0208524975 LITTLE RIVER BELOW LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 36°06′48″, long 78°51′35″ referenced to North American Datum of 1983, Durham County, NC, Hydrologic Unit 03020201, 125 ft downstream of the mouth of Little River tributary and 0.5 mi downstream of Little River dam.

DRAINAGE AREA.--98.9 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1995 to current year.

REVISED RECORDS.--WDR-US-2006: 2005 (maximum discharge, gage height, daily discharges).

GAGE.--Water-stage recorder. Elevation of gage is 270 ft above National Geodetic Vertical Datum of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by releases from the Little River Reservoir. Maximum discharge for period of record from extension of rating curve based on contracted-opening measurement of peak flow. Maximum gage height for period of record from floodmarks. Minimum discharge for the period of record not determined.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 0208524975, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/0208524975.2012.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e2.4	e1.2	e5.3	2.4	4.8	36	7.9	8.3	7.3	3.9	2.1	2.9
2	e2.2	e1.2	e5.0	2.6	4.8	27	7.3	7.3	5.4	4.4	2.0	3.2
3	e2.2	e1.1	e4.0	2.5	4.7	154	7.0	6.9	2.9	4.5	2.0	27
4	e2.1	e15	e4.2	2.4	4.8	200	7.2	6.8	2.9	4.3	2.1	5.5
5	e2.0	e1.3	e5.2	2.5	5.5	116	7.0	39	3.0	4.3	2.2	3.2
6	e2.2	e1.2	e5.8	2.4	4.9	62	6.9	175	3.0	4.2	2.2	3.6
7	e2.0	e1.7	e12	2.4	4.7	43	7.0	72	2.9	4.1	3.2	3.3
8	e1.6	e1.6	e7.0	2.3	4.7	35	6.9	18	2.7	4.2	4.7	3.2
9	e1.6	e1.9	e4.8	5.3	4.7	38	6.9	11	2.9	4.3	2.7	3.3
10	e1.9	e1.8	e4.4	6.0	4.6	33	7.1	15	2.9	4.9	2.7	3.1
11	e2.1	e1.8	e4.3	6.5	4.6	29	7.5	7.2	5.9	13	19	2.9
12	e2.0	e1.6	e4.1	6.5	4.8	26	7.3	6.9	3.3	3.5	3.3	2.9
13	e2.1	e1.6	e3.9	6.2	4.7	23	7.3	6.9	4.4	3.1	3.1	3.0
14	e2.1	e1.7	e5.1	e6.0	4.7	20	7.3	9.1	2.7	3.0	3.5	3.0
15	e2.1	e1.5	e6.6	e5.9	4.8	18	7.3	8.9	2.7	3.0	3.5	3.1
16	e2.1	e4.4	e6.8	e5.8	6.0	17	7.3	7.5	2.7	3.0	3.5	3.6
17	e2.1	e11	e8.9	5.7	5.4	16	7.3	6.9	2.8	3.1	3.6	2.9
18	e2.2	e1.3	e5.3	5.6	5.0	16	7.3	7.0	2.8	3.1	3.7	79
19	e9.2	e0.48	e4.7	5.6	6.9	20	7.3	6.9	2.8	3.1	13	589
20	e1.4	e0.46	e5.1	5.6	8.4	41	7.3	6.9	2.9	3.3	4.3	127
21	e1.1	e1.7	e13	6.4	5.6	45	8.2	6.9	2.9	3.4	3.7	51
22	e1.1	e3.9	7.3	5.8	5.2	14	13	6.9	5.1	3.8	3.1	26
23	e1.2	e5.2	4.3	5.6	6.2	7.8	8.4	10	3.0	3.7	2.9	12
24	e1.1	e4.2	3.0	5.5	17	28	9.0	6.9	2.7	2.5	2.9	2.9
25	e1.1	e8.7	2.8	5.3	58	1,160	7.0	6.9	2.8	1.9	3.3	2.7
26	e1.0	e11	2.6	5.3	46	150	9.1	6.9	2.9	1.9	2.9	2.7
27	e1.1	e13	3.5	10	40	102	50	6.7	2.9	5.8	2.7	2.8
28	e1.1	e11	3.1	5.5	34	43	23	6.6	3.0	7.6	2.7	3.0
29	e3.1	e25	2.8	5.0	32	25	7.4	6.8	3.2	4.2	2.8	4.6
30	e1.3	e6.2	2.6	5.0	---	10	6.6	6.9	3.7	2.2	2.6	2.7
31	e1.2	---	2.5	5.0	---	9.1	---	7.0	---	2.1	2.7	---
Total	62.0	143.74	160.0	154.6	347.5	2,563.9	286.1	512.0	101.1	123.4	118.7	985.1
Mean	2.00	4.79	5.16	4.99	12.0	82.7	9.54	16.5	3.37	3.98	3.83	32.8
Max	9.2	25	13	10	58	1,160	50	175	7.3	13	19	589
Min	1.0	0.46	2.5	2.3	4.6	7.8	6.6	6.6	2.7	1.9	2.0	2.7
Med	2.0	1.8	4.7	5.5	5.0	29	7.3	6.9	2.9	3.7	2.9	3.2
Ac-ft	123	285	317	307	689	5,090	567	1,020	201	245	235	1,950
Cfsm	0.02	0.05	0.05	0.05	0.12	0.84	0.10	0.17	0.03	0.04	0.04	0.33
In.	0.02	0.05	0.06	0.06	0.13	0.96	0.11	0.19	0.04	0.05	0.04	0.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	18.7	44.7	78.1	73.9	105	154	109	40.3	23.8	16.4	14.9	81.1
Max	178	169	341	333	509	705	510	260	162	146	132	538
(WY)	(2003)	(2007)	(2010)	(1998)	(1998)	(1998)	(2003)	(2003)	(2003)	(2003)	(2003)	(1996)
Min	1.06	0.78	1.07	0.64	1.19	4.46	6.09	5.69	1.30	1.16	1.57	0.95
(WY)	(2008)	(2008)	(2001)	(2008)	(2008)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

