

Water-Data Report 2008

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 35°47'56", long 79°00'21" referenced to North American Datum of 1983, Chatham County, NC, Hydrologic Unit 03030002, .02 mi above Secondary Road 1008, and 0.2 mi east of Farrington.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1992 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.

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Time	Sample medium and 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)
Oct									
17...	0830	Surface water, regular	60	1.0	.30	761	6.9	76	7.8
17...	0831	QC - Surface water, replicate	50	1.0	--	--	--	--	--
17...	0835	Surface water, regular	--	2.0	--	761	4.1	45	7.3
17...	0840	Surface water, regular	--	3.0	--	761	2.3	25	7.2
Dec									
06...	0930	Surface water, regular	--	.80	.40	--	--	--	--
06...	0935	Surface water, regular	40	1.0	--	763	10.4	88	7.7
06...	0940	Surface water, regular	--	2.0	--	763	10.3	88	7.7
06...	0945	Surface water, regular	--	3.0	--	763	10.3	87	7.7
Feb									
26...	0930	Surface water, regular	--	1.2	.60	--	--	--	--
26...	0935	Surface water, regular	25	1.0	--	750	11.4	102	7.8
26...	0940	Surface water, regular	--	2.0	--	750	10.7	95	7.5
26...	0945	Surface water, regular	--	4.0	--	750	3.8	34	7.3
Apr									
23...	0915	Surface water, regular	--	1.0	.50	--	--	--	--
23...	0920	Surface water, regular	50	1.0	--	760	8.4	89	7.2
23...	0925	Surface water, regular	--	3.0	--	760	8.3	88	7.2
23...	0930	Surface water, regular	--	5.0	--	760	7.5	79	7.1
Jun									
19...	0930	Surface water, regular	--	1.4	.70	--	--	--	--
19...	0935	Surface water, regular	50	1.0	--	757	7.4	96	8.1
19...	0940	Surface water, regular	--	2.0	--	757	6.9	90	7.9
19...	0945	Surface water, regular	--	4.0	--	757	2.0	25	7.0
Aug									
06...	1230	Surface water, regular	--	1.2	.60	--	--	--	--
06...	1235	Surface water, regular	50	1.0	--	756	4.2	56	7.2
06...	1240	Surface water, regular	--	2.0	--	756	3.9	52	7.2
06...	1245	Surface water, regular	--	4.0	--	756	.1	2	7.0

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Specific conductance, wat unf μ S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, 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)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate water, fltrd, mg/L (00945)
Oct													
17...	242	20.3	39	10.0	3.39	5.59	33.1	45	55	25.2	.34	3.59	23.5
17...	--	--	39	10.2	3.39	5.62	33.0	44	54	25.1	.33	3.56	23.2
17...	259	20.0	--	--	--	--	--	--	--	--	--	--	--
17...	265	19.9	--	--	--	--	--	--	--	--	--	--	24.6
Dec													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	244	8.4	40	10.4	3.49	5.38	32.2	42	51	24.8	.33	3.39	30.4
06...	244	8.4	--	--	--	--	--	--	--	--	--	--	--
06...	244	8.4	--	--	--	--	--	--	--	--	--	--	30.2
Feb													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	214	9.9	36	9.06	3.16	4.59	27.6	42	52	22.6	.25	.79	26.1
26...	221	9.5	--	--	--	--	--	--	--	--	--	--	--
26...	226	9.5	--	--	--	--	--	--	--	--	--	--	27.6
Apr													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	158	18.1	31	7.79	2.79	3.36	16.9	29	35	15.4	.16	1.59	19.0
23...	158	18.1	--	--	--	--	--	--	--	--	--	--	--
23...	160	17.9	--	--	--	--	--	--	--	--	--	--	19.0
Jun													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	198	28.5	37	9.33	3.31	4.22	20.9	40	48	17.6	.23	.28	18.5
19...	197	28.3	--	--	--	--	--	--	--	--	--	--	--
19...	188	27.4	--	--	--	--	--	--	--	--	--	--	18.3
Aug													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	188	30.4	36	9.22	3.05	4.24	21.2	39.0	47.6	16.4	.24	4.82	17.0
06...	187	30.1	--	--	--	--	--	--	--	--	--	--	--
06...	198	28.8	--	--	--	--	--	--	--	--	--	--	15.0

