

Water-Data Report 2007

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 Unpublished records of gage height for water years 1988 to 1997 are available from the USGS Water Science Center, Raleigh, NC.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.--No estimated daily discharges. Records good. Minimum discharge for period of record also occurred June 16, 2002.

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 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	84	57	85	130	68	64	38	28	14	31	75	11
2	61	47	87	161	114	494	37	25	13	25	52	10
3	46	39	73	125	96	443	35	22	126	21	39	10
4	37	32	93	100	80	268	36	21	97	17	29	10
5	31	28	80	85	67	158	31	22	58	15	23	10
6	108	27	65	553	56	104	27	22	60	14	23	10
7	119	481	58	465	51	78	32	21	49	13	18	10
8	171	1,020	49	500	46	63	29	19	38	13	16	11
9	143	568	41	381	43	54	28	37	33	13	15	11
10	102	324	39	233	39	49	26	55	44	13	26	11
11	74	172	38	148	36	45	30	43	33	93	17	11
12	62	713	35	109	35	41	355	261	27	105	13	11
13	49	649	34	87	44	38	317	283	108	58	13	11
14	38	411	34	74	181	37	206	114	98	42	12	100
15	31	228	33	67	155	36	888	75	55	33	12	86
16	27	1,340	31	59	119	833	1,120	54	40	27	12	22
17	54	1,040	31	52	91	1,030	565	43	45	89	12	16
18	240	647	30	56	74	544	325	36	32	773	12	14
19	168	404	29	75	59	316	187	28	27	320	11	13
20	132	224	28	65	51	184	125	25	34	162	12	17
21	99	195	27	74	47	121	91	23	38	90	11	19
22	75	2,390	125	457	44	91	70	20	28	58	11	16
23	63	1,400	353	337	39	75	57	18	24	42	43	14
24	49	861	216	220	34	63	47	17	21	33	20	14
25	40	507	906	146	70	54	41	17	21	26	13	12
26	33	303	1,030	105	124	48	36	16	19	22	15	11
27	44	187	600	81	93	44	50	15	36	60	17	10
28	228	129	364	68	75	43	48	14	53	126	13	9.8
29	147	100	211	58	---	48	37	15	66	376	12	9.3
30	98	85	135	49	---	46	32	14	43	190	11	8.9
31	72	---	101	45	---	40	---	14	---	112	11	---
Total	2,725	14,608	5,061	5,165	2,031	5,552	4,946	1,417	1,380	3,012	619	529.0
Mean	87.9	487	163	167	72.5	179	165	45.7	46.0	97.2	20.0	17.6
Max	240	2,390	1,030	553	181	1,030	1,120	283	126	773	75	100
Min	27	27	27	45	34	36	26	14	13	13	11	8.9
Cfsm	0.90	4.99	1.67	1.71	0.74	1.84	1.69	0.47	0.47	1.00	0.20	0.18
In.	1.04	5.57	1.93	1.97	0.77	2.12	1.89	0.54	0.53	1.15	0.24	0.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2007, BY WATER YEAR (WY)

