

Water-Data Report 2008

02087275 CRABTREE CREEK AT U.S. HIGHWAY 70 AT RALEIGH, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 35°50'17", long 78°40'27" referenced to North American Datum of 1983, Wake County, NC, Hydrologic Unit 03020201, on left bank at upstream side of bridge on U.S. Highway 70, 0.6 mi upstream from Mine Creek, 4.4 mi northwest of Raleigh.

DRAINAGE AREA.--97.6 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1997 to current year. Unpublished records of gage height for water years 1988 to 1997 are available from the USGS Water Science Center, Raleigh, NC.

GAGE.--Water-stage recorder. Datum of gage is 203.72 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred June 16, 2002. Minimum discharge for current water year also occurred October 14.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1973, reached a stage of about 27.69 ft, discharge, about 11,700 ft³/s.

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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	9.4	49	12	470	128	67	344	241	17	155	17	393
2	9.2	36	12	256	176	52	243	135	18	88	14	191
3	9.0	26	12	138	117	44	157	83	14	57	13	111
4	8.9	22	13	87	86	52	222	57	13	42	12	93
5	9.9	20	12	63	68	869	460	43	12	291	11	74
6	11	16	12	50	54	542	435	34	11	e520	9.9	3,070
7	9.9	14	12	43	46	546	331	28	11	e720	9.6	1,640
8	9.8	13	12	37	37	810	213	26	10	404	9.4	1,240
9	9.2	12	12	32	31	563	139	61	11	e254	9.4	750
10	9.6	12	12	30	29	351	96	57	10	e300	11	555
11	9.0	11	12	29	25	205	74	109	9.8	192	10	614
12	9.0	11	12	27	21	126	67	237	9.5	111	9.6	406
13	8.9	11	13	24	205	86	61	137	9.8	70	9.7	229
14	9.1	11	12	23	301	69	47	86	9.7	174	10	134
15	9.8	24	26	21	204	119	39	62	86	156	11	89
16	9.3	19	250	20	128	357	33	82	28	77	14	251
17	9.0	15	106	43	87	230	28	88	30	50	10	424
18	13	14	68	71	140	145	26	95	15	53	11	248
19	27	14	51	68	106	101	24	151	12	41	11	147
20	15	13	41	88	77	85	33	121	11	102	14	93
21	10	12	33	68	58	61	51	149	255	104	27	66
22	9.5	12	28	54	70	50	49	95	321	72	24	51
23	8.7	12	31	57	75	40	57	63	303	93	19	38
24	e62	10	32	49	62	35	44	45	143	77	17	31
25	e166	11	26	40	55	30	36	34	80	54	16	26
26	349	17	161	34	102	27	30	28	51	40	14	326
27	1,270	16	175	31	231	25	187	24	43	31	268	245
28	496	14	105	29	130	23	574	24	33	28	787	207
29	228	13	87	26	88	22	659	24	36	27	432	121
30	115	13	671	29	---	29	416	22	276	22	247	81
31	69	---	874	26	---	151	---	19	---	20	621	---
Total	2,998.2	493	2,935	2,063	2,937	5,912	5,175	2,460	1,888.8	4,425	2,698.6	11,944
Mean	96.7	16.4	94.7	66.5	101	191	172	79.4	63.0	143	87.1	398
Max	1,270	49	874	470	301	869	659	241	321	720	787	3,070
Min	8.7	10	12	20	21	22	24	19	9.5	20	9.4	26
Cfsm	0.99	0.17	0.97	0.68	1.04	1.95	1.77	0.81	0.65	1.46	0.89	4.08
In.	1.14	0.19	1.12	0.79	1.12	2.25	1.97	0.94	0.72	1.69	1.03	4.55

