

Water-Data Report 2012

02053652 CHOWAN RIVER NEAR EDENHOUSE, NC

 Albemarle-Chowan Basin
 Chowan Subbasin

LOCATION.--Lat 36°02'52", long 76°41'42" referenced to North American Datum of 1927, Bertie-Chowan County line, NC, Hydrologic Unit 03010203, at U.S. Highway 17 bridge, approximately 5 mi southwest of Edenton.

DRAINAGE AREA.--4,870 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-65, 1968-73, 1991-93, July to August 2012.

REMARKS.--Station operated in 2012 to define water quality in the Albemarle Sound as part of the National Monitoring Network for U.S. Coastal Waters and their Tributaries. Water-quality samples were collected through a zone equal to double the secchi depth using the depth-integration sampling technique.

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

Part 1 of 5

[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)	Temperature, air, °C (00020)	Depth to bottom from water surface, at sampling location		Dissolved oxygen, water, unfiltered, mg/L (00300)	water, unfiltered, field, standard units (00400)	pH, water, unfiltered, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)
						meters (82903)					
07-23-2012	1230	Surface water	Regular	765	28.5	8.40	8.1	7.5	2,720		
08-27-2012	1330	Surface water	Regular	763	30.3	6.50	8.8	8.1	3,720		

02053652 CHOWAN RIVER NEAR EDENHOUSE, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 5

[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)	Transparency, water, in situ, Secchi disc, m (00078)	micromole s of photons per square meter per second (99988)	Sampling depth, m (00098)	Photosynthetically active radiation (average flux density on a horizontal surface during measurement interval), micromole s of photons per square meter per second (99988)		Dissolved solids dried at 180°C, water, filtered, mg/L (70300)		Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)
						Sampling depth, m (00098)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)		
07-23-2012	1230	29.1	1.00	2,230	2.0	1,540	< 15	25.1	56.3	17.2			
08-27-2012	1330	28.3	.90	2,210	1.8	2,000	< 15	29.9	68.9	20.2			

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 3 of 5

[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	Sodium, water, filtered, mg/L (00930)	Alkalinity, water, filtered, mg/L as CaCO ₃ (29801)	Chloride, laboratory, mg/L as CaCO ₃ (39086)	Fluoride, field, mg/L (00940)	Silica, water, filtered, mg/L as SiO ₂ (00955)	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)	
								Chloride, laboratory, mg/L as CaCO ₃ (39086)	Fluoride, field, mg/L (00940)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)
07-23-2012	1230	429	26.4	23.9	820	0.11	5.83	114	0.57	< .010	
08-27-2012	1330	549	--	22.8	1,080	.14	5.68	146	.53	< .010	

02053652 CHOWAN RIVER NEAR EDENHOUSE, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 5

[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	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, unfiltered, mg/L as P (00665)	Chlorophyll a, phyto-plankton, chromato-graphic-fluorometric method, µg/L (70953)	Aluminum, water, filtered, µg/L (01106)	Cobalt, water, filtered, µg/L (01035)	Copper, water, filtered, µg/L (01040)
07-23-2012	1230	<.040	0.001	<.004	0.027	9.0	<6.6	1.01	<2.4
08-27-2012	1330	<.040	.001	<.004	.043	6.7	<6.6	.559	7.3

WATER-QUALITY DATA
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Part 5 of 5

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Date	Sample start time	Iron, water, filtered, µg/L (01046)	Lead, water, filtered, µg/L (01049)	Manganese, water, filtered, µg/L (01056)	Molybdenum, water, filtered, µg/L (01060)	Nickel, water, filtered, µg/L (01065)	Zinc, water, filtered, µg/L (01090)
07-23-2012	1230	24.1	<.075	68.2	1.25	0.61	<4.2
08-27-2012	1330	<3.2	<.075	13.7	1.26	.60	6.1