



Water-Data Report 2011

0209699999 B. EVERETT JORDAN LAKE, HAW RIVER ARM NEAR HANKS CHAPEL, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 35°42'19", long 79°05'04" referenced to North American Datum of 1983, Chatham County, NC, Hydrologic Unit 03030002, 2.2 mi below bridge on U.S. Highway 64, and 2.2 mi east of Hanks Chapel.

DRAINAGE AREA.--1,303 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1991 to current year. Prior to October 1993, published as "Haw River at U.S. Highway 64 near Pittsboro, NC" (station 0209699980). October 1993 to September 2006, published as "B. Everett Jordan Lake, Haw River arm, above B. Everett Jordan dam" (station 0209719700).

REMARKS.--Station operated to define water quality as part of a regional surface-water quality assessment. Samples for nutrient, pheophytin a and chlorophyll 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.

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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	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 conductance, water, unfiltered, µS/cm at 25 °C (00095)
10-05-2010	1200	Surface water	Regular	--	--	--	--	--	--
10-05-2010	1205	Surface water	Regular	765	62	8.5	92	7.3	96
10-05-2010	1210	Surface water	Regular	765	--	8.5	91	7.2	95
10-05-2010	1215	Surface water	Regular	765	--	8.5	90	7.2	94
12-10-2010	1330	Surface water	Regular	--	--	--	--	--	--
12-10-2010	1335	Surface water	Regular	768	62	13.1	98	7.7	173
12-10-2010	1340	Surface water	Regular	768	--	12.7	95	7.6	175
12-10-2010	1345	Surface water	Regular	768	--	10.3	80	7.2	240
02-22-2011	1045	Surface water	Regular	--	--	--	--	--	--
02-22-2011	1050	Surface water	Regular	760	35	10.7	99	9.0	246
02-22-2011	1055	Surface water	Regular	760	--	11.1	101	8.5	236
02-22-2011	1100	Surface water	Regular	760	--	10.0	88	7.5	220
04-06-2011	1300	Surface water	Regular	--	--	--	--	--	--
04-06-2011	1305	Surface water	Regular	766	62	9.7	96	7.3	135
04-06-2011	1310	Surface water	Regular	766	--	9.7	93	7.3	135
04-06-2011	1315	Surface water	Regular	766	--	9.0	86	7.2	136
06-20-2011	1315	Surface water	Regular	--	--	--	--	--	--
06-20-2011	1320	Surface water	Regular	757	25	8.7	114	8.2	324
06-20-2011	1325	Surface water	Regular	757	--	7.5	97	7.9	316
06-20-2011	1330	Surface water	Regular	757	--	6.0	77	7.7	316
08-12-2011	0945	Surface water	Regular	--	--	--	--	--	--
08-12-2011	0950	Surface water	Regular	760	--	9.4	126	8.5	280
08-12-2011	0955	Surface water	Regular	760	--	4.9	65	7.4	370

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

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[%, 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	Temperature, water, °C (00010)	Trans-parency, water, in situ, Secchi disc, m (00078)	Sampling depth, m (00098)	Dissolved solids					
					dried at 180 °C, water, filtered, mg/L (70300)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)
10-05-2010	1200	--	.50	1.0	--	--	--	--	--	--
10-05-2010	1205	19.1	--	1.0	71	23.9	5.86	2.25	3.22	7.44
10-05-2010	1210	19.0	--	2.0	--	--	--	--	--	--
10-05-2010	1215	18.5	--	4.0	--	--	--	--	--	--
12-10-2010	1330	--	.70	1.4	--	--	--	--	--	--
12-10-2010	1335	3.7	--	1.0	115	36.5	8.93	3.44	3.97	18.4
12-10-2010	1340	3.6	--	2.0	--	--	--	--	--	--
12-10-2010	1345	4.9	--	4.0	--	--	--	--	--	--
02-22-2011	1045	--	1.00	2.0	--	--	--	--	--	--
02-22-2011	1050	11.9	--	1.0	136	41.3	10.1	3.90	3.79	30.1
02-22-2011	1055	11.1	--	2.0	--	--	--	--	--	--
02-22-2011	1100	9.6	--	3.0	--	--	--	--	--	--
04-06-2011	1300	--	.50	1.0	--	--	--	--	--	--
04-06-2011	1305	15.4	--	1.0	89	37.2	8.80	3.69	2.62	12.7
04-06-2011	1310	14.0	--	2.0	--	--	--	--	--	--
04-06-2011	1315	13.6	--	4.0	--	--	--	--	--	--
06-20-2011	1315	--	.80	1.6	--	--	--	--	--	--
06-20-2011	1320	28.9	--	1.0	181	42.7	10.1	4.22	5.68	43.6
06-20-2011	1325	28.1	--	2.0	--	--	--	--	--	--
06-20-2011	1330	27.9	--	3.0	--	--	--	--	--	--
08-12-2011	0945	--	.50	1.0	--	--	--	--	--	--
08-12-2011	0950	30.5	--	1.0	157	34.5	7.94	3.56	5.91	36.3
08-12-2011	0955	30.0	--	3.0	--	--	--	--	--	--