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	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)	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)
Oct													
17...	141	1.3	E.018	<.016	<.002	E.005	.112	7.3	12.8	57.5	27.3	201	.85
17...	147	1.4	E.016	<.016	E.001	E.005	.110	7.3	12.7	56.8	29.4	--	--
17...	--	1.5	E.016	<.016	E.001	E.004	.136	--	--	--	--	--	--
17...	--	1.4	.050	<.016	E.002	.006	.151	7.3	--	--	--	--	--
Dec													
06...	--	1.2	.092	.173	.012	E.004	.098	--	--	33.9	32.4	--	--
06...	151	--	--	--	--	--	--	7.1	10.6	--	--	--	--
06...	--	1.2	.091	.170	.012	E.003	.091	--	--	--	--	--	--
06...	--	1.0	.094	.172	.012	E.004	.157	7.1	--	--	--	--	--
Feb													
26...	--	1.1	.032	.435	.009	<.006	.081	--	--	38.2	24.8	--	--
26...	130	--	--	--	--	--	--	6.7	10.6	--	--	--	--
26...	--	1.1	.086	.456	.010	<.006	.089	--	--	--	--	--	--
26...	--	1.3	.130	.460	.010	<.006	.099	6.8	--	--	--	--	--
Apr													
23...	--	.99	E.013	<.016	E.001	E.004	.095	--	--	43.0	22.0	--	--
23...	112	--	--	--	--	--	--	8.2	11.1	--	--	327	.63
23...	--	1.0	E.019	E.008	E.002	E.004	.094	--	--	--	--	--	--
23...	--	1.1	.035	E.010	E.002	E.004	.140	8.3	--	--	--	--	--
Jun													
19...	--	.92	<.020	<.016	<.002	<.006	.067	--	--	28.4	17.7	--	--
19...	129	--	--	--	--	--	--	9.5	11.9	--	--	--	--
19...	--	.91	<.020	<.016	<.002	<.006	.064	--	--	--	--	--	--
19...	--	.82	<.020	<.016	<.002	<.006	.064	9.0	--	--	--	--	--
Aug													
06...	--	.91	E.011	<.016	<.002	E.005	.075	--	--	24.4	15.2	--	--
06...	115	--	--	--	--	--	--	8.5	10.7	--	--	--	--
06...	--	.92	E.012	<.016	<.002	.007	.072	--	--	--	--	--	--
06...	--	1.3	.321	<.016	<.002	.025	.153	8.5	--	--	--	--	--

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 5

[QC, quality control sample. Remark codes: <, less than; E, estimated.]

Date	Cadmium water, unfltrd μg/L (01027)	Chrom- ium, water, unfltrd recover- able, μg/L (01034)	Cobalt water, unfltrd recover- able, μg/L (01037)	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 ftrd, μg/L (71890)	Mercury water, unfltrd recover- able, μg/L (71900)	Molyb- denum, water, unfltrd recover- able, μg/L (01062)	Nickel, water, unfltrd recover- able, μg/L (01067)	Selen- ium, water, unfltrd μg/L (01147)	Silver, water, unfltrd recover- able, μg/L (01077)
Oct													
17...	.02	E.37	.36	<1.2	487	.56	249	<.010	E.008	9.6	1.1	.21	<.02
17...	--	--	--	--	484	--	236	<.010	.016	--	--	--	--
17...	--	--	--	--	585	--	266	--	--	--	--	--	--
17...	--	--	--	--	772	--	319	<.010	E.010	--	--	--	--
Dec													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	406	--	238	<.010	<.010	--	--	--	--
06...	--	--	--	--	406	--	237	--	--	--	--	--	--
06...	--	--	--	--	474	--	236	<.010	<.010	--	--	--	--
Feb													
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	308	--	101	<.010	<.010	--	--	--	--
26...	--	--	--	--	409	--	129	--	--	--	--	--	--
26...	--	--	--	--	571	--	171	<.010	<.010	--	--	--	--
Apr													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.01	.54	.38	2.4	665	.74	123	<.010	.012	2.2	1.3	.17	<.02
23...	--	--	--	--	655	--	113	--	--	--	--	--	--
23...	--	--	--	--	1,280	--	209	<.010	.012	--	--	--	--
Jun													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	256	--	134	<.010	<.010	--	--	--	--
19...	--	--	--	--	248	--	139	--	--	--	--	--	--
19...	--	--	--	--	249	--	198	<.010	<.010	--	--	--	--
Aug													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	269	--	221	<.010	E.010	--	--	--	--
06...	--	--	--	--	255	--	215	--	--	--	--	--	--
06...	--	--	--	--	912	--	1,480	<.010	E.008	--	--	--	--

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO
SEPTEMBER 2008

Part 5 of 5

[QC, quality control sample. Remark codes:
 <, less than; E, estimated.]

Date	Zinc, water, unfiltrd recover -able, µg/L (01092)	Data base number	Medium code
Oct			
17...	2.8	01	WS
17...	--	04	WSQ
17...	--	01	WS
17...	--	01	WS
Dec			
06...	--	01	WS
06...	--	01	WS
06...	--	01	WS
06...	--	01	WS
Feb			
26...	--	01	WS
26...	--	01	WS
26...	--	01	WS
26...	--	01	WS
Apr			
23...	--	01	WS
23...	3.4	01	WS
23...	--	01	WS
23...	--	01	WS
Jun			
19...	--	01	WS
19...	--	01	WS
19...	--	01	WS
19...	--	01	WS
Aug			
06...	--	01	WS
06...	--	01	WS
06...	--	01	WS
06...	--	01	WS