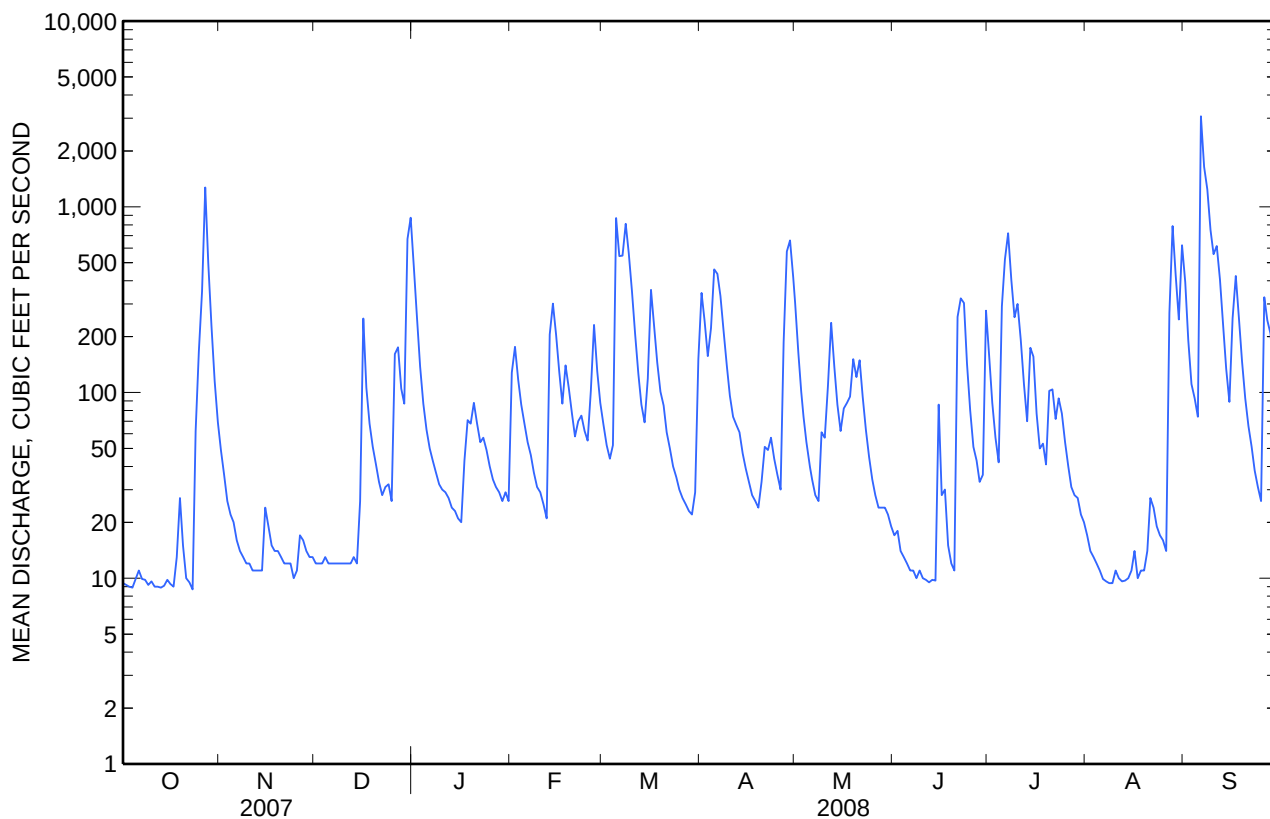
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	91.6	107	116	151	156	195	138	53.0	103	91.2	99.8	182
Max	352	487	308	422	412	429	310	92.8	540	166	331	939
(WY)	(2003)	(2007)	(2003)	(1998)	(1998)	(1998)	(2003)	(2003)	(2006)	(1997)	(2004)	(1999)
Min	22.2	16.4	27.1	33.7	72.5	44.0	70.0	15.6	13.1	26.0	20.0	17.6
(WY)	(2001)	(2008)	(2002)	(2001)	(2007)	(2006)	(2004)	(2002)	(1999)	(1999)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1997 - 2008	
Annual total	31,077.2		45,929.6			
Annual mean	85.1		125		125	
Highest annual mean					213	
Lowest annual mean					68.8	
Highest daily mean	1,270	Oct 27	3,070	Sep 6	5,030	Sep 16, 1999
Lowest daily mean	8.7	Oct 23	8.7	Oct 23	4.9	Jun 13, 2002
Annual seven-day minimum	9.2	Oct 11	9.2	Oct 11	5.6	Jun 12, 2002
Maximum peak flow			4,720	Sep 6	8,650	Jun 14, 2006
Maximum peak stage			18.47	Sep 6	23.77	Jun 14, 2006
Instantaneous low flow			^a 5.8	Oct 1	^a 1.6	Jun 14, 2002
Annual runoff (cfsm)	0.872		1.29		1.28	
Annual runoff (inches)	11.84		17.51		17.36	
10 percent exceeds	185		322		279	
50 percent exceeds	34		44		52	
90 percent exceeds	11		11		14	

^aSee Remarks.

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PERIOD OF RECORD.--September 2006 to current year.

INSTRUMENTATION.--Tipping bucket raingage. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.00	0.00	0.00	0.54	0.00	0.02	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.03	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.71	0.31	0.00	0.00	0.30	0.00	0.00
5	0.09	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.34	0.00	0.35
6	0.00	0.00	0.00	0.00	0.02	0.00	0.09	0.00	0.00	---	0.00	3.38
7	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.00	---	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.05	0.00	0.02	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	---	0.00	0.00
10	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	---	0.08	0.40
11	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.73	0.00	0.02	0.00	0.00
12	0.00	0.00	0.00	0.00	0.03	0.00	0.08	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.00	0.08	0.00
14	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.90	0.00	0.00
15	0.00	0.36	0.81	0.00	0.00	0.82	0.00	0.14	1.25	0.00	0.16	0.00
16	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.01	0.76
17	0.00	0.00	0.00	0.41	0.01	0.00	0.00	0.00	0.27	0.00	0.02	0.01
18	0.29	0.00	0.00	0.00	0.38	0.00	0.00	0.58	0.00	0.47	0.00	0.00
19	0.58	0.00	0.01	0.30	0.00	0.11	0.00	0.00	0.00	0.01	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.47	0.00	0.00	0.17	0.00
21	0.00	0.00	0.02	0.00	0.01	0.00	0.01	0.01	1.50	0.00	0.00	0.00
22	0.00	0.00	0.00	0.07	0.19	0.00	0.34	0.00	0.34	0.00	0.01	0.00
23	0.00	0.00	0.17	0.00	0.00	0.00	0.02	0.00	0.01	0.09	0.00	0.00
24	---	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00
25	---	0.06	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.16
26	1.29	0.17	0.69	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.11	0.96
27	1.46	0.01	0.00	0.00	0.00	0.00	1.93	0.00	0.44	0.00	1.17	0.42
28	0.00	0.00	0.01	0.00	0.00	0.00	0.79	0.16	0.00	0.00	0.49	0.01
29	0.00	0.00	0.04	0.00	0.00	0.04	0.01	0.00	0.48	0.00	0.00	0.01
30	0.00	0.00	1.66	0.10	---	0.25	0.00	0.01	0.28	0.00	0.16	0.00
31	0.00	---	0.01	0.00	---	0.80	---	0.00	---	0.00	0.11	---
Total	---	0.60	3.63	0.92	2.85	3.72	4.55	2.97	4.58	---	2.57	6.46

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