

Water-Data Report 2008

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 mi².

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 also occurred October 15, 17.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1973, reached a stage of about 17.98 ft, discharge, about 13,500 ft³/s.

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11	62	18	435	151	81	342	242	22	163	26	365
2	11	46	17	260	200	63	248	161	25	91	23	215
3	11	34	18	170	142	53	185	105	20	54	21	140
4	11	30	18	114	106	67	235	73	18	41	19	117
5	14	27	17	81	81	809	487	58	16	227	18	117
6	15	24	17	64	63	533	409	46	15	497	17	3,200
7	14	22	17	55	53	587	320	38	14	681	17	1,810
8	13	20	17	47	42	838	229	35	14	355	17	1,140
9	12	19	18	41	36	557	169	105	13	302	16	682
10	12	18	18	37	33	355	124	71	12	326	18	492
11	11	17	18	36	32	239	91	142	11	196	19	516
12	11	17	18	34	26	172	79	267	12	121	17	351
13	11	17	18	30	233	126	76	160	12	72	18	239
14	11	17	17	28	277	98	55	103	12	227	19	167
15	11	50	40	26	205	158	46	77	130	214	20	116
16	11	30	318	25	148	361	39	118	39	113	36	246
17	11	23	147	73	103	240	33	122	63	72	23	373
18	54	21	92	92	179	173	30	134	19	89	21	245
19	57	19	68	96	130	131	28	180	15	77	19	170
20	30	19	55	116	91	114	40	150	14	121	39	117
21	16	18	45	83	67	80	60	175	238	136	54	83
22	13	18	38	65	89	65	80	113	349	103	35	65
23	13	18	46	70	89	53	78	73	308	117	28	51
24	262	16	47	59	71	46	51	51	155	104	24	41
25	294	16	37	48	64	41	44	41	87	73	22	37
26	430	31	210	40	133	37	34	34	53	54	21	373
27	1,540	25	216	37	253	35	434	29	51	43	351	298
28	523	20	138	35	155	32	763	33	49	38	726	249
29	250	19	112	31	108	32	646	31	41	37	391	155
30	151	18	765	38	---	49	384	27	300	32	271	103
31	91	---	913	33	---	218	---	24	---	29	532	---
Total	3,925	731	3,533	2,399	3,360	6,443	5,839	3,018	2,127	4,805	2,878	12,273
Mean	127	24.4	114	77.4	116	208	195	97.4	70.9	155	92.8	409
Max	1,540	62	913	435	277	838	763	267	349	681	726	3,200
Min	11	16	17	25	26	32	28	24	11	29	16	37
Cfsm	1.05	0.20	0.94	0.64	0.96	1.72	1.61	0.80	0.59	1.28	0.77	3.38
In.	1.21	0.22	1.09	0.74	1.03	1.98	1.80	0.93	0.65	1.48	0.88	3.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	126	125	127	201	182	226	156	76.4	134	102	107	204
Max	427	549	335	495	483	494	382	128	674	198	400	1,162
(WY)	(2003)	(2007)	(2003)	(1998)	(1998)	(1998)	(2003)	(2003)	(2006)	(1997)	(2004)	(1999)
Min	30.8	23.2	44.2	45.0	59.5	50.5	57.4	21.3	21.3	30.7	28.6	14.2
(WY)	(1992)	(1992)	(2002)	(2001)	(1991)	(2006)	(1995)	(2002)	(1999)	(1993)	(2007)	(1990)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1990 - 2008	
Annual total	37,324		51,331			
Annual mean	102		140		148	
Highest annual mean					261	2003
Lowest annual mean					96.7	2002
Highest daily mean	1,540	Oct 27	3,200	Sep 6	7,730	Sep 6, 1996
Lowest daily mean	10	Sep 3	11	Oct 1	1.9	Oct 8, 1994
Annual seven-day minimum	10	Sep 1	11	Oct 11	2.3	Oct 2, 1994
Maximum peak flow			4,240	Sep 6	12,700	Sep 6, 1996
Maximum peak stage			13.54	Sep 6	^a 18.23	Sep 6, 1996
Instantaneous low flow			^a 10	Oct 12	^a 1.9	Oct 7, 1994
Annual runoff (cfs)	0.845		1.16		1.22	
Annual runoff (inches)	11.47		15.78		16.59	
10 percent exceeds	215		350		324	
50 percent exceeds	47		55		70	
90 percent exceeds	14		17		20	

^aSee Remarks.