

Water-Data Report 2008

0208726005 CRABTREE CREEK AT EBENEZER CHURCH ROAD NEAR RALEIGH, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 35°50'43", long 78°43'28" referenced to North American Datum of 1983, Wake County, NC, Hydrologic Unit 03020201, on upstream side of bridge at Ebenezer Church Road (Secondary Road 1649), 0.1 mi downstream from Sycamore Creek, and 6.6 mi northwest of Raleigh.

DRAINAGE AREA.--76 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--December 1987 to September 1992, May 1997 to current year. December 1987 to September 1992, published as "Crabtree Creek at Secondary Road 1649 near Raleigh, NC".

GAGE.--Water-stage recorder. Datum of gage is 225.00 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at station.

REMARKS.--Records poor. Flow regulated by flood-control dams upstream. Minimum discharge for period of record due to regulation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,120 ft³/s, June 14, 2006; maximum gage height, 22.30 ft on June 14, 2006, from flooding as a result of Tropical Storm Alberto.

0208726005 CRABTREE CREEK AT EBENEZER CHURCH ROAD NEAR RALEIGH, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	8.6	e42	e9.3	390	93	57	267	181	15	120	15	323
2	7.7	e30	e8.9	208	136	45	194	105	14	76	13	149
3	7.6	e22	e9.3	120	101	39	130	69	12	52	11	93
4	7.7	e18	e9.8	80	76	40	175	49	11	38	10	79
5	7.9	e15	e9.1	59	60	807	364	39	9.9	250	9.1	58
6	7.7	e12	e8.8	47	49	512	355	30	9.0	462	8.4	2,170
7	7.7	e10	e8.8	40	42	490	265	26	8.4	671	8.2	1,200
8	8.7	e9.0	e8.5	34	34	754	171	21	8.4	338	8.0	953
9	8.0	e8.7	e9.1	30	29	519	117	41	8.8	199	7.5	593
10	8.0	e8.3	e9.5	28	27	311	90	51	8.5	267	8.1	461
11	7.9	e7.7	e9.2	28	22	184	74	63	8.1	150	8.6	512
12	8.1	e7.9	9.3	25	19	124	67	163	7.9	96	8.0	312
13	7.5	e8.1	9.2	22	122	89	60	105	7.7	65	8.1	166
14	7.7	e7.9	8.5	21	215	72	48	69	7.7	102	8.3	100
15	9.0	e16	13	19	154	88	38	55	31	111	9.0	66
16	8.1	e15	173	18	104	293	33	58	16	67	9.7	174
17	7.9	e12	76	31	75	196	29	68	16	48	8.2	312
18	8.2	e11	42	58	97	132	26	59	10	37	9.2	184
19	13	e10	27	53	85	96	22	109	8.7	37	9.1	109
20	e8.6	e9.4	21	73	64	81	30	85	8.4	93	9.4	72
21	e7.2	e9.3	16	59	50	60	43	111	121	90	25	51
22	e6.9	e9.4	12	48	55	50	37	81	216	67	22	40
23	e6.5	e9.3	12	49	61	41	46	57	222	85	18	31
24	e44	e7.3	13	44	51	36	38	40	112	70	15	26
25	e125	e7.7	10	37	47	31	32	31	70	52	14	22
26	e281	e12	97	32	61	28	26	24	48	39	12	183
27	e872	e12	133	29	148	26	49	22	36	31	161	139
28	e394	e10	76	26	99	23	399	21	28	29	659	129
29	e180	e9.6	59	24	72	20	541	21	26	27	363	83
30	e100	e9.4	479	25	---	24	333	19	184	22	203	59
31	e60	---	712	23	---	100	---	17	---	19	576	---
Total	2,242.2	376.0	2,098.3	1,780	2,248	5,368	4,099	1,890	1,289.5	3,810	2,253.9	8,849
Mean	72.3	12.5	67.7	57.4	77.5	173	137	61.0	43.0	123	72.7	295
Max	872	42	712	390	215	807	541	181	222	671	659	2,170
Min	6.5	7.3	8.5	18	19	20	22	17	7.7	19	7.5	22
Cfsm	0.95	0.16	0.89	0.76	1.02	2.28	1.80	0.80	0.57	1.62	0.96	3.88
In.	1.10	0.18	1.03	0.87	1.10	2.63	2.01	0.93	0.63	1.86	1.10	4.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2008^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	68.5	81.0	79.3	115	120	157	101	49.1	73.4	63.8	68.4	105
Max	276	410	255	370	364	393	260	144	458	123	246	743
(WY)	(2003)	(2007)	(2003)	(1998)	(1998)	(1998)	(2003)	(1989)	(2006)	(2008)	(2004)	(1999)
Min	13.6	12.5	14.4	23.1	16.2	25.0	32.5	9.30	9.34	9.15	6.74	5.35
(WY)	(1992)	(2008)	(1991)	(2001)	(1991)	(1988)	(1992)	(2002)	(1999)	(1988)	(1990)	(1990)

0208726005 CRABTREE CREEK AT EBENEZER CHURCH ROAD NEAR RALEIGH, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1988 - 2008 ^a	
Annual total	24,107.7		36,303.9			
Annual mean	66.0		99.2		93.5	
Highest annual mean					170	2003
Lowest annual mean					46.6	1992
Highest daily mean	999	Apr 16	2,170	Sep 6	3,400	Jun 14, 2006
Lowest daily mean	6.5	Oct 23	6.5	Oct 23	2.1	Dec 18, 1990
Annual seven-day minimum	7.8	Sep 29	7.8	Oct 1	2.6	Dec 12, 1990
Maximum peak flow			3,760	Sep 6	8,120	Jun 14, 2006
Maximum peak stage			16.79	Sep 6	22.30	Jun 14, 2006
Instantaneous low flow					^b 1.5	Oct 12, 1997
Annual runoff (cfs)	0.869		1.31		1.23	
Annual runoff (inches)	11.80		17.77		16.71	
10 percent exceeds	142		254		209	
50 percent exceeds	27		38		37	
90 percent exceeds	8.5		8.3		9.3	

^aSee Period of Record.^bSee Remarks.