



Water-Data Report 2010

0208675010 ELLERBE CREEK AT CLUB BOULEVARD AT DURHAM, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 36°01'09.8", long 78°53'41.2" referenced to North American Datum of 1983, Durham County, NC, Hydrologic Unit 03020201, on right bank 200 ft downstream of Club Boulevard, approximately 1.6 mi northeast of Durham.

DRAINAGE AREA.--6.01 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 2008 to current year.

PRECIPITATION: August 2008 to current year, station number 360143078540945.

GAGE.--Water-stage recorder. Datum of gage is 289.2 ft above North American Vertical Datum of 1988. Prior to October 9, 2008 at site 120 ft downstream at datum 284.3 ft above North American Vertical Datum of 1988. Satellite telemetry at streamgage.

COOPERATION.--Gage is operated in cooperation with Stormwater Services Division, City of Durham.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for period of record occurred many days. Minimum discharge for current water year also occurred September 11.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.91	30	1.8	3.7	6.9	1.8	3.7	0.60	9.0	0.34	3.4	0.21
2	0.70	4.4	e52	2.9	23	1.9	3.7	0.34	4.1	0.27	1.0	0.19
3	0.53	1.8	61	2.4	63	5.8	3.7	0.26	2.8	0.22	0.61	0.17
4	0.39	0.94	4.9	2.1	12	2.6	3.4	0.27	1.6	0.20	0.56	0.12
5	0.45	0.69	13	2.1	173	2.0	3.5	0.27	1.1	1.6	11	0.12
6	0.46	0.55	5.1	2.0	70	1.5	3.2	0.42	0.86	3.3	7.6	0.12
7	0.42	0.46	3.7	2.0	6.3	1.5	2.8	1.4	1.8	3.1	1.1	0.13
8	0.35	0.42	4.7	2.5	4.0	1.5	2.5	0.28	0.71	3.8	0.59	0.14
9	0.28	0.34	129	2.3	10	1.5	6.1	0.17	0.50	6.2	0.36	0.11
10	0.28	11	6.9	2.0	5.9	1.5	2.8	0.17	0.51	3.4	0.27	0.05
11	0.34	208	3.9	1.8	3.4	4.1	2.4	0.19	0.44	3.5	0.28	0.03
12	1.4	69	3.3	1.8	2.8	6.2	2.4	0.30	3.4	3.9	0.73	0.20
13	1.6	27	21	1.6	3.8	40	2.3	0.75	17	27	0.29	0.05
14	0.63	4.1	5.8	1.6	2.9	11	2.2	0.23	5.5	31	1.4	0.06
15	2.0	2.6	4.0	1.5	3.0	4.1	2.2	0.33	1.4	2.5	0.28	0.04
16	0.66	1.8	3.3	1.5	3.1	e3.0	2.3	4.1	59	0.90	0.23	0.10
17	0.44	1.3	2.8	111	2.2	e2.6	2.0	e190	11	17	0.14	0.09
18	0.34	4.3	2.8	15	2.1	e2.3	2.0	51	2.5	19	0.06	0.07
19	0.26	6.6	110	5.2	1.6	e2.1	2.0	7.6	1.3	7.8	27	0.25
20	0.26	2.9	10	3.9	1.5	e1.9	1.7	7.8	0.96	2.0	12	0.23
21	0.26	1.7	5.6	24	1.5	e1.7	14	2.3	0.69	2.3	1.2	0.17
22	0.26	1.2	4.4	35	15	e2.4	2.4	44	0.48	0.65	17	0.17
23	0.26	82	3.8	6.0	3.9	1.4	0.88	37	4.7	0.43	42	1.2
24	5.7	6.1	3.5	4.5	7.3	1.3	0.66	9.1	1.6	0.33	9.4	0.28
25	1.7	3.3	113	e137	4.9	1.3	3.7	4.7	0.89	1.6	5.3	0.36
26	0.77	2.3	20	7.6	2.8	2.1	1.3	2.5	0.65	3.8	1.7	3.1
27	1.4	2.3	5.5	4.2	2.2	1.8	0.71	1.6	0.48	6.0	0.79	40
28	17	1.4	4.1	3.8	2.0	1.3	0.53	e8.0	0.34	2.8	0.54	20
29	2.1	1.1	3.6	3.5	---	51	0.47	e78	0.71	0.77	0.36	30
30	1.1	1.7	3.2	4.7	---	5.3	0.33	6.0	0.36	5.7	0.35	150
31	1.5	---	4.7	5.1	---	3.9	---	3.4	---	1.1	0.27	---
Mean	1.44	16.0	20.0	13.0	15.7	5.56	2.73	14.9	4.55	5.24	4.77	8.26
Max	17	208	129	137	173	51	14	190	59	31	42	150
Min	0.26	0.34	1.8	1.5	1.5	1.3	0.33	0.17	0.34	0.20	0.06	0.03
Cfsm	0.24	2.67	3.33	2.17	2.62	0.93	0.45	2.49	0.76	0.87	0.79	1.37
In.	0.28	2.98	3.84	2.50	2.72	1.07	0.51	2.87	0.84	1.01	0.91	1.53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2008 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1.08	10.3	15.4	9.76	9.30	13.8	3.80	8.87	6.78	3.24	6.06	15.6
Max	1.44	16.0	20.0	13.0	15.7	22.0	4.87	14.9	9.02	5.24	9.94	32.7
(WY)	(2010)	(2010)	(2010)	(2010)	(2010)	(2009)	(2009)	(2010)	(2009)	(2010)	(2008)	(2008)
Min	0.72	4.60	10.9	6.49	2.89	5.56	2.73	2.80	4.55	1.23	3.46	5.82
(WY)	(2009)	(2009)	(2009)	(2009)	(2009)	(2010)	(2010)	(2009)	(2010)	(2009)	(2009)	(2009)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 2008 - 2010	
Annual mean	8.04		9.32		7.79	
Highest annual mean					9.32	2010
Lowest annual mean					6.26	2009
Highest daily mean	208	Nov 11	208	Nov 11	694	Sep 6, 2008
Lowest daily mean	0.04	Sep 12	0.03	Sep 11	0.03	Sep 11, 2010
Annual seven-day minimum	0.05	Sep 10	0.08	Sep 10	0.05	Sep 10, 2009
Maximum peak flow			Not Determined		1,910	Sep 6, 2008
Maximum peak stage			6.60	Dec 2	11.09	Sep 6, 2008
Instantaneous low flow			^a 0.02	Sep 10	^a 0.00	Oct 9, 2008
Annual runoff (cfsm)	1.34		1.55		1.30	
Annual runoff (inches)	18.16		21.06		17.61	
10 percent exceeds	18		19		17	
50 percent exceeds	1.4		2.1		1.6	
90 percent exceeds	0.26		0.26		0.26	

^a See Remarks.

