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Water-Data Report 2012

**0209781125 B. EVERETT JORDAN LAKE NEAR BUOY 8 NEAR BELLS, NC**

Cape Fear Basin  
Haw Subbasin

LOCATION.--Lat 35°45'07", long 79°01'45" referenced to North American Datum of 1983, Chatham County, NC, Hydrologic Unit 03030002, 1.0 mi upstream from U.S Highway 64, and 2.1 mi west of Bells.

DRAINAGE AREA.--256.1 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--April to November 2012.

REMARKS.--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.

0209781125 B. EVERETT JORDAN LAKE NEAR BUOY 8 NEAR BELLS, NC—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 1 of 3

[%, percent; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; 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]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)
04-04-2012	1100	Surface water	Regular	--	--	--	--	--	--
04-04-2012	1105	Surface water	Regular	757	8.3	90	7.4	193	19.2
04-04-2012	1110	Surface water	Regular	757	2.5	26	6.9	202	16.9
04-16-2012	1200	Surface water	Regular	--	--	--	--	--	--
04-16-2012	1205	Surface water	Regular	766	8.0	86	7.5	195	18.7
04-16-2012	1210	Surface water	Regular	766	6.5	68	7.3	193	17.9
05-10-2012	1100	Surface water	Regular	--	--	--	--	--	--
05-10-2012	1105	Surface water	Regular	756	7.5	87	7.6	194	22.3
05-10-2012	1110	Surface water	Regular	756	1.9	22	7.0	196	20.4
05-21-2012	1115	Surface water	Regular	--	--	--	--	--	--
05-21-2012	1120	Surface water	Regular	761	8.8	102	8.1	194	22.9
05-21-2012	1125	Surface water	Regular	761	.2	2	7.0	196	19.6
06-06-2012	1100	Surface water	Regular	--	--	--	--	--	--
06-06-2012	1105	Surface water	Regular	759	7.0	85	7.6	191	25.1
06-06-2012	1110	Surface water	Regular	759	1.9	22	7.1	202	22.2
06-21-2012	1000	Surface water	Regular	--	--	--	--	--	--
06-21-2012	1005	Surface water	Regular	760	9.2	116	8.8	197	27.2
06-21-2012	1010	Surface water	Regular	760	.3	3	7.1	226	21.4
07-05-2012	1030	Surface water	Regular	--	--	--	--	--	--
07-05-2012	1035	Surface water	Regular	758	8.3	108	9.1	198	29.2
07-05-2012	1040	Surface water	Regular	758	.2	2	7.2	205	25.3
07-18-2012	1030	Surface water	Regular	--	--	--	--	--	--
07-18-2012	1035	Surface water	Regular	757	7.0	92	8.4	198	29.1
07-18-2012	1040	Surface water	Regular	757	.2	2	7.0	222	24.5
08-02-2012	1145	Surface water	Regular	--	--	--	--	--	--
08-02-2012	1150	Surface water	Regular	756	5.7	75	7.7	198	29.8
08-02-2012	1155	Surface water	Regular	756	.3	4	7.2	221	26.1
08-15-2012	1100	Surface water	Regular	--	--	--	--	--	--
08-15-2012	1105	Surface water	Regular	755	6.3	82	7.5	195	28.4
08-15-2012	1110	Surface water	Regular	755	2.9	37	7.4	202	28.0
08-30-2012	1045	Surface water	Regular	--	--	--	--	--	--
08-30-2012	1050	Surface water	Regular	760	9.7	123	9.0	206	27.6
08-30-2012	1055	Surface water	Regular	760	.3	4	7.1	220	25.6
09-12-2012	1015	Surface water	Regular	--	--	--	--	--	--
09-12-2012	1020	Surface water	Regular	765	6.5	81	7.5	202	26.8
09-12-2012	1025	Surface water	Regular	765	2.5	31	7.2	203	26.6
09-26-2012	1015	Surface water	Regular	--	--	--	--	--	--
09-26-2012	1020	Surface water	Regular	762	7.1	84	7.5	203	23.6
09-26-2012	1025	Surface water	Regular	762	6.4	75	7.5	204	23.3

## 0209781125 B. EVERETT JORDAN LAKE NEAR BUOY 8 NEAR BELLS, NC—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 2 of 3

[%, percent; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; 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]

