

Water-Data Report 2011

**0208521324 LITTLE RIVER AT SECONDARY ROAD 1461 NEAR ORANGE FACTORY, NC**

Neuse Basin  
Upper Neuse Subbasin

LOCATION.--Lat 36°08'30", long 78°55'09" referenced to North American Datum of 1983, Durham County, NC, Hydrologic Unit 03020201, on right bank, 5 feet downstream from bridge on Secondary Road 1461, and 1.8 mi northwest of Orange Factory.

DRAINAGE AREA.--78.2 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1987 to current year. Prior to October 1987, equivalent records published as "Little River near Orange Factory, NC" (02085220), September 1961 to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 382.89 ft above North American Vertical Datum of 1988. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Maximum discharge for period of record from extension of rating curve above 2,300 ft<sup>3</sup>/s, based on contracted-opening measurement of peak flow; maximum gage height, 13.26 ft, from high-water mark in gage shelter. No flow occurs periodically. Minimum discharge for current water year also occurred August 26.

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**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	221	2.8	7.2	9.9	9.3	105	134	9.6	7.7	14	0.44	0.13
2	54	2.5	9.8	13	9.8	49	80	9.3	6.7	6.9	0.34	0.12
3	24	2.4	11	17	9.4	25	51	8.8	5.6	4.4	0.26	0.12
4	13	4.3	9.0	17	10	16	37	156	4.6	2.9	0.27	0.10
5	9.5	6.3	8.0	14	103	13	32	105	4.1	3.4	0.26	0.10
6	6.6	10	7.4	12	123	21	31	33	3.9	6.9	0.26	1.5
7	5.2	7.4	6.8	11	45	183	24	29	3.4	67	0.26	83
8	4.0	5.5	6.7	11	28	64	20	26	3.1	15	0.25	11
9	3.2	4.3	6.6	10	21	33	21	20	2.9	28	0.21	4.5
10	2.9	3.9	6.1	8.8	16	65	173	16	2.7	13	0.15	2.4
11	2.8	3.9	6.2	8.3	14	189	95	15	3.5	9.2	0.12	1.5
12	3.9	4.0	7.3	8.5	13	72	52	14	4.0	5.2	0.10	1.1
13	6.4	3.6	8.5	9.8	11	40	35	19	4.6	3.7	11	0.91
14	7.0	5.0	12	11	9.7	27	25	41	2.9	2.5	2.8	0.71
15	5.8	4.4	11	8.2	9.0	22	20	69	2.2	1.7	0.75	0.66
16	4.7	3.6	9.6	8.0	8.6	38	56	29	1.8	1.4	0.39	0.45
17	5.5	5.0	13	8.2	8.2	53	121	20	1.8	0.85	0.26	0.40
18	4.2	4.7	20	8.9	8.3	31	47	20	1.7	0.57	0.19	0.34
19	3.3	5.8	20	9.3	8.2	22	27	16	1.5	0.40	0.17	0.27
20	2.8	6.2	16	9.5	7.3	18	20	13	1.3	0.75	0.14	0.27
21	2.0	5.5	13	9.0	7.0	17	17	11	0.97	0.69	0.12	0.33
22	1.8	5.3	11	7.9	7.0	15	15	9.7	0.88	0.51	0.10	0.45
23	1.5	4.9	10	7.2	6.8	15	18	24	0.82	0.44	0.09	0.56
24	1.3	4.3	9.3	7.0	6.9	283	19	20	0.78	0.41	0.09	0.59
25	1.8	3.8	8.9	6.9	7.3	115	16	13	0.79	0.97	0.07	0.70
26	4.0	4.2	10	9.7	7.3	51	14	9.9	0.71	1.1	0.07	0.64
27	5.3	4.3	10	15	11	150	15	12	0.72	0.65	0.08	0.59
28	11	4.4	9.9	19	11	116	16	20	2.8	0.46	0.08	0.61
29	7.2	4.3	9.7	15	---	63	13	19	171	0.36	0.28	0.49
30	4.1	4.5	8.9	12	---	304	11	12	38	0.37	0.33	0.48
31	3.3	---	8.9	10	---	316	---	9.0	---	0.66	0.18	---
<b>Total</b>	433.1	141.1	311.8	332.1	536.1	2,531	1,255	828.3	287.47	194.39	20.11	115.02
<b>Mean</b>	14.0	4.70	10.1	10.7	19.1	81.6	41.8	26.7	9.58	6.27	0.65	3.83
<b>Max</b>	221	10	20	19	123	316	173	156	171	67	11	83
<b>Min</b>	1.3	2.4	6.1	6.9	6.8	13	11	8.8	0.71	0.36	0.07	0.10
<b>Cfsm</b>	0.18	0.06	0.13	0.14	0.24	1.04	0.53	0.34	0.12	0.08	0.01	0.05
<b>In.</b>	0.21	0.07	0.15	0.16	0.26	1.20	0.60	0.39	0.14	0.09	0.01	0.05

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2011, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	31.4	49.8	76.8	106	113	161	105	51.4	40.4	29.9	23.7	49.0
<b>Max</b>	222	209	294	257	379	456	346	203	194	141	125	329
<b>(WY)</b>	(2003)	(2010)	(2010)	(1998)	(1998)	(1993)	(2003)	(2003)	(1995)	(2003)	(2003)	(1996)
<b>Min</b>	0.14	0.07	5.06	7.50	19.1	12.7	17.1	7.48	2.08	0.31	0.19	0.01
<b>(WY)</b>	(1994)	(2008)	(2002)	(2008)	(2011)	(2006)	(1995)	(2002)	(2002)	(2002)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1987 - 2011	
<b>Annual total</b>	21,579.03		6,985.49			
<b>Annual mean</b>	59.1		19.1		69.5	
<b>Highest annual mean</b>					195	2003
<b>Lowest annual mean</b>					14.8	2002
<b>Highest daily mean</b>	2,200	Feb 6	316	Mar 31	6,500	Sep 6, 1996
<b>Lowest daily mean</b>	0.02	Sep 25	0.07	Aug 25	0.00	Aug 19, 1988
<b>Annual seven-day minimum</b>	0.03	Sep 20	0.08	Aug 22	0.00	Aug 19, 1988
<b>Maximum peak flow</b>			798	Mar 30	<sup>a</sup> 11,600	Sep 6, 1996
<b>Maximum peak stage</b>			4.34	Mar 30	<sup>a</sup> 13.26	Sep 6, 1996
<b>Instantaneous low flow</b>			<sup>a</sup> 0.06	Aug 25	<sup>a</sup> 0.00	Aug 19, 1998
<b>Annual runoff (cfsm)</b>	0.756		0.245		0.889	
<b>Annual runoff (inches)</b>	10.27		3.32		12.08	
<b>10 percent exceeds</b>	113		43		139	
<b>50 percent exceeds</b>	11		7.7		22	
<b>90 percent exceeds</b>	1.8		0.37		1.3	

<sup>a</sup> See Remarks

