

Water-Data Report 2008

02096846 CANE CREEK NEAR ORANGE GROVE, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 35°59'14", long 79°12'22" referenced to North American Datum of 1983, Orange County, NC, Hydrologic Unit 03030002, on right bank, downstream of bridge on Secondary Road 1114, and 1.0 mi northwest of Orange Grove.

DRAINAGE AREA.--7.54 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--November 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 507.6 ft above North American Vertical Datum of 1988. Satellite telemetry at station.

REMARKS.--Records poor. Maximum discharge for period of record from rating curve extended above 500 ft³/s, based on contracted-opening measurement of peak flow; maximum gage-height, 7.90 ft, from flood mark. No flow occurs at times most years.

02096846 CANE CREEK NEAR ORANGE GROVE, NC—Continued

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	0.00	0.00	0.00	1.4	0.24	0.83	21	3.2	0.41	0.51	e0.06	e0.58
2	0.00	0.00	0.00	0.66	0.87	0.66	7.1	2.2	0.32	0.30	e0.11	e0.21
3	0.00	0.00	0.00	0.46	1.1	0.54	3.6	2.1	0.27	0.31	e0.00	e0.04
4	0.00	0.00	0.00	0.38	0.64	12	16	1.3	0.30	0.31	e0.00	e0.02
5	0.00	0.00	0.00	0.34	0.46	53	52	1.00	0.27	0.48	e0.00	e0.06
6	0.00	0.00	0.00	0.31	0.38	6.3	22	0.89	0.23	2.2	e0.00	e0.40
7	0.00	0.00	0.00	0.25	0.34	36	10	0.74	0.20	2.4	e0.00	19
8	0.00	0.00	0.00	0.21	0.21	26	5.5	0.62	0.18	1.3	e0.00	7.7
9	0.00	0.00	0.00	0.19	0.21	6.7	3.5	0.81	0.17	0.93	e0.00	4.7
10	0.00	0.00	0.00	0.19	0.25	3.8	2.9	2.6	0.16	0.59	e0.00	4.8
11	0.00	0.00	0.00	0.17	0.29	2.7	2.2	23	0.13	0.48	e0.00	5.3
12	0.00	0.00	0.00	0.17	0.27	2.2	2.2	18	0.11	0.20	e0.00	4.6
13	0.00	0.00	0.00	0.16	9.5	1.8	2.0	4.4	0.10	e0.30	e0.00	3.8
14	0.00	0.00	0.00	0.13	4.5	1.5	1.6	2.4	0.10	e0.07	e0.00	2.5
15	0.00	0.00	0.00	0.13	2.5	1.6	1.4	1.8	0.10	e0.34	e0.00	1.6
16	0.00	0.00	0.00	0.12	1.6	10	1.2	7.9	0.09	e0.34	e0.00	11
17	0.00	0.00	0.00	0.18	0.98	3.6	1.1	4.2	0.09	e0.10	e0.00	13
18	0.00	0.00	0.00	0.27	0.88	2.4	0.98	2.4	0.07	e0.22	e0.00	5.4
19	0.00	0.00	0.00	0.45	0.67	2.2	0.87	2.3	0.06	e1.4	e0.00	3.0
20	0.00	0.00	0.00	0.66	0.53	4.4	8.1	1.7	0.06	e0.56	e0.00	1.9
21	0.00	0.00	0.00	0.50	0.43	3.1	14	1.7	0.06	e0.03	e0.00	1.5
22	0.00	0.00	0.00	0.43	0.47	2.1	4.3	1.3	0.07	e0.02	e0.00	1.1
23	0.00	0.00	0.00	0.41	0.50	1.8	2.7	0.97	0.15	e0.01	e0.00	0.97
24	0.00	0.00	0.00	0.31	0.50	1.5	1.9	0.83	0.12	e0.02	e0.00	0.83
25	0.00	0.00	0.00	0.23	0.48	1.3	1.5	0.76	0.08	e0.03	e0.00	0.74
26	0.01	0.00	0.00	0.20	0.95	1.2	1.1	0.63	0.07	e0.04	e0.01	3.9
27	0.03	0.00	0.00	0.19	3.8	1.1	1.1	0.57	0.03	e0.10	e1.0	5.9
28	0.10	0.00	0.00	0.19	1.7	1.0	40	0.57	0.03	e0.49	e1.1	4.6
29	0.02	0.00	0.00	0.19	1.1	1.00	24	0.62	0.08	e0.11	4.3	2.7
30	0.00	0.00	0.33	0.17	---	1.0	6.1	0.56	2.0	e0.24	2.4	0.99
31	0.00	---	2.1	0.14	---	8.0	---	0.44	---	e0.09	1.1	---
Total	0.16	0.00	2.43	9.79	36.35	201.33	261.95	92.51	6.11	14.52	10.08	112.84
Mean	0.01	0.00	0.08	0.32	1.25	6.49	8.73	2.98	0.20	0.47	0.33	3.76
Max	0.10	0.00	2.1	1.4	9.5	53	52	23	2.0	2.4	4.3	19
Min	0.00	0.00	0.00	0.12	0.21	0.54	0.87	0.44	0.03	0.01	0.00	0.02
Cfsm	0.00	0.00	0.01	0.04	0.17	0.86	1.16	0.40	0.03	0.06	0.04	0.50
In.	0.00	0.00	0.01	0.05	0.18	0.99	1.29	0.46	0.03	0.07	0.05	0.56