Date	Sample start time	Turbidity, water, unfiltered, broad band light source (400-680 nm), Trans- parency, multiple angles water, in situ, including 90 +/- 30 degrees, Secchi disc, m (00078)			Depth to 1 percent of surface light, meters (85328)	Sampling depth, m (00098)	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)
		ratiometric correction, NTRU (63676)									
04-04-2012	1100	0.90	--	2.2	1.8	0.84	0.059	0.06	<.004		
04-04-2012	1105	--	8.0	--	1.0	--	--	--	--		
04-04-2012	1110	--	--	--	6.0	.83	.112	.06	<.004		
04-16-2012	1200	.80	--	2.0	1.6	.80	.111	.09	<.004		
04-16-2012	1205	--	11	--	1.0	--	--	--	--		
04-16-2012	1210	--	--	--	5.0	.74	.142	.09	<.004		
05-10-2012	1100	1.00	--	2.5	2.0	.72	.020	.02	<.004		
05-10-2012	1105	--	6.6	--	1.0	--	--	--	--		
05-10-2012	1110	--	--	--	6.0	.68	.083	.09	<.004		
05-21-2012	1115	.90	--	2.2	1.8	.77	<.010	<.01	<.004		
05-21-2012	1120	--	6.9	--	1.0	--	--	--	--		
05-21-2012	1125	--	--	--	7.0	.67	.026	.17	<.004		
06-06-2012	1100	1.20	--	2.3	2.4	.70	<.010	.04	<.004		
06-06-2012	1105	--	4.8	--	1.0	--	--	--	--		
06-06-2012	1110	--	--	--	6.0	.70	<.010	<.01	<.004		
06-21-2012	1000	1.20	--	2.1	2.4	.75	<.010	<.01	<.004		
06-21-2012	1005	--	5.5	--	1.0	--	--	--	--		
06-21-2012	1010	--	--	--	8.0	1.3	.425	<.01	.022		
07-05-2012	1030	.60	--	1.5	1.2	.89	<.010	<.01	<.004		
07-05-2012	1035	--	6.8	--	1.0	--	--	--	--		
07-05-2012	1040	--	--	--	6.0	.88	.152	<.01	<.004		
07-18-2012	1030	.70	--	2.2	1.4	.86	<.010	<.01	<.004		
07-18-2012	1035	--	8.5	--	1.0	--	--	--	--		
07-18-2012	1040	--	--	--	7.0	.87	.019	<.01	<.004		
08-02-2012	1145	.80	--	1.9	1.6	.84	<.010	<.01	<.004		
08-02-2012	1150	--	5.8	--	1.0	--	--	--	--		
08-02-2012	1155	--	--	--	7.0	1.3	.456	<.01	<.004		
08-15-2012	1100	.80	--	1.9	1.6	.86	.050	<.01	<.004		
08-15-2012	1105	--	6.6	--	1.0	--	--	--	--		
08-15-2012	1110	--	--	--	6.0	.85	.110	.01	<.004		
08-30-2012	1045	.60	--	--	1.2	1.0	<.010	<.01	<.004		
08-30-2012	1050	--	6.1	--	1.0	--	--	--	--		
08-30-2012	1055	--	--	--	7.5	1.2	.386	<.01	<.004		
09-12-2012	1015	.70	--	1.5	1.4	.91	.039	<.01	<.004		
09-12-2012	1020	--	6.7	--	1.0	--	--	--	--		
09-12-2012	1025	--	--	--	7.0	.93	.085	<.01	<.004		
09-26-2012	1015	.60	--	1.1	1.2	.86	.030	.02	<.004		
09-26-2012	1020	--	8.8	--	1.0	--	--	--	--		
09-26-2012	1025	--	--	--	7.0	.94	.061	.01	<.004		

## 0209781125 B. EVERETT JORDAN LAKE NEAR BUOY 8 NEAR BELLS, NC—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 3 of 3

[%, percent; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; 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]

