<.010	<.008	--	<.004	.026	--	--	--	--	--
08-11-2011	0935	--	--	--	--	--	--	--	--	--	--
08-11-2011	0940	.012	<.008	--	<.004	.027	--	--	--	--	--

0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 5 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; m, meters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than]

Date	Sample start time	Cobalt, water, unfiltered, recoverable, micrograms per liter (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, micrograms per liter (01062)	Nickel, water, unfiltered, recoverable, µg/L (01067)	Silver, water, unfiltered, recoverable, µg/L (01077)
10-06-2010	0900	--	--	--	--	--	--	--	--	--
10-06-2010	0905	.18	<.70	258	.19	212	<.005	1.6	.47	<.01
10-06-2010	0910	--	--	281	--	213	--	--	--	--
10-06-2010	0915	--	--	352	--	215	--	--	--	--
12-10-2010	0915	--	--	--	--	--	--	--	--	--
12-10-2010	0920	--	--	189	--	120	--	--	--	--
12-10-2010	0925	--	--	184	--	120	--	--	--	--
12-10-2010	0930	--	--	200	--	126	--	--	--	--
02-23-2011	1155	--	--	--	--	--	--	--	--	--
02-23-2011	1200	--	--	145	--	65.9	--	--	--	--
02-23-2011	1205	--	--	146	--	66.0	--	--	--	--
02-23-2011	1210	--	--	170	--	70.7	--	--	--	--
04-07-2011	1015	--	--	--	--	--	--	--	--	--
04-07-2011	1020	.20	1.2	236	.23	110	<.005	1.1	.82	<.01
04-07-2011	1025	--	--	250	--	102	--	--	--	--
04-07-2011	1030	--	--	269	--	113	--	--	--	--
06-21-2011	0900	--	--	--	--	--	--	--	--	--
06-21-2011	0901	--	--	--	--	--	--	--	--	--
06-21-2011	0905	--	--	42	--	42.7	--	--	--	--
06-21-2011	0906	--	--	43	--	42.8	--	--	--	--
06-21-2011	0910	--	--	58	--	52.1	--	--	--	--
06-21-2011	0915	--	--	283	--	731	--	--	--	--
06-21-2011	1149	<.02	<.70	<5	<.04	<.4	<.005	<.1	<.12	<.01
06-21-2011	1153	.57	<.70	20	.05	1.7	<.005	<.1	.19	<.01
08-11-2011	0930	--	--	--	--	--	--	--	--	--
08-11-2011	0935	--	--	68	--	51.1	--	--	--	--
08-11-2011	0940	--	--	74	--	50.9	--	--	--	--

0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 6 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; m, meters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than]

Date	Sample start time	Zinc, water, unfiltered, recover- able, µg/L (01092)	Arsenic, water, unfiltered, µg/L (01002)	Selenium, water, unfiltered, µg/L (01147)	Organic carbon, water, unfiltered, mg/L (00680)
10-06-2010	0900	--	--	--	--
10-06-2010	0905	< 2.4	.96	.13	7.7
10-06-2010	0910	--	--	--	--
10-06-2010	0915	--	--	--	--
12-10-2010	0915	--	--	--	--
12-10-2010	0920	--	--	--	8.5
12-10-2010	0925	--	--	--	--
12-10-2010	0930	--	--	--	--
02-23-2011	1155	--	--	--	--
02-23-2011	1200	--	--	--	8.4
02-23-2011	1205	--	--	--	--
02-23-2011	1210	--	--	--	--
04-07-2011	1015	--	--	--	--
04-07-2011	1020	3.3	.64	.15	8.3
04-07-2011	1025	--	--	--	--
04-07-2011	1030	--	--	--	--
06-21-2011	0900	--	--	--	--
06-21-2011	0901	--	--	--	--
06-21-2011	0905	--	--	--	8.5
06-21-2011	0906	--	--	--	8.8
06-21-2011	0910	--	--	--	--
06-21-2011	0915	--	--	--	--
06-21-2011	1149	< 2.4	< .09	< .05	< .3
06-21-2011	1153	< 2.4	< .09	< .05	< .3
08-11-2011	0930	--	--	--	--
08-11-2011	0935	--	--	--	9.4
08-11-2011	0940	--	--	--	--