



Water-Data Report 2007

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.

DRAINAGE AREA.--

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.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 4

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

| Date | Time | 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 μS/cm 25 degC (00095) | Temper-ature, water, deg C (00010) | Hard-ness, water, mg/L as CaCO3 (00900) | Calcium water, fltrd, mg/L (00915) | Magnes-ium, water, fltrd, mg/L (00925) |
|------------|------|--|---------------------------------|---|--------------------------------------|---------------------------------|---|---|---|------------------------------------|---|------------------------------------|--|
| Oct | | | | | | | | | | | | | |
| 10... | 1100 | 30 | 1.0 | .40 | 761 | 8.4 | 92 | 7.3 | 177 | 19.8 | 29 | 7.39 | 2.54 |
| 10... | 1105 | -- | 2.0 | -- | 761 | 8.3 | 91 | 7.2 | 177 | 19.7 | -- | -- | -- |
| 10... | 1110 | -- | 4.0 | -- | 761 | 8.2 | 89 | 7.2 | 177 | 19.7 | -- | -- | -- |
| Apr | | | | | | | | | | | | | |
| 19... | 1215 | 50 | 1.0 | .60 | 756 | 10.0 | 102 | 7.8 | 138 | 15.9 | 29 | 7.27 | 2.54 |
| 19... | 1220 | -- | 3.0 | -- | 756 | 8.7 | 87 | 6.9 | 138 | 15.4 | -- | -- | -- |
| 19... | 1225 | -- | 6.0 | -- | 756 | 8.2 | 83 | 6.7 | 139 | 15.2 | -- | -- | -- |
| Jun | | | | | | | | | | | | | |
| 28... | 0930 | 40 | 1.0 | .60 | 760 | 5.8 | 74 | 7.5 | 160 | 28.1 | 39 | 9.28 | 3.73 |
| 28... | 0935 | -- | 2.0 | -- | 760 | 5.5 | 70 | 7.4 | 164 | 27.7 | -- | -- | -- |
| 28... | 0940 | -- | 4.0 | -- | 760 | .4 | 5 | 6.8 | 170 | 26.6 | -- | -- | -- |
| Aug | | | | | | | | | | | | | |
| 21... | 1230 | 40 | 1.0 | .40 | 759 | -- | -- | -- | 213 | 28.6 | 36 | 9.17 | 3.10 |
| 21... | 1235 | -- | 2.0 | -- | 759 | -- | -- | -- | 212 | 28.5 | -- | -- | -- |
| 21... | 1240 | -- | 3.0 | -- | 759 | -- | -- | -- | 211 | 28.5 | -- | -- | -- |

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 4

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

| Date | Potas- sium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | ANC, wat unf incrm. titr., field, mg/L as CaCO3 (00419) | Bicar- bonate, wat unf incrm. titr., field, mg/L (00450) | Chlor- ide, water, fltrd, mg/L (00940) | Fluor- ide, water, fltrd, mg/L (00950) | Silica, water, fltrd, mg/L (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) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) |
|------------|--|--|--|---|---|---|--|--|---|--|--|---|--|
| Oct | | | | | | | | | | | | | |
| 10... | 3.85 | 19.6 | 35 | 42 | 16.6 | .26 | 4.52 | 15.8 | 112 | 1.0 | <.020 | .026 | .004 |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | .97 | E.015 | .025 | .004 |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | .88 | E.010 | .022 | .004 |
| Apr | | | | | | | | | | | | | |
| 19... | 2.88 | 14.2 | 29 | 35 | 12.1 | .15 | 1.66 | 12.1 | 86 | .80 | <.020 | .016 | .003 |
| 19... | -- | -- | -- | -- | -- | -- | -- | -- | -- | .76 | .020 | .029 | .003 |
| 19... | -- | -- | -- | -- | -- | -- | -- | -- | -- | .69 | .028 | .026 | .003 |
| Jun | | | | | | | | | | | | | |
| 28... | 5.75 | 45.0 | 33 | 40 | 35.1 | .37 | 4.22 | 27.7 | 215 | 1.5 | <.020 | .220 | .007 |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | .96 | .022 | .283 | .007 |
| 28... | -- | -- | -- | -- | -- | -- | -- | -- | -- | .88 | .068 | .450 | .009 |
| Aug | | | | | | | | | | | | | |
| 21... | 4.37 | 23.6 | 41 | 50 | 19.5 | .27 | 4.08 | 16.3 | 115 | 1.3 | .095 | <.016 | .003 |
| 21... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1.2 | .257 | E.010 | .005 |
| 21... | -- | -- | -- | -- | -- | -- | -- | 16.4 | -- | 1.3 | .301 | E.008 | .006 |