Date	Sample start time	Phosphorus, water, unfiltered, mg/L as P (00665)	Chloro-phyll a, phyto-plankton, chromatographic method, µg/L (70953)	Iron, water, filtered, µg/L (01046)	Iron, water, unfiltered, recoverable, µg/L (01045)	Manganese, water, filtered, µg/L (01056)	Manganese, water, unfiltered, recoverable, µg/L (01055)
04-04-2012	1100	0.042	11.8	--	--	--	--
04-04-2012	1105	--	--	26.6	152	3.39	84.2
04-04-2012	1110	.045	--	29.4	191	2.85	114
04-16-2012	1200	.048	17.4	--	--	--	--
04-16-2012	1205	--	--	32.8	232	2.22	148
04-16-2012	1210	.042	--	35.1	242	2.09	163
05-10-2012	1100	.037	16.6	--	--	--	--
05-10-2012	1105	--	--	--	104	--	103
05-10-2012	1110	.044	--	--	154	--	232
05-21-2012	1115	.039	21.8	--	--	--	--
05-21-2012	1120	--	--	6.2	87.7	.82	107
05-21-2012	1125	.040	--	100	229	413	623
06-06-2012	1100	.037	9.1	--	--	--	--
06-06-2012	1105	--	--	< 3.2	74.5	1.16	95.8
06-06-2012	1110	.036	--	4.5	74.9	.84	95.6
06-21-2012	1000	.037	18.4	--	--	--	--
06-21-2012	1005	--	--	< 3.2	62.1	1.16	54.6
06-21-2012	1010	.144	--	548	1,440	2,590	2,510
07-05-2012	1030	.040	63.7	--	--	--	--
07-05-2012	1035	--	--	4.1	85.1	.97	108
07-05-2012	1040	.060	--	68.3	229	1,160	1,210
07-18-2012	1030	.040	36.7	--	--	--	--
07-18-2012	1035	--	--	< 3.2	68.7	.91	140
07-18-2012	1040	.049	--	3.7	75.1	85.1	303
08-02-2012	1145	.043	27.1	--	--	--	--
08-02-2012	1150	--	--	< 3.2	79.2	1.07	158
08-02-2012	1155	.057	--	78.0	242	1,760	1,760
08-15-2012	1100	.038	21.6	--	--	--	--
08-15-2012	1105	--	--	4.6	82.5	.91	139
08-15-2012	1110	.041	--	< 3.2	97.5	.71	152
08-30-2012	1045	.053	42.8	--	--	--	--
08-30-2012	1050	--	--	6.7	117	.48	130
08-30-2012	1055	.058	--	3.7	205	461	861
09-12-2012	1015	.046	34.7	--	--	--	--
09-12-2012	1020	--	--	9.4	81.7	1.72	184
09-12-2012	1025	.049	--	< 3.2	103	.82	239
09-26-2012	1015	.053	38.8	--	--	--	--
09-26-2012	1020	--	--	6.5	185	1.22	191
09-26-2012	1025	.053	--	8.3	190	1.44	196

## 0209781125 B. EVERETT JORDAN LAKE NEAR BUOY 8 NEAR BELLS, NC—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 1 of 3

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Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)
10-11-2012	0945	Surface water	Regular	--	--	--	--	--	--
10-11-2012	0950	Surface water	Regular	763	6.7	74	7.4	197	19.9
10-11-2012	0955	Surface water	Regular	763	7.0	76	7.4	196	20.1
10-24-2012	1015	Surface water	Regular	--	--	--	--	--	--
10-24-2012	1020	Surface water	Regular	761	7.6	81	7.5	194	18.6
10-24-2012	1025	Surface water	Regular	761	7.7	82	7.6	194	18.5
11-07-2012	1000	Surface water	Regular	--	--	--	--	--	--
11-07-2012	1005	Surface water	Regular	753	9.7	93	7.6	194	13.0
11-07-2012	1010	Surface water	Regular	753	9.7	93	7.6	195	13.0

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 2 of 3

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Date	Sample start time	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, situ, ratiometric			Depth to 1 percent of surface	Sampling light, meters (85328)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)		Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Orthophosphate, water, filtered, mg/L as P (00671)
		Transparency, water, in	Secchi disc, m (00078)	correction, NTRU (63676)			Ammonia, water, filtered, mg/L as N (00608)			
10-11-2012	0945	0.60	--	11	1.2	1.2	0.85	0.077	0.01	<.004
10-11-2012	0950	--	--	--	1.0	--	--	--	--	--
10-11-2012	0955	--	--	--	5.0	.85	.078	.01	<.004	<.004
10-24-2012	1015	.60	--	7.4	1.2	1.2	.90	.011	<.01	<.004
10-24-2012	1020	--	--	--	1.0	--	--	--	--	--
10-24-2012	1025	--	--	--	7.0	.86	<.010	<.01	<.004	<.004
11-07-2012	1000	.60	--	7.8	1.3	1.2	.85	<.010	<.01	<.004
11-07-2012	1005	--	--	--	1.0	--	--	--	--	--
11-07-2012	1010	--	--	--	6.0	.86	<.010	<.01	<.004	<.004

**0209781125 B. EVERETT JORDAN LAKE NEAR BUOY 8 NEAR BELLS, NC—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 3 of 3

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Date	Sample start time	Phosphorus, water, unfiltered, mg/L as P (00665)	Chloro-phyll a, phyto-plankton, chromatographic method, µg/L (70953)	Iron, water, filtered, µg/L (01046)	Iron, water, unfiltered, recoverable, µg/L (01045)	Manganese, water, filtered, µg/L (01056)	Manganese, water, unfiltered, recoverable, µg/L (01055)
10-11-2012	0945	0.046	30.2	--	--	--	--
10-11-2012	0950	--	--	6.4	194	1.82	161
10-11-2012	0955	.047	--	6.2	188	1.21	152
10-24-2012	1015	.045	35.3	--	--	--	--
10-24-2012	1020	--	--	< 4.0	164	1.01	138
10-24-2012	1025	.043	--	< 4.0	166	1.21	139
11-07-2012	1000	.050	35.4	--	--	--	--
11-07-2012	1005	--	--	4.8	209	1.59	122
11-07-2012	1010	.047	--	5.2	215	1.78	121