

Water-Data Report 2007

02102908 FLAT CREEK NEAR INVERNESS, NC

Cape Fear Basin
Upper Cape Fear Subbasin

LOCATION.--Lat 35°10'58", long 79°10'39" referenced to North American Datum of 1983, Hoke County, NC, Hydrologic Unit 03030004, on left bank 15 ft downstream of culvert on Manchester Road, Fort Bragg military reservation, 0.4 mi upstream from mouth, and 3.6 mi east of Inverness.

DRAINAGE AREA.--7.63 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1968 to current year.

REVISED RECORDS.--WDR NC-72-1: 1968-70(M). WDR NC-81-1: Drainage area. WDR-US-2006: 1969-2005(M,P)

GAGE.--Water-stage recorder. Datum of gage is 191.18 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some diurnal fluctuation at low flow during growing season. Minimum discharge some years affected by regulation from unknown source.

02102908 FLAT CREEK NEAR INVERNESS, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6.1	6.9	14	15	16	9.9	10	7.1	e4.1	31	4.0	3.1
2	5.5	6.8	14	13	23	34	11	6.9	e7.0	10	3.6	3.0
3	5.3	6.6	12	12	15	19	10	6.9	e15.0	7.3	3.4	2.6
4	5.2	6.7	13	11	12	13	14	7.3	e10.4	6.5	3.3	2.6
5	5.1	6.9	12	11	11	12	10	8.2	e6.5	5.8	3.3	2.6
6	6.1	6.9	11	23	11	11	9.8	8.5	5.8	5.4	3.1	2.5
7	7.2	17	11	16	11	11	10	6.9	5.2	6.4	3.1	2.6
8	15	42	11	22	11	10	9.8	6.8	5.1	9.2	3.1	2.5
9	10	16	10	15	10	10	9.9	7.5	4.8	6.1	2.9	2.4
10	7.8	11	10	13	10	10	9.8	7.3	4.6	5.7	3.1	2.3
11	6.9	9.6	10	12	10	10	12	6.8	4.9	5.4	3.3	2.4
12	6.8	16	10	12	10	9.6	24	6.7	5.7	17	3.6	2.1
13	6.4	12	10	11	11	9.7	13	8.4	7.1	6.9	3.0	2.8
14	6.3	9.6	10	11	27	9.3	11	7.0	6.2	6.1	2.8	3.1
15	6.0	9.0	9.9	11	14	9.2	23	6.3	5.9	5.7	2.6	11
16	5.9	23	9.5	e11	12	26	27	6.1	5.6	8.2	2.8	4.8
17	8.8	18	9.4	e11	11	36	14	11	10	6.1	2.7	3.8
18	17	11	9.3	13	11	15	12	9.6	6.2	10	2.9	3.4
19	9.2	10	9.1	15	10	13	11	8.3	5.2	6.5	2.4	3.5
20	7.8	9.7	9.1	12	11	12	11	e7.9	6.6	5.2	2.4	4.6
21	6.8	12	9.0	11	10	11	10	e7.1	6.0	5.0	2.7	6.2
22	7.1	109	13	27	10	11	9.7	e6.7	4.9	4.5	3.3	4.8
23	7.6	51	27	16	9.7	10	9.2	e6.3	4.6	4.2	3.1	4.1
24	6.8	35	13	13	9.7	9.9	8.9	e6.0	4.6	4.1	3.4	3.5
25	6.7	16	34	12	11	9.9	8.8	e5.7	4.5	4.2	3.0	3.3
26	6.6	15	46	12	15	11	8.4	e5.3	4.2	3.9	2.9	3.3
27	7.8	14	17	11	11	11	8.3	e5.0	4.8	3.9	3.1	3.2
28	18	13	14	11	10	10	8.0	e4.8	5.1	4.2	3.1	3.2
29	9.1	13	13	11	---	11	7.6	e4.6	13	4.1	2.9	2.9
30	7.3	13	13	11	---	11	7.4	e4.5	34	4.5	3.1	2.9
31	6.9	---	12	11	---	10	---	e4.3	---	5.1	3.2	---
Total	245.1	545.7	425.3	416	343.4	405.5	348.6	211.8	217.6	218.2	95.2	105.1
Mean	7.91	18.2	13.7	13.4	12.3	13.1	11.6	6.83	7.25	7.04	3.07	3.50
Max	18	109	46	27	27	36	27	11	34	31	4.0	11
Min	5.1	6.6	9.0	11	9.7	9.2	7.4	4.3	4.1	3.9	2.4	2.1
Cfsm	1.04	2.38	1.80	1.76	1.61	1.71	1.52	0.90	0.95	0.92	0.40	0.46
In.	1.19	2.66	2.07	2.03	1.67	1.98	1.70	1.03	1.06	1.06	0.46	0.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2007, BY WATER YEAR (WY)