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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-						Ammonia plus organic		Ammonia, water, filtered, mg/L as N (00608)	
		ANC, water, unfiltered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (00419)	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)	nitrogen, water, unfiltered, mg/L as N (00625)			
10-05-2010	1200	--	--	--	--	--	--	.56	.051		
10-05-2010	1205	22.2	27.1	7.58	.11	10.9	9.13	--	--		
10-05-2010	1210	--	--	--	--	--	--	.51	.050		
10-05-2010	1215	--	--	--	--	--	--	.54	.047		
12-10-2010	1330	--	--	--	--	--	--	.44	.011		
12-10-2010	1335	36.2	44.1	19.0	.16	9.24	12.2	--	--		
12-10-2010	1340	--	--	--	--	--	--	.45	.011		
12-10-2010	1345	--	--	--	--	--	--	.51	.050		
02-22-2011	1045	--	--	--	--	--	--	.61	.031		
02-22-2011	1050	--	--	30.2	.16	2.15	25.9	--	--		
02-22-2011	1055	--	--	--	--	--	--	.62	.031		
02-22-2011	1100	--	--	--	--	--	--	.68	.093		
04-06-2011	1300	--	--	--	--	--	--	.53	.017		
04-06-2011	1305	27.9	34.0	14.4	.10	11.5	12.6	--	--		
04-06-2011	1310	--	--	--	--	--	--	.55	.016		
04-06-2011	1315	--	--	--	--	--	--	.51	.035		
06-20-2011	1315	--	--	--	--	--	--	1.1	.048		
06-20-2011	1320	51.2	62.4	36.2	.25	5.72	34.4	--	--		
06-20-2011	1325	--	--	--	--	--	--	.96	.119		
06-20-2011	1330	--	--	--	--	--	--	.96	.228		
08-12-2011	0945	--	--	--	--	--	--	1.3	.023		
08-12-2011	0950	47.9	56.8	32.8	.19	3.41	25.6	--	--		
08-12-2011	0955	--	--	--	--	--	--	1.1	.123		

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

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Date	Sample start time	Nitrate plus nitrite, 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, unfiltered, recoverable, µg/L (01105)	Cadmium, water, unfiltered, µg/L (01027)	Chromium, water, unfiltered, recoverable, µg/L (01034)	Cobalt, water, unfiltered, recoverable, micrograms per liter (01037)
10-05-2010	1200	.393	.005	.039	.096	--	--	--	--
10-05-2010	1205	--	--	--	--	366	< .05	< .21	.43
10-05-2010	1210	.399	< .010	.039	.096	--	--	--	--
10-05-2010	1215	.405	.005	.039	.098	--	--	--	--
12-10-2010	1330	.554	.004	.019	.056	--	--	--	--
12-10-2010	1335	--	--	--	--	--	--	--	--
12-10-2010	1340	.543	.004	.017	.054	--	--	--	--
12-10-2010	1345	.936	.007	.016	.056	--	--	--	--
02-22-2011	1045	.688	.007	.007	.061	--	--	--	--
02-22-2011	1050	--	--	--	--	--	--	--	--
02-22-2011	1055	.684	.007	.007	.059	--	--	--	--
02-22-2011	1100	.715	.007	.009	.068	--	--	--	--
04-06-2011	1300	.569	.015	.073	.149	--	--	--	--
04-06-2011	1305	--	--	--	--	260	< .05	.73	.43
04-06-2011	1310	.572	.015	.075	.159	--	--	--	--
04-06-2011	1315	.593	.016	.079	.171	--	--	--	--
06-20-2011	1315	1.46	.020	.026	.119	--	--	--	--
06-20-2011	1320	--	--	--	--	--	--	--	--
06-20-2011	1325	1.07	.018	.008	.090	--	--	--	--
06-20-2011	1330	1.05	.018	.017	.137	--	--	--	--
08-12-2011	0945	.219	--	< .004	.123	--	--	--	--
08-12-2011	0950	--	--	--	--	--	--	--	--
08-12-2011	0955	.449	--	.004	.163	--	--	--	--

