



Water-Data Report 2010

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 upstream 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 National Geodetic Vertical Datum of 1929. Prior to November 11, 2009, gage located 40 ft downstream at same datum. Prior to August 8, 1999, at site 40 ft upstream at datum 183.27 ft above National Geodetic Vertical Datum of 1929. Satellite and telephone telemetry at streamgage.

REMARKS.--No estimated daily discharge. Records good. 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.

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 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	49	143	90	107	136	76	184	29	157	24	56	27
2	40	128	390	90	173	74	128	27	216	18	50	23
3	34	85	2,450	77	415	123	100	27	153	16	42	20
4	29	64	1,140	70	460	116	83	26	82	14	35	18
5	30	51	814	64	1,070	102	72	25	61	13	426	15
6	29	42	495	60	2,180	87	64	24	48	13	574	14
7	26	35	297	58	1,060	77	57	22	45	13	189	15
8	23	31	202	59	601	72	52	21	37	13	105	15
9	21	28	1,040	56	451	67	168	20	32	14	75	14
10	20	60	680	53	423	62	118	18	34	71	57	13
11	20	1,830	395	51	268	134	94	17	28	37	44	14
12	22	1,890	226	50	186	164	79	18	23	25	50	18
13	26	1,210	193	49	169	468	66	17	131	27	40	18
14	30	612	189	49	146	370	58	18	152	38	31	17
15	33	337	149	47	126	258	52	19	56	34	26	15
16	30	197	118	48	116	169	48	44	48	33	23	15
17	27	135	99	670	103	126	44	382	52	88	21	16
18	24	130	90	743	93	103	41	760	40	62	71	16
19	23	182	652	445	84	89	36	488	32	40	102	16
20	20	130	481	268	77	77	33	252	28	32	176	17
21	19	106	305	256	72	69	45	143	25	63	93	16
22	19	90	190	651	97	66	59	210	22	39	69	16
23	18	193	135	385	108	63	46	1,090	46	31	213	15
24	19	248	107	249	102	56	40	609	33	27	367	14
25	22	179	235	1,080	111	53	80	277	23	22	184	15
26	22	131	430	650	104	56	63	168	20	34	103	184
27	24	109	287	403	93	52	48	114	18	37	72	613
28	31	88	194	241	84	49	40	106	17	32	54	240
29	27	76	134	160	---	892	35	396	22	53	44	478
30	25	78	105	149	---	538	33	128	40	296	36	2,210
31	25	---	135	133	---	303	---	99	---	59	30	---
Total	807	8,618	12,447	7,471	9,108	5,011	2,066	5,594	1,721	1,318	3,458	4,137
Mean	26.0	287	402	241	325	162	68.9	180	57.4	42.5	112	138
Max	49	1,890	2,450	1,080	2,180	892	184	1,090	216	296	574	2,210
Min	18	28	90	47	72	49	33	17	17	13	21	13
Cfsm	0.22	2.37	3.32	1.99	2.69	1.34	0.57	1.49	0.47	0.35	0.92	1.14
In.	0.25	2.65	3.83	2.30	2.80	1.54	0.64	1.72	0.53	0.41	1.06	1.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	117	131	144	200	184	231	149	83.9	132	96.5	104	194
Max	427	549	402	495	483	494	382	180	674	198	400	1,162
(WY)	(2003)	(2007)	(2010)	(1998)	(1998)	(1998)	(2003)	(2010)	(2006)	(1997)	(2004)	(1999)
Min	26.0	23.2	44.2	45.0	59.5	50.5	57.4	21.3	21.3	30.7	28.6	14.2
(WY)	(2010)	(1992)	(2002)	(2001)	(1991)	(2006)	(1995)	(2002)	(1999)	(1993)	(2007)	(1990)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1990 - 2010	
Annual total	57,221		61,756			
Annual mean	157		169		148	
Highest annual mean					261	2003
Lowest annual mean					96.7	2002
Highest daily mean	2,450	Dec 3	2,450	Dec 3	7,730	Sep 6, 1996
Lowest daily mean	14	Sep 6	13	Jul 5	1.9	Oct 8, 1994
Annual seven-day minimum	17	Aug 31	14	Jul 3	2.3	Oct 2, 1994
Maximum peak flow			3,370	Dec 3	12,700	Sep 6, 1996
Maximum peak stage			12.23	Dec 3	^a 18.23	Sep 6, 1996
Instantaneous low flow			9.8	Sep 10	^a 1.9	Oct 7, 1994
Annual runoff (cfsm)	1.30		1.40		1.22	
Annual runoff (inches)	17.59		18.99		16.58	
10 percent exceeds	379		428		326	
50 percent exceeds	73		64		69	
90 percent exceeds	22		18		20	

^a See Remarks.