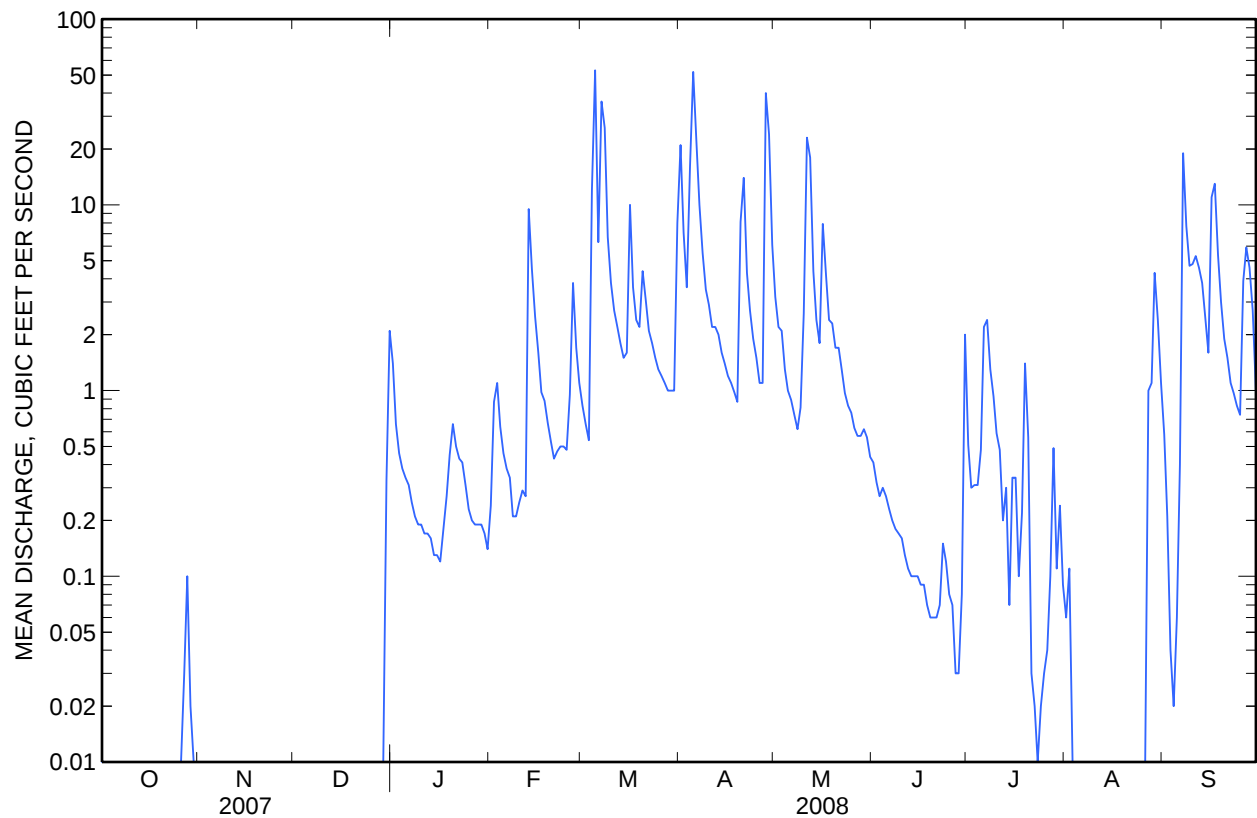
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2.47	3.91	5.45	10.5	11.1	16.3	9.94	4.73	3.60	2.27	1.35	3.75
Max	13.0	18.6	19.8	28.3	34.3	46.3	37.2	18.7	16.4	13.5	9.50	25.9
(WY)	(2003)	(2007)	(2003)	(1998)	(1998)	(1998)	(2003)	(1989)	(1995)	(2000)	(2004)	(1996)
Min	0.01	0.00	0.08	0.32	1.25	1.19	1.06	0.13	0.02	0.03	0.00	0.00
(WY)	(1999)	(2008)	(2008)	(2008)	(2008)	(2006)	(2002)	(2002)	(2002)	(2007)	(2007)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1989 - 2008	
Annual total	1,337.57		748.07			
Annual mean	3.66		2.04		6.10	
Highest annual mean					14.3	2003
Lowest annual mean					0.99	2002
Highest daily mean	174	Apr 15	53	Mar 5	516	Mar 4, 1993
Lowest daily mean	0.00	Aug 2	0.00	Oct 1	0.00	Sep 17, 1990
Annual seven-day minimum	0.00	Aug 2	0.00	Oct 1	0.00	Sep 17, 1990
Maximum peak flow			978	Sep 6	^a 2,060	Sep 6, 1996
Maximum peak stage			5.70	Sep 6	^a 7.90	Sep 6, 1996
Instantaneous low flow			^a 0.00	Oct 1	^a 0.00	Sep 17, 1990
Annual runoff (cfs)	0.486		0.271		0.809	
Annual runoff (inches)	6.60		3.69		10.99	
10 percent exceeds	6.1		4.4		11	
50 percent exceeds	0.07		0.27		1.5	
90 percent exceeds	0.00		0.00		0.04	

^aSee Remarks.