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 5 of 6

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Date	Sample start time	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)	m, water, unfiltered, recoverable, microgram s per liter (01062)	Molybdenum, water, unfiltered, recoverable, µg/L (01067)	Nickel, water, unfiltered, recoverable, µg/L (01077)	Silver, water, unfiltered, recoverable, µg/L (01077)	Zinc, water, unfiltered, recoverable, µg/L (01092)
10-05-2010	1200	--	--	--	--	--	--	--	--	--	--
10-05-2010	1205	3.3	867	.84	73.7	.034	.3	.79	<.01	7.1	
10-05-2010	1210	--	875	--	74.1	--	--	--	--	--	--
10-05-2010	1215	--	911	--	82.5	--	--	--	--	--	--
12-10-2010	1330	--	--	--	--	--	--	--	--	--	--
12-10-2010	1335	--	695	--	22.8	--	--	--	--	--	--
12-10-2010	1340	--	666	--	26.6	--	--	--	--	--	--
12-10-2010	1345	--	602	--	55.9	--	--	--	--	--	--
02-22-2011	1045	--	--	--	--	--	--	--	--	--	--
02-22-2011	1050	--	640	--	133	--	--	--	--	--	--
02-22-2011	1055	--	628	--	136	--	--	--	--	--	--
02-22-2011	1100	--	728	--	175	--	--	--	--	--	--
04-06-2011	1300	--	--	--	--	--	--	--	--	--	--
04-06-2011	1305	2.2	834	.57	86.8	<.005	.5	.82	<.01	7.1	
04-06-2011	1310	--	840	--	83.7	--	--	--	--	--	--
04-06-2011	1315	--	1,030	--	128	--	--	--	--	--	--
06-20-2011	1315	--	--	--	--	--	--	--	--	--	--
06-20-2011	1320	--	318	--	102	--	--	--	--	--	--
06-20-2011	1325	--	278	--	94.0	--	--	--	--	--	--
06-20-2011	1330	--	432	--	156	--	--	--	--	--	--
08-12-2011	0945	--	--	--	--	--	--	--	--	--	--
08-12-2011	0950	--	453	--	121	--	--	--	--	--	--
08-12-2011	0955	--	862	--	212	--	--	--	--	--	--

0209699999 B. EVERETT JORDAN LAKE, HAW RIVER ARM NEAR HANKS CHAPEL, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 6 of 6

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Date	Sample start time	Arsenic, water, unfiltered, µg/L (01002)	Selenium, water, unfiltered, µg/L (01147)	carbon, water, unfiltered, mg/L (00680)	Organic
10-05-2010	1200	--	--	--	
10-05-2010	1205	.55	.18	8.2	
10-05-2010	1210	--	--	--	
10-05-2010	1215	--	--	--	
12-10-2010	1330	--	--	--	
12-10-2010	1335	--	--	7.9	
12-10-2010	1340	--	--	--	
12-10-2010	1345	--	--	--	
02-22-2011	1045	--	--	--	
02-22-2011	1050	--	--	7.1	
02-22-2011	1055	--	--	--	
02-22-2011	1100	--	--	--	
04-06-2011	1300	--	--	--	
04-06-2011	1305	.69	.15	7.7	
04-06-2011	1310	--	--	--	
04-06-2011	1315	--	--	--	
06-20-2011	1315	--	--	--	
06-20-2011	1320	--	--	8.8	
06-20-2011	1325	--	--	--	
06-20-2011	1330	--	--	--	
08-12-2011	0945	--	--	--	
08-12-2011	0950	--	--	10.3	
08-12-2011	0955	--	--	--	