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 4

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

| Date | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, fltrd, mg/L (00681) | Organic carbon, water, unfltrd mg/L (00680) | Chlorophyll a phyton, fluoro, µg/L (70953) | Pheophytin a, phyton, µg/L (62360) | Aluminum, water, unfltrd recover-able, µg/L (01105) | Arsenic, water, unfltrd µg/L (01002) | Cadmium, water, unfltrd µg/L (01027) | Chromium, 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) |
|------------|--|---|--|---|--|------------------------------------|---|--------------------------------------|--------------------------------------|---|---|---|---|
| Oct | | | | | | | | | | | | | |
| 10... | E.003 | .080 | -- | 11.0 | 42.8 | 16.4 | 193 | .81 | E.01 | E.59 | .268 | 1.2 | 399 |
| 10... | E.004 | .085 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 397 |
| 10... | E.004 | .084 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 377 |
| Apr | | | | | | | | | | | | | |
| 19... | <.006 | .076 | -- | E9.6 | 29.3 | 16.7 | 142 | .56 | .02 | <.60 | .39 | 1.5 | 318 |
| 19... | <.006 | .061 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 321 |
| 19... | <.006 | .062 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 317 |
| Jun | | | | | | | | | | | | | |
| 28... | .007 | .186 | -- | 9.4 | 26.8 | 10.7 | -- | -- | -- | -- | -- | -- | 248 |
| 28... | .015 | .124 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 284 |
| 28... | .039 | .143 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 412 |
| Aug | | | | | | | | | | | | | |
| 21... | E.004 | .103 | 8.3 | 11.7 | 55.9 | 29.1 | -- | -- | -- | -- | -- | -- | 518 |
| 21... | E.005 | .097 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 506 |
| 21... | E.006 | .099 | 7.6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 523 |

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 4

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

| Date | Lead, | Mangan- | | Mercury | Molyb- | Nickel, | | Silver, | Zinc, |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | water, | ese, | Mercury | water, | denum, | water, | Selen- | water, | water, |
| | unfltrd | water, | water, | unfltrd | water, | unfltrd | ium, | unfltrd | unfltrd |
| | recover | recover | fltrd, | recover | recover | recover | water, | recover | recover |
| | -able, | -able, | able, | -able, | -able, | -able, | unfltrd | -able, | -able, |
| | µg/L |
| | (01051) | (01055) | (71890) | (71900) | (01062) | (01067) | (01147) | (01077) | (01092) |
| Oct | | | | | | | | | |
| 10... | .43 | 137 | -- | E.006 | 4.5 | .88 | .17 | <.02 | 2 |
| 10... | -- | 136 | -- | -- | -- | -- | -- | -- | -- |
| 10... | -- | 134 | -- | -- | -- | -- | -- | -- | -- |
| Apr | | | | | | | | | |
| 19... | .37 | 91.6 | -- | .833 | 2.5 | .92 | .14 | <.02 | 3.6 |
| 19... | -- | 80.7 | -- | -- | -- | -- | -- | -- | -- |
| 19... | -- | 81.6 | -- | -- | -- | -- | -- | -- | -- |
| Jun | | | | | | | | | |
| 28... | -- | 95.1 | -- | -- | -- | -- | -- | -- | -- |
| 28... | -- | 103 | -- | -- | -- | -- | -- | -- | -- |
| 28... | -- | 136 | -- | -- | -- | -- | -- | -- | -- |
| Aug | | | | | | | | | |
| 21... | -- | 216 | .072 | .077 | -- | -- | -- | -- | -- |
| 21... | -- | 261 | -- | -- | -- | -- | -- | -- | -- |
| 21... | -- | 284 | .014 | .020 | -- | -- | -- | -- | -- |