



Water-Data Report 2012

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 zone equal to double the secchi disk depth using the depth-integration sampling technique. Prior to October 1, 2005, samples for chlorophyll were analyzed using a high-performance liquid chromatography method.

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 1 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; 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	Color, water, filtered, platinum cobalt units	Dissolved oxygen, water, unfiltered, mg/L	Dissolved oxygen, water, unfiltered, % saturation	pH, water, unfiltered, field, standard units
				(00025)	(00080)	(00300)	(00301)	(00400)
10-12-2011	1015	Surface water	Regular	--	--	--	--	--
10-12-2011	1020	Surface water	Regular	756	15	9.0	100	7.6
10-12-2011	1025	Surface water	Regular	756	--	8.1	89	7.3
12-01-2011	1145	Surface water	Regular	--	--	--	--	--
12-01-2011	1150	Surface water	Regular	764	--	11.0	99	7.2
12-01-2011	1155	Surface water	Regular	764	--	10.9	98	7.2
02-15-2012	1200	Surface water	Regular	--	--	--	--	--
02-15-2012	1201	QC sample - Surface water	Duplicate	--	--	--	--	--
02-15-2012	1205	Surface water	Regular	754	--	12.6	106	8.3
02-15-2012	1206	QC sample - Surface water	Duplicate	--	--	--	--	--
02-15-2012	1210	Surface water	Regular	754	--	12.3	101	7.9
02-15-2012	1301	QC sample - Artificial	Blank	--	--	--	--	--
02-15-2012	1308	QC sample - Artificial	Blank	--	--	--	--	--
04-05-2012	0930	Surface water	Regular	--	--	--	--	--
04-05-2012	0935	Surface water	Regular	755	--	6.8	77	7.3
04-05-2012	0940	Surface water	Regular	755	--	5.5	60	7.2
06-08-2012	0930	Surface water	Regular	--	--	--	--	--
06-08-2012	0935	Surface water	Regular	759	--	9.6	117	9.0
06-08-2012	0940	Surface water	Regular	759	--	7.7	93	8.4
08-09-2012	0915	Surface water	Regular	--	--	--	--	--
08-09-2012	0916	QC sample - Surface water	Replicate	--	--	--	--	--
08-09-2012	0920	Surface water	Regular	758	--	6.6	86	7.4
08-09-2012	0921	QC sample - Surface water	Replicate	--	--	--	--	--
08-09-2012	0925	Surface water	Regular	758	--	4.5	58	7.3
08-09-2012	0926	QC sample - Surface water	Replicate	--	--	--	--	--

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; 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						Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Calcium, water, filtered, mg/L (00915)
		Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Transparency, water, in situ, Secchi disc, m (00078)	Detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Depth to 1 percent of surface light, meters (85328)	Sampling depth, m (00098)		
10-12-2011	1015	--	--	0.70	--	1.4	1.4	--	--
10-12-2011	1020	204	20.0	--	9.3	--	1.0	116	8.89
10-12-2011	1025	175	19.3	--	--	--	3.0	--	--
12-01-2011	1145	--	--	.30	--	1.2	.60	--	--
12-01-2011	1150	95	10.8	--	6.2	--	2.0	85	6.83
12-01-2011	1155	95	10.8	--	--	--	4.0	--	--
02-15-2012	1200	--	--	1.20	--	2.6	2.4	--	--
02-15-2012	1201	--	--	1.20	--	--	2.4	--	--
02-15-2012	1205	192	7.5	--	6.2	--	1.0	114	9.11
02-15-2012	1206	--	--	--	--	--	1.0	118	8.97
02-15-2012	1210	196	6.6	--	--	--	3.0	--	--
02-15-2012	1301	--	--	--	--	--	--	--	< .022
02-15-2012	1308	--	--	--	--	--	--	--	< .022
04-05-2012	0930	--	--	.60	--	1.4	1.2	--	--
04-05-2012	0935	142	20.8	--	12	--	1.0	83	8.24
04-05-2012	0940	195	19.5	--	--	--	3.0	--	--
06-08-2012	0930	--	--	.90	--	2.0	1.8	--	--
06-08-2012	0935	207	25.4	--	6.3	--	1.0	125	9.24
06-08-2012	0940	211	24.5	--	--	--	3.0	--	--
08-09-2012	0915	--	--	.50	--	1.0	1.0	--	--
08-09-2012	0916	--	--	--	--	--	1.0	--	--
08-09-2012	0920	174	29.2	--	13	--	1.0	113	7.53
08-09-2012	0921	--	--	--	13	--	1.0	115	8.22
08-09-2012	0925	187	28.8	--	--	--	3.0	--	--
08-09-2012	0926	--	--	--	--	--	3.0	--	--

