



Water-Data Report 2011

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 in the 2009 water year. Minimum discharge for current water year also occurred August 4, 5, 6.

0208675010 ELLERBE CREEK AT CLUB BOULEVARD AT DURHAM, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6.7	0.44	6.9	2.3	0.68	9.8	4.1	0.52	0.73	0.44	0.26	0.19
2	2.3	0.32	1.2	6.6	3.1	2.3	2.3	0.42	0.71	0.28	0.09	0.10
3	1.1	0.27	0.47	2.6	1.5	1.4	1.4	0.41	0.38	0.20	0.04	0.33
4	0.75	10	1.1	1.3	7.1	0.95	1.3	32	0.30	e80	0.04	0.18
5	1.5	3.9	1.6	1.0	68	0.76	8.0	2.8	0.27	13	0.02	0.10
6	0.54	1.5	0.62	1.7	7.5	11	2.0	3.3	0.24	2.9	8.2	e80
7	0.42	0.83	0.41	1.0	3.5	6.6	1.0	2.8	0.20	2.3	0.64	e60
8	0.36	0.54	0.26	1.3	2.4	2.0	0.82	2.4	0.20	e55	0.44	2.3
9	0.32	0.43	0.20	0.85	1.7	2.4	10	1.1	0.18	24	0.36	0.80
10	0.27	0.45	0.35	0.65	1.1	16	14	0.81	0.30	2.5	0.24	0.44
11	0.27	0.36	1.00	2.0	0.85	4.3	2.5	2.5	6.2	1.1	0.20	0.34
12	0.27	0.28	4.7	1.5	0.73	1.6	1.8	4.2	3.7	1.3	0.20	0.24
13	0.24	0.28	2.0	0.98	0.61	1.0	1.8	4.3	1.7	0.73	7.9	0.18
14	37	0.26	0.78	0.74	0.58	0.73	1.0	23	0.38	0.36	1.4	0.11
15	4.2	0.27	0.34	0.61	0.84	0.28	0.84	5.2	0.38	0.23	0.41	0.08
16	1.2	0.88	15	0.59	0.66	4.4	35	2.0	0.27	0.20	0.18	0.18
17	0.70	4.0	8.9	0.62	0.59	1.2	7.6	1.9	0.46	0.22	0.09	0.36
18	0.52	0.88	2.9	1.9	0.59	0.78	2.1	3.1	0.42	0.19	0.14	0.18
19	0.43	0.56	1.9	0.98	0.54	0.72	1.2	0.87	0.34	0.15	0.19	0.12
20	0.44	0.44	1.2	0.65	0.47	0.58	0.88	0.67	0.44	0.09	0.20	0.08
21	0.52	0.38	0.71	0.77	0.47	0.47	0.73	0.54	0.43	0.08	2.4	7.0
22	0.39	0.36	0.59	0.91	0.47	0.90	4.9	1.2	0.36	0.12	2.4	5.2
23	0.31	0.37	0.51	0.79	0.58	1.7	4.1	1.4	0.61	0.07	0.54	16
24	0.28	0.39	0.48	0.74	0.67	24	1.3	0.59	0.39	0.05	0.24	4.0
25	1.4	0.36	0.40	0.53	1.3	2.7	0.82	0.48	0.17	0.17	0.10	1.3
26	12	0.51	4.7	17	0.67	2.7	0.98	0.45	0.20	0.18	0.19	0.52
27	2.6	0.70	2.3	4.6	0.55	14	3.0	e135	0.19	0.07	2.5	0.31
28	7.7	0.39	1.2	2.2	16	3.9	3.5	20	9.0	0.08	0.97	4.7
29	1.4	0.37	1.0	1.6	---	2.1	1.1	3.0	10	0.05	0.57	0.57
30	0.83	0.40	1.0	1.2	---	35	0.61	1.5	0.89	0.08	3.6	0.21
31	0.54	---	0.81	0.76	---	9.0	---	1.1	---	1.3	0.48	---
Mean	2.82	1.04	2.11	1.97	4.42	5.33	4.02	8.37	1.33	6.05	1.14	6.20
Max	37	10	15	17	68	35	35	135	10	80	8.2	80
Min	0.24	0.26	0.20	0.53	0.47	0.28	0.61	0.41	0.17	0.05	0.02	0.08
Cfsm	0.47	0.17	0.35	0.33	0.74	0.89	0.67	1.39	0.22	1.01	0.19	1.03
In.	0.54	0.19	0.41	0.38	0.77	1.02	0.75	1.61	0.25	1.16	0.22	1.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2008 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1.66	7.23	11.0	7.17	7.68	11.0	3.87	8.70	4.97	4.17	4.83	13.3
Max	2.82	16.0	20.0	13.0	15.7	22.0	4.87	14.9	9.02	6.05	9.94	32.7
(WY)	(2011)	(2010)	(2010)	(2010)	(2010)	(2009)	(2009)	(2010)	(2009)	(2011)	(2008)	(2008)
Min	0.72	1.04	2.11	1.97	2.89	5.33	2.73	2.80	1.33	1.23	1.14	5.82
(WY)	(2009)	(2011)	(2011)	(2011)	(2009)	(2011)	(2010)	(2009)	(2011)	(2009)	(2011)	(2009)

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 2008 - 2011	
Annual mean		6.69		3.73		6.44
Highest annual mean						9.32
Lowest annual mean						3.73
Highest daily mean	190	May 17	135	May 27	694	Sep 6, 2008
Lowest daily mean	0.03	Sep 11	0.02	Aug 5	0.02	Aug 5, 2011
Annual seven-day minimum	0.08	Sep 10	0.10	Jul 23	0.05	Sep 10, 2009
Maximum peak flow			Not determined		1,910	Sep 6, 2008
Maximum peak stage			5.94	Sep 7	11.09	Sep 6, 2008
Instantaneous low flow			^a 0.02	Jul 30	^a 0.00	Oct 9, 2008
Annual runoff (cfsm)	1.11		0.621			1.07
Annual runoff (inches)	15.11		8.44			14.56
10 percent exceeds	11		7.5			11
50 percent exceeds	1.6		0.78			1.3
90 percent exceeds	0.27		0.19			0.23

^a See Remarks.