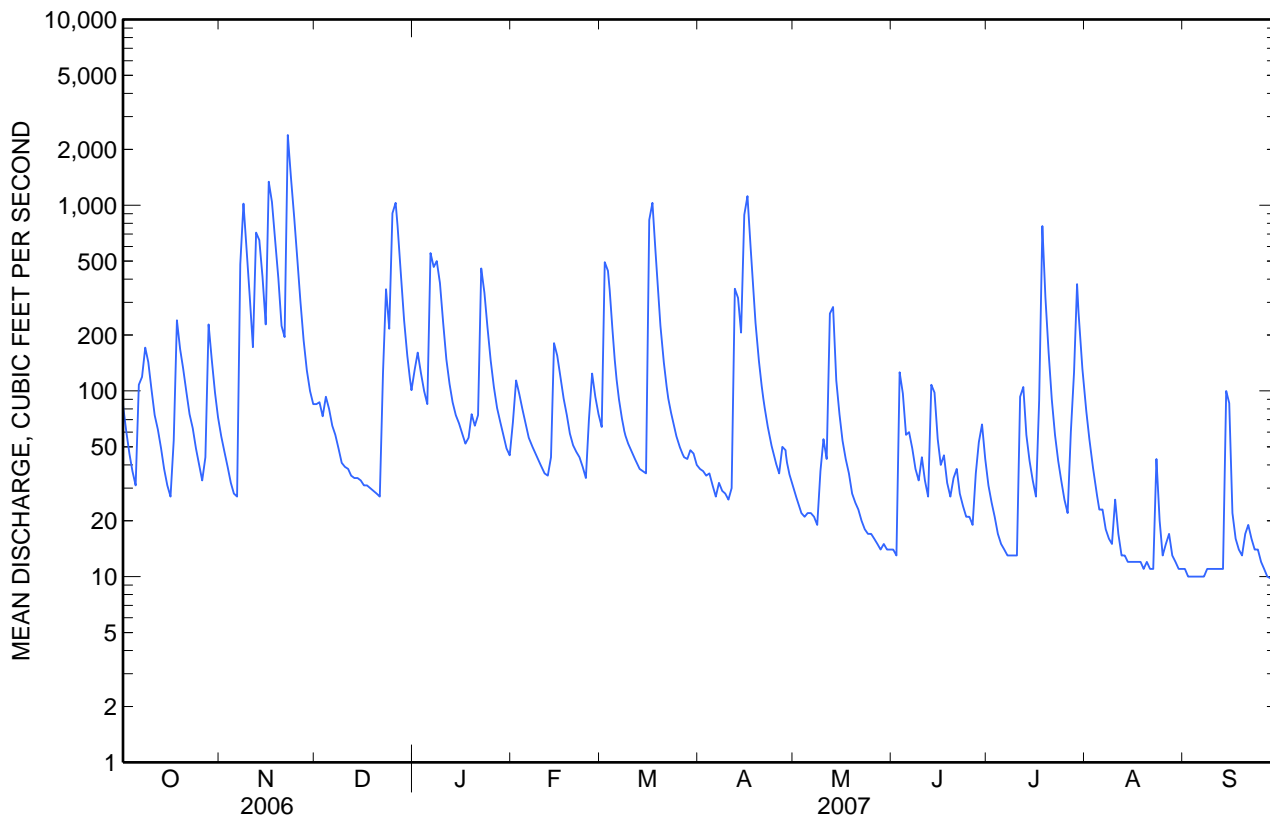
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	91.0	116	118	159	162	196	134	50.4	107	86.6	101	162
Max	352	487	308	422	412	429	310	92.8	540	166	331	939
(WY)	(2003)	(2007)	(2003)	(1998)	(1998)	(1998)	(2003)	(2003)	(2006)	(1997)	(2004)	(1999)
Min	22.2	31.5	27.1	33.7	72.5	44.0	70.0	15.6	13.1	26.0	20.0	17.6
(WY)	(2001)	(2002)	(2002)	(2001)	(2007)	(2006)	(2004)	(2002)	(1999)	(1999)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1997 - 2007	
Annual total	57,918		47,045.0			
Annual mean	159		129		125	
Highest annual mean					213	2003
Lowest annual mean					68.8	2002
Highest daily mean	4,220	Jun 14	2,390	Nov 22	5,030	Sep 16, 1999
Lowest daily mean	14	May 31	8.9	Sep 30	4.9	Jun 13, 2002
Annual seven-day minimum	16	May 26	10	Sep 1	5.6	Jun 12, 2002
Maximum peak flow			3,370	Nov 22	8,650	Jun 14, 2006
Maximum peak stage			15.37	Nov 22	23.77	Jun 14, 2006
Instantaneous low flow			5.8	Sep 30	^a 1.6	Jun 14, 2002
Annual runoff (cfsm)	1.63		1.32		1.28	
Annual runoff (inches)	22.08		17.93		17.35	
10 percent exceeds	368		330		276	
50 percent exceeds	59		48		53	
90 percent exceeds	22		13		15	

^a See Remarks.