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 3 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; 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	Magne-	Potassium,	Sodium,	titration	titration	Chloride,	Fluoride,	Silica,
		sium, water, filtered, mg/L (00925)	water, filtered, mg/L (00935)	water, filtered, mg/L (00930)	method, field, mg/L as CaCO ₃ (00419)	method, field, mg/L (00450)	water, filtered, mg/L (00940)	water, filtered, mg/L (00950)	water, filtered, mg/L as SiO ₂ (00955)
10-12-2011	1015	--	--	--	--	--	--	--	--
10-12-2011	1020	3.16	4.51	24.2	37.0	45.1	23.2	.19	5.46
10-12-2011	1025	--	--	--	--	--	--	--	--
12-01-2011	1145	--	--	--	--	--	--	--	--
12-01-2011	1150	2.81	3.67	6.62	21.0	25.5	7.55	.08	11.2
12-01-2011	1155	--	--	--	--	--	--	--	--
02-15-2012	1200	--	--	--	--	--	--	--	--
02-15-2012	1201	--	--	--	--	--	--	--	--
02-15-2012	1205	3.70	3.18	19.7	33.6	40.9	19.6	.15	6.13
02-15-2012	1206	3.70	3.03	19.2	34.6	42.2	19.7	.15	6.22
02-15-2012	1210	--	--	--	--	--	--	--	--
02-15-2012	1301	<.011	<.03	<.06	--	--	<.06	<.04	<.018
02-15-2012	1308	<.011	<.03	<.06	--	--	--	--	<.018
04-05-2012	0930	--	--	--	--	--	--	--	--
04-05-2012	0935	3.75	2.75	12.8	--	--	12.4	.13	11.2
04-05-2012	0940	--	--	--	--	--	--	--	--
06-08-2012	0930	--	--	--	--	--	--	--	--
06-08-2012	0935	3.80	4.31	25.0	42.1	48.1	20.3	.20	2.70
06-08-2012	0940	--	--	--	--	--	--	--	--
08-09-2012	0915	--	--	--	--	--	--	--	--
08-09-2012	0916	--	--	--	--	--	--	--	--
08-09-2012	0920	3.11	3.96	21.6	38	46.0	19.2	.19	5.36
08-09-2012	0921	3.42	4.17	23.6	37	44.5	19.0	.18	5.68
08-09-2012	0925	--	--	--	--	--	--	--	--
08-09-2012	0926	--	--	--	--	--	--	--	--

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; 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	Sulfate, water, filtered, mg/L (00945)	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)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, unfiltered, mg/L as P (00665)	Chlorophyll a, phytoplankton, chromato-graphic method, µg/L (70953)	Aluminum, water, unfiltered, recoverable, µg/L (01105)
10-12-2011	1015	--	0.77	0.022	0.51	< .004	0.083	27.4	--
10-12-2011	1020	20.0	--	--	--	--	--	--	85.2
10-12-2011	1025	--	.64	.047	.35	.025	.093	--	--
12-01-2011	1145	--	.85	.072	.40	.052	.173	5.4	--
12-01-2011	1150	6.97	--	--	--	--	--	--	--
12-01-2011	1155	--	.85	.071	.39	.054	.185	--	--
02-15-2012	1200	--	.51	.016	.95	.008	.045	4.1	--
02-15-2012	1201	--	.52	.016	.95	.007	.045	4.0	--
02-15-2012	1205	16.8	--	--	--	--	--	--	--
02-15-2012	1206	16.8	--	--	--	--	--	--	--
02-15-2012	1210	--	.51	.022	.98	.009	.045	--	--
02-15-2012	1301	< .09	< .07	< .010	.02	< .004	< .004	--	< 3.8
02-15-2012	1308	--	< .07	.014	< .01	< .004	< .004	--	< 3.8
04-05-2012	0930	--	.70	.041	.46	.018	.096	53.1	--
04-05-2012	0935	12.0	--	--	--	--	--	--	182
04-05-2012	0940	--	.69	.109	.47	.026	.099	--	--
06-08-2012	0930	--	.66	.070	.39	< .004	.058	9.5	--
06-08-2012	0935	19.2	--	--	--	--	--	--	--
06-08-2012	0940	--	.58	.054	.62	.010	.056	--	--
08-09-2012	0915	--	1.0	.010	< .01	< .004	.112	46.4	--
08-09-2012	0916	--	.87	.015	< .01	< .004	.113	45.8	--
08-09-2012	0920	17.4	--	--	--	--	--	--	--
08-09-2012	0921	17.4	--	--	--	--	--	--	--
08-09-2012	0925	--	1.0	.124	.03	.014	.176	--	--
08-09-2012	0926	--	1.0	.119	.03	.014	.111	--	--

