

Water-Data Report 2007

**02087324 CRABTREE CREEK AT U.S. HIGHWAY 1 AT RALEIGH, NC**

Neuse Basin  
Upper Neuse Subbasin

LOCATION.--Lat 35°48'40", long 78°36'39" referenced to North American Datum of 1983, Wake County, NC, Hydrologic Unit 03020201, on downstream side of bridge on U.S. Highway 1, 2.7 mi northeast of Raleigh, and 7.2 mi upstream from mouth.

DRAINAGE AREA.--121 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--July 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 182.27 ft above NGVD of 1929. Prior to August 8, 1999, at site 40 ft upstream at datum 183.27 ft above NGVD of 1929. Satellite and telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Maximum gage height for period of record from high-water mark in gage well. Minimum discharge for period of record also occurred October 8, 9, 1994. Minimum discharge for current water year occurred several days in September.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1973, reached a stage of about 17.98 ft, discharge, about 13,500 ft<sup>3</sup>/s.

## 02087324 CRABTREE CREEK AT U.S. HIGHWAY 1 AT RALEIGH, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	88	65	121	159	98	76	56	41	16	46	88	11
2	66	54	104	179	135	511	54	36	16	35	66	11
3	51	46	88	142	109	434	51	33	207	28	52	10
4	41	37	110	116	92	257	54	30	140	23	40	10
5	34	33	94	104	80	160	47	31	75	20	34	10
6	156	31	79	642	69	110	41	31	80	19	39	10
7	144	655	71	472	64	88	51	29	63	18	32	10
8	171	1,260	63	512	59	74	45	26	50	17	25	11
9	147	603	55	380	56	64	41	37	54	16	27	12
10	106	333	53	238	51	58	39	82	84	17	52	12
11	79	191	51	163	49	55	46	61	45	90	41	11
12	78	843	49	125	47	51	367	398	33	184	23	11
13	54	699	48	103	56	47	312	359	94	78	21	11
14	41	417	47	90	203	45	215	141	136	57	20	142
15	34	239	46	82	164	44	898	95	79	45	18	177
16	30	1,500	44	75	129	914	1,270	74	60	36	19	43
17	84	1,220	43	66	103	1,220	553	59	92	102	19	27
18	253	673	43	78	86	547	325	51	56	997	16	22
19	174	404	41	93	73	331	201	41	41	327	14	20
20	144	235	40	79	64	213	145	36	59	184	14	34
21	106	218	39	94	60	149	111	32	57	113	15	40
22	83	2,780	192	510	56	117	91	28	44	79	13	28
23	71	1,650	398	332	52	101	77	25	37	62	39	24
24	56	927	226	224	45	88	66	22	31	50	31	21
25	45	504	1,120	159	111	78	59	21	35	41	18	19
26	37	297	1,230	117	148	70	52	21	30	35	25	16
27	62	193	629	93	106	68	89	19	38	63	27	16
28	267	143	364	82	87	66	71	18	67	136	18	14
29	161	113	222	73	---	76	54	17	104	342	15	13
30	107	98	155	63	---	67	47	17	78	204	13	12
31	81	---	120	59	---	60	---	16	---	126	12	---
<b>Total</b>	3,051	16,461	5,985	5,704	2,452	6,239	5,528	1,927	2,001	3,590	886	808
<b>Mean</b>	98.4	549	193	184	87.6	201	184	62.2	66.7	116	28.6	26.9
<b>Max</b>	267	2,780	1,230	642	203	1,220	1,270	398	207	997	88	177
<b>Min</b>	30	31	39	59	45	44	39	16	16	16	12	10
<b>Cfsm</b>	0.81	4.53	1.60	1.52	0.72	1.66	1.52	0.51	0.55	0.96	0.24	0.22
<b>In.</b>	0.94	5.06	1.84	1.75	0.75	1.92	1.70	0.59	0.62	1.10	0.27	0.25

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2007, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	126	131	128	208	186	227	154	75.2	138	99.0	107	192
<b>Max</b>	427	549	335	495	483	494	382	128	674	198	400	1,162
<b>(WY)</b>	(2003)	(2007)	(2003)	(1998)	(1998)	(1998)	(2003)	(2003)	(2006)	(1997)	(2004)	(1999)
<b>Min</b>	30.8	23.2	44.2	45.0	59.5	50.5	57.4	21.3	21.3	30.7	28.6	14.2
<b>(WY)</b>	(1992)	(1992)	(2002)	(2001)	(1991)	(2006)	(1995)	(2002)	(1999)	(1993)	(2007)	(1990)

02087324 CRABTREE CREEK AT U.S. HIGHWAY 1 AT RALEIGH, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1990 - 2007	
Annual total	68,636		54,632			
Annual mean	188		150		148	
Highest annual mean					261	2003
Lowest annual mean					96.7	2002
Highest daily mean	5,560	Jun 14	2,780	Nov 22	7,730	Sep 6, 1996
Lowest daily mean	16	Jun 1	10	Sep 3	1.9	Oct 8, 1994
Annual seven-day minimum	21	Aug 11	10	Sep 1	2.3	Oct 2, 1994
Maximum peak flow			3,490	Nov 22	12,700	Sep 6, 1996
Maximum peak stage			12.18	Nov 22	<sup>a</sup> 18.23	Sep 6, 1996
Instantaneous low flow			<sup>a</sup> 10	Sep 2	<sup>a</sup> 1.9	Oct 7, 1994
Annual runoff (cfsm)	1.55		1.24		1.22	
Annual runoff (inches)	21.10		16.80		16.63	
10 percent exceeds	397		349		323	
50 percent exceeds	73		64		70	
90 percent exceeds	28		18		20	

<sup>a</sup> See Remarks.