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CLIMATOLOGICAL RECORDS

PERIOD OF RECORD.--September 2006 to September 2007.

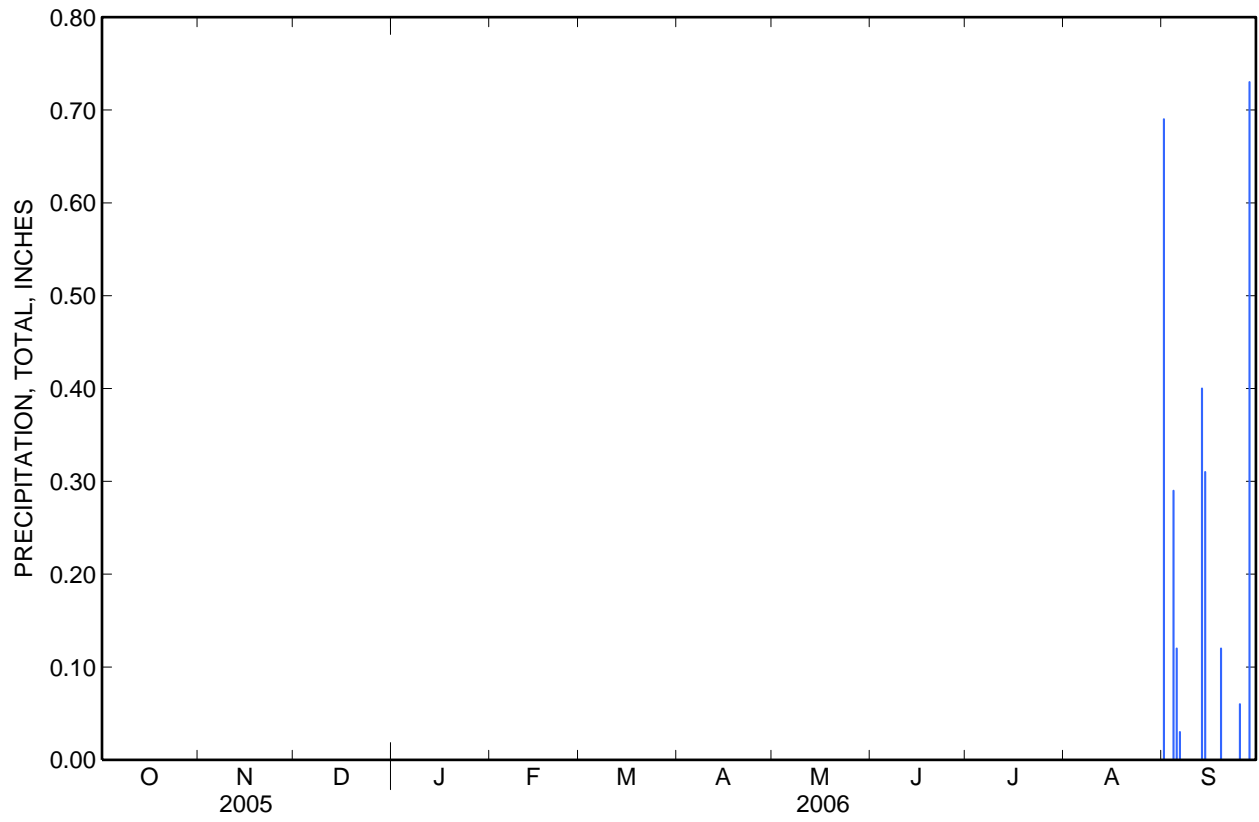
INSTRUMENTATION.--Tipping bucket raingage. Satellite telemetry at station.