02096846 CANE CREEK NEAR ORANGE GROVE, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a regional surface-water quality assessment.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	Instantaneous discharge, cfs (00061)	Color, water, ftrd, Pt-Co units (00080)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd, μ S/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium, water, ftrd, mg/L (00915)	Magnesium, water, ftrd, mg/L (00925)	Potassium, water, ftrd, mg/L (00935)
Feb 06...	1245	.33	30	744	9.1	86	7.0	113	11.4	27	6.91	2.34	2.99
Apr 02...	1115	6.9	70	757	11.3	108	7.1	63	13.1	19	4.72	1.78	1.02
Jun 02...	1130	.30	50	750	7.1	79	7.3	94	19.9	32	8.02	2.96	1.62
Aug 04...	1015	.09	50	751	7.4	84	7.3	103	21.2	35	8.94	3.16	2.98
Sep 06...	1115	877	150	745	7.6	88	6.2	31	21.3	11	2.90	1.02	1.75

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 4

[Remark codes: <, less than; E, estimated.]

Date	Sodium, water, ftrd, mg/L (00930)	ANC, wat unfltrd, titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd, titr., field, mg/L (00450)	Chloride, water, ftrd, mg/L (00940)	Fluoride, water, ftrd, mg/L (00950)	Silica, water, ftrd, mg/L as SiO ₂ (00955)	Sulfate, water, ftrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia, water, ftrd, mg/L as N (00608)	Nitrate + nitrite, water, ftrd, mg/L as N (00631)	Nitrite, water, ftrd, mg/L as N (00613)	Orthophosphate, water, ftrd, mg/L as P (00671)
Feb 06...	6.49	12	15	7.60	<.12	10.4	14.7	75	.61	E.014	.128	E.002	.008
Apr 02...	5.08	10	13	5.34	<.12	9.25	7.56	60	.53	<.020	.157	.003	.007
Jun 02...	5.70	30	36	6.90	<.12	13.1	3.50	69	.35	E.015	.471	.002	.036
Aug 04...	5.06	36	44	5.61	E.07	11.6	1.77	75	.43	E.011	.191	E.002	.032
Sep 06...	1.35	4.0	4.9	1.33	<.12	4.46	2.64	58	1.2	<.020	.119	.004	.024

02096846 CANE CREEK NEAR ORANGE GROVE, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 4

[Remark codes: <, less than; E, estimated.]

Date	Phos- phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	Organic carbon, water, unfltrd mg/L (00680)	Alum- inum, water, unfltrd recover- able, µg/L (01105)	Arsenic water, unfltrd µg/L (01002)	Cadmium water, unfltrd µg/L (01027)	Chrom- ium, water, unfltrd recover- able, µg/L (01034)	Cobalt water, unfltrd recover- able, µg/L (01037)	Copper, water, unfltrd recover- able, µg/L (01042)	Iron, water, unfltrd recover- able, µg/L (01045)	Lead, water, unfltrd recover- able, µg/L (01051)	Mangan- ese, water, unfltrd recover- able, µg/L (01055)	Mercury water, fltrd, µg/L (71890)
Feb 06...	.049	7.4	8.8	--	--	--	--	--	--	--	--	--	<.010
Apr 02...	.047	8.7	10.9	264	E.32	<.01	E.37	.22	2.3	512	.27	30.4	E.008
Jun 02...	.056	5.4	5.1	--	--	--	--	--	--	--	--	--	<.010
Aug 04...	.116	5.2	6.3	--	--	--	--	--	--	--	--	--	<.010
Sep 06...	.187	18.4	18.5	1,460	.85	E.01	.87	2.3	4.4	2,370	2.41	270	E.006

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 4

[Remark codes: <, less than; E, estimated.]

Date	Mercury water, unfltrd recover- able, µg/L (71900)	Molyb- denum, water, unfltrd recover- able, µg/L (01062)	Nickel, water, unfltrd recover- able, µg/L (01067)	Selen- ium, water, unfltrd µg/L (01147)	Silver, water, unfltrd recover- able, µg/L (01077)	Zinc, water, unfltrd recover- able, µg/L (01092)	Sus- pended sediment concentration mg/L (80154)
Feb 06...	<.010	--	--	--	--	--	4
Apr 02...	E.008	<.1	.39	.12	<.02	2.2	11
Jun 02...	<.010	--	--	--	--	--	2
Aug 04...	<.010	--	--	--	--	--	50
Sep 06...	.014	E.1	.82	.14	E.01	8.0	231