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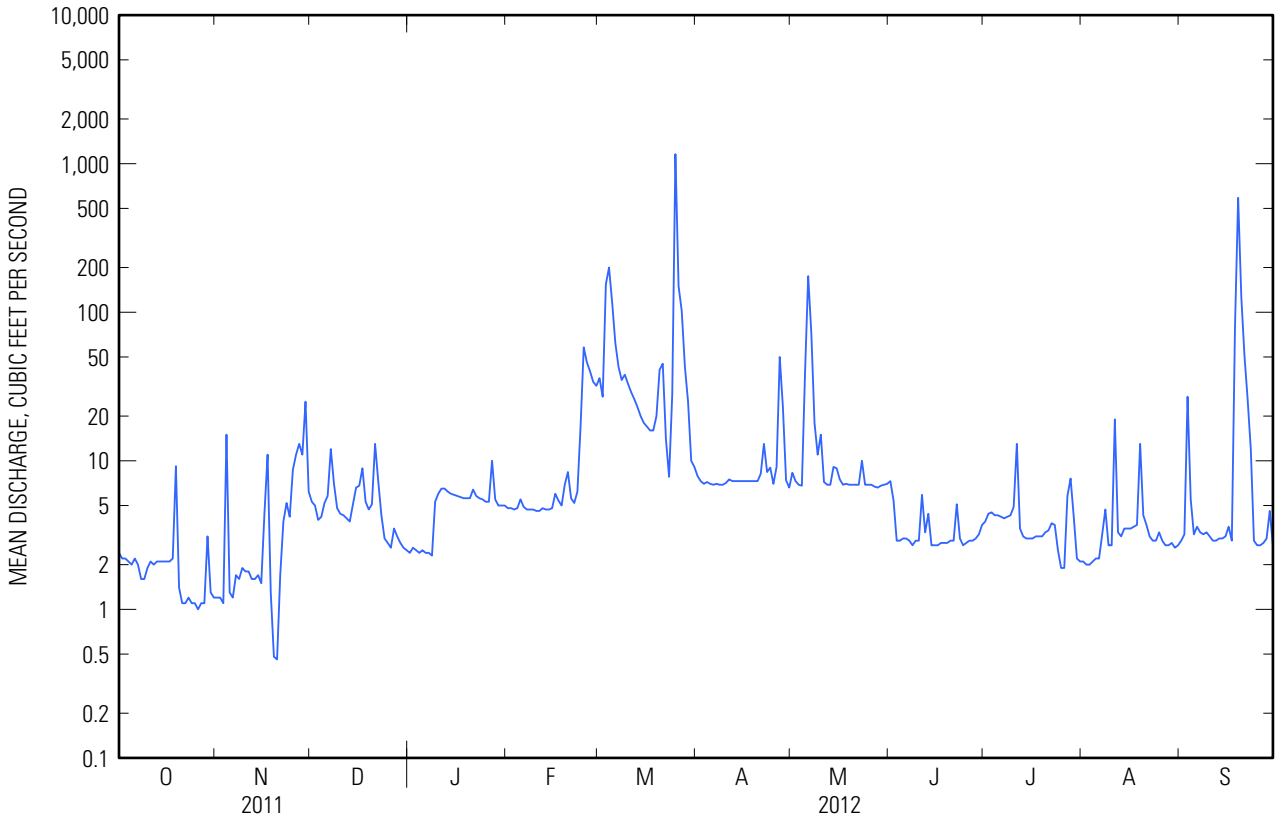
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1996 - 2012	
Annual total	3,564.04		5,558.14			
Annual mean	9.76		15.2		59.4	
Highest annual mean					224	2003
Lowest annual mean					3.39	2002
Highest daily mean	406	Mar 31	1,160	Mar 25	10,300	Sep 6, 1996
Lowest daily mean	0.46	Nov 20	0.46	Nov 20	0.41	Nov 22, 1998
Annual seven-day minimum	1.1	Oct 21	1.1	Oct 21	0.51	Sep 7, 2002
Maximum peak flow			2,640	Mar 25	[a]16,600	Sep 6, 1996
Maximum peak stage			10.24	Mar 25	[a]17.27	Sep 6, 1996
Instantaneous Low Flow			Not determined		Not determined	
Annual runoff (ac-ft)	7,070		11,020		43,050	
Annual runoff (cfsm)	0.099		0.154		0.601	
Annual runoff (inches)	1.34		2.09		8.16	
10 percent exceeds	12		24		104	
50 percent exceeds	4.6		4.7		6.1	
90 percent exceeds	1.8		2.0		1.9	