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 2005 TO SEPTEMBER 2006
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	---	---	---	---	---	---	---	0.69
2	---	---	---	---	---	---	---	---	---	---	---	0.00
3	---	---	---	---	---	---	---	---	---	---	---	0.00
4	---	---	---	---	---	---	---	---	---	---	---	0.29
5	---	---	---	---	---	---	---	---	---	---	---	0.12
6	---	---	---	---	---	---	---	---	---	---	---	0.03
7	---	---	---	---	---	---	---	---	---	---	---	0.00
8	---	---	---	---	---	---	---	---	---	---	---	0.00
9	---	---	---	---	---	---	---	---	---	---	---	0.00
10	---	---	---	---	---	---	---	---	---	---	---	0.00
11	---	---	---	---	---	---	---	---	---	---	---	0.00
12	---	---	---	---	---	---	---	---	---	---	---	0.00
13	---	---	---	---	---	---	---	---	---	---	---	0.40
14	---	---	---	---	---	---	---	---	---	---	---	0.31
15	---	---	---	---	---	---	---	---	---	---	---	0.00
16	---	---	---	---	---	---	---	---	---	---	---	0.00
17	---	---	---	---	---	---	---	---	---	---	---	0.00
18	---	---	---	---	---	---	---	---	---	---	---	0.00
19	---	---	---	---	---	---	---	---	---	---	---	0.12
20	---	---	---	---	---	---	---	---	---	---	---	0.00
21	---	---	---	---	---	---	---	---	---	---	---	0.00
22	---	---	---	---	---	---	---	---	---	---	---	0.00
23	---	---	---	---	---	---	---	---	---	---	---	0.00
24	---	---	---	---	---	---	---	---	---	---	---	0.00
25	---	---	---	---	---	---	---	---	---	---	---	0.06
26	---	---	---	---	---	---	---	---	---	---	---	0.00
27	---	---	---	---	---	---	---	---	---	---	---	0.00
28	---	---	---	---	---	---	---	---	---	---	---	0.73
29	---	---	---	---	---	---	---	---	---	---	---	0.00
30	---	---	---	---	---	---	---	---	---	---	---	0.00
31	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	2.75

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PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.00	0.15	0.33	0.41	0.23	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.01	0.39	0.01	0.00	0.06	0.00	0.00	0.00
3	0.00	0.00	0.12	0.00	0.01	0.00	0.01	0.00	1.05	0.00	0.00	0.00
4	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
6	1.02	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.17	0.01	0.20	0.00
7	0.09	2.14	0.00	0.17	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00
8	0.14	0.09	0.00	0.23	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
9	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.32	0.00	0.06	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.18	0.30	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	1.12	0.02	0.00
12	0.05	0.93	0.00	0.00	0.00	0.00	0.43	1.41	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.42	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	1.75
15	0.00	0.00	0.00	0.00	0.00	0.00	1.59	0.00	0.00	0.00	0.00	0.13
16	0.00	1.68	0.00	0.00	0.00	1.76	0.38	0.02	0.00	0.00	0.00	0.00
17	0.70	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.17	1.75	0.07	0.00
18	0.10	0.00	0.00	0.30	0.01	0.00	0.00	0.00	0.00	0.63	0.00	0.00
19	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00
20	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.30
21	0.00	1.04	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02
22	0.09	1.43	1.06	0.12	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
23	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	1.48	0.00	0.55	0.00	0.00	0.00	0.12	0.00	0.00	0.00
26	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00
27	0.49	0.00	0.00	0.00	0.00	0.04	0.48	0.00	0.00	0.62	0.00	0.00
28	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00
29	0.00	0.00	0.00	0.04	---	0.17	0.00	0.00	1.14	0.00	0.00	0.00
30	0.00	0.07	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.01	0.00	---	0.00	---	0.00	---	0.00	0.00	---
Total	3.12	7.38	2.85	2.63	1.48	2.60	3.48	1.50	3.90	4.50	0.94	2.20

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