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 5 of 6

[%, percent; ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; 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	Chromium, water, unfiltered, recoverable, µg/L (01027)		Cobalt, water, unfiltered, recoverable, µg/L (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, µg/L (01062)	
		Cadmium, water, unfiltered, µg/L (01027)	unfiltered, recoverable, µg/L (01034)	Cadmium, water, unfiltered, recoverable, µg/L (01037)	unfiltered, recoverable, µg/L (01037)	Copper, water, unfiltered, recoverable, µg/L (01042)	unfiltered, recoverable, µg/L (01042)	Iron, water, unfiltered, recoverable, µg/L (01045)	unfiltered, recoverable, µg/L (01045)	Lead, water, unfiltered, recoverable, µg/L (01051)	unfiltered, recoverable, µg/L (01051)	Manganese, water, unfiltered, recoverable, µg/L (01055)	unfiltered, recoverable, µg/L (01055)	Mercury, water, unfiltered, recoverable, µg/L (71900)	unfiltered, recoverable, µg/L (71900)	Molybdenum, water, unfiltered, recoverable, µg/L (01062)	unfiltered, recoverable, µg/L (01062)
10-12-2011	1015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10-12-2011	1020	.021	1.1	.43	2.0	225	.23	50.3	< .005	2.40							
10-12-2011	1025	--	--	--	--	465	--	96.9	--	--							
12-01-2011	1145	--	--	--	--	--	--	--	--	--							
12-01-2011	1150	--	--	--	--	1,790	--	100	--	--							
12-01-2011	1155	--	--	--	--	2,110	--	125	--	--							
02-15-2012	1200	--	--	--	--	--	--	--	--	--							
02-15-2012	1201	--	--	--	--	--	--	--	--	--							
02-15-2012	1205	--	--	--	--	569	--	51.4	--	--							
02-15-2012	1206	--	--	--	--	571	--	52.1	--	--							
02-15-2012	1210	--	--	--	--	659	--	61.0	--	--							
02-15-2012	1301	< .016	< .30	< .02	< .70	< 4.6	< .04	< .4	< .005	< .05							
02-15-2012	1308	< .016	< .30	< .02	< .70	< 4.6	< .04	< .4	< .005	< .05							
04-05-2012	0930	--	--	--	--	--	--	--	--	--							
04-05-2012	0935	< .016	.38	.57	2.0	826	.63	146	.167	.98							
04-05-2012	0940	--	--	--	--	1,070	--	432	--	--							
06-08-2012	0930	--	--	--	--	--	--	--	--	--							
06-08-2012	0935	--	--	--	--	304	--	72.0	--	--							
06-08-2012	0940	--	--	--	--	496	--	122	--	--							
08-09-2012	0915	--	--	--	--	--	--	--	--	--							
08-09-2012	0916	--	--	--	--	--	--	--	--	--							
08-09-2012	0920	--	--	--	--	488	--	174	--	--							
08-09-2012	0921	--	--	--	--	489	--	174	--	--							
08-09-2012	0925	--	--	--	--	1,220	--	299	--	--							
08-09-2012	0926	--	--	--	--	589	--	202	--	--							

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

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 6 of 6

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Date	Sample start time	Nickel, water, unfiltered, recover- able, µg/L (01067)	Silver, water, unfiltered, recover- able, µg/L (01077)	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)
10-12-2011	1015	--	--	--	--	--	--
10-12-2011	1020	1.4	<.015	<3.0	.65	.152	7.4
10-12-2011	1025	--	--	--	--	--	--
12-01-2011	1145	--	--	--	--	--	--
12-01-2011	1150	--	--	--	--	--	11.9
12-01-2011	1155	--	--	--	--	--	--
02-15-2012	1200	--	--	--	--	--	--
02-15-2012	1201	--	--	--	--	--	--
02-15-2012	1205	--	--	--	--	--	5.9
02-15-2012	1206	--	--	--	--	--	5.8
02-15-2012	1210	--	--	--	--	--	--
02-15-2012	1301	<.19	<.015	<3.0	<.28	<.050	<.5
02-15-2012	1308	.67	<.015	<3.0	<.28	<.050	<.5
04-05-2012	0930	--	--	--	--	--	--
04-05-2012	0935	.97	<.015	4.3	.44	.125	9.2
04-05-2012	0940	--	--	--	--	--	--
06-08-2012	0930	--	--	--	--	--	--
06-08-2012	0935	--	--	--	--	--	7.0
06-08-2012	0940	--	--	--	--	--	--
08-09-2012	0915	--	--	--	--	--	--
08-09-2012	0916	--	--	--	--	--	--
08-09-2012	0920	--	--	--	--	--	8.4
08-09-2012	0921	--	--	--	--	--	8.1
08-09-2012	0925	--	--	--	--	--	--
08-09-2012	0926	--	--	--	--	--	--