[a] See Remarks.



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WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1995 to June 2012 (discontinued).

REMARKS.--Station operated to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 1 of 4

[%, percent; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; 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)	Discharge, instantaneous, ft³/s (00061)	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)
10-27-2011	**1430**	Surface water	Regular	748	1.2	6.8	71	7.0	150
11-04-2011	**1130**	Surface water	Regular	754	3.9	9.3	87	6.0	110
11-29-2011	**1600**	Surface water	Regular	746	13	8.8	86	7.2	124
12-22-2011	**1300**	Surface water	Regular	754	5.9	9.2	88	6.2	113
03-13-2012	**1045**	Surface water	Regular	760	24	10.2	95	7.7	87
03-20-2012	**1200**	Surface water	Regular	756	42	8.8	--	6.3	--
06-07-2012	**1230**	Surface water	Regular	757	2.9	8.9	101	6.2	97

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 2 of 4

[%, percent; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; 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)	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)	Aluminum, water, unfiltered, recoverable, µg/L (01105)	Cadmium, water, unfiltered, µg/L (01027)
10-27-2011	**1430**	16.3	0.39	0.020	0.08	0.016	0.046	--	--
11-04-2011	**1130**	12.2	.75	.026	.56	.173	.248	--	--
11-29-2011	**1600**	13.4	.82	.010	.38	.116	.187	534	< .016
12-22-2011	**1300**	13.3	.52	.011	.35	.056	.105	--	--
03-13-2012	**1045**	12.2	.47	.013	.15	< .004	.030	--	--
03-20-2012	**1200**	16.9	.75	.025	.22	.008	.055	--	--
06-07-2012	**1230**	21.6	.50	.021	.06	< .004	.032	--	--

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 3 of 4

[%, percent; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; 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	Chromium, water, unfiltered, recoverable, µg/L (01034)	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)	Nickel, water, unfiltered, recoverable, µg/L (01067)
10-27-2011	1430	--	--	--	--	--	--	--	--	--
11-04-2011	1130	--	--	--	--	--	--	--	--	--
11-29-2011	1600	.58	.34	3.7	636	.54	88.6	.006	.19	.54
12-22-2011	1300	--	--	--	--	--	--	--	--	--
03-13-2012	1045	--	--	--	--	--	--	--	--	--
03-20-2012	1200	--	--	--	--	--	--	--	--	--
06-07-2012	1230	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 4

[%, percent; N, nitrogen; P, phosphorus; ft³/s, cubic feet per second; 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	Silver, water, unfiltered, recoverable, µg/L (01077)	Zinc, water, unfiltered, recoverable, µg/L (01092)	Arsenic, water, unfiltered, µg/L (01002)	Selenium, water, unfiltered, µg/L (01147)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)
10-27-2011	1430	--	--	--	--	8	0.03
11-04-2011	1130	--	--	--	--	37	.39
11-29-2011	1600	< .015	3.3	1.2	.101	21	.74
12-22-2011	1300	--	--	--	--	33	.53
03-13-2012	1045	--	--	--	--	14	.91
03-20-2012	1200	--	--	--	--	19	2.2
06-07-2012	1230	--	--	--	--	5	.04