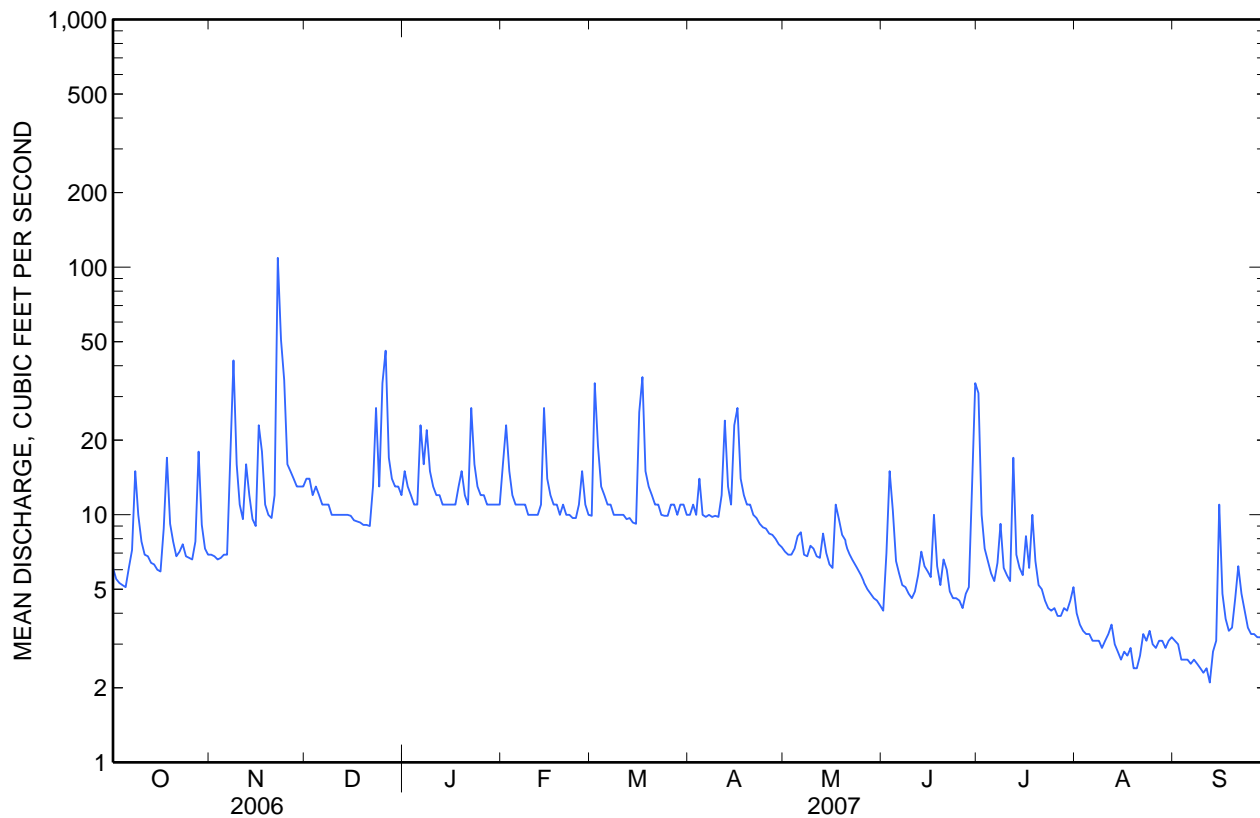
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	10.2	11.0	11.7	13.5	14.6	14.6	13.0	10.5	10.4	10.3	9.53	9.95
Max	19.9	20.5	19.5	20.2	32.0	28.5	39.7	18.9	25.3	24.5	21.7	22.3
(WY)	(1972)	(1980)	(1973)	(1975)	(1973)	(1998)	(1973)	(1973)	(1995)	(1989)	(2003)	(1996)
Min	5.13	5.02	5.16	7.30	7.00	6.47	5.11	3.67	3.19	2.90	2.74	3.50
(WY)	(2002)	(2002)	(2002)	(2001)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2007)

02102908 FLAT CREEK NEAR INVERNESS, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1968 - 2007	
Annual total	3,526.9		3,577.5			
Annual mean	9.66		9.80		11.6	
Highest annual mean					20.2	1973
Lowest annual mean					5.00	2002
Highest daily mean	109	Nov 22	109	Nov 22	200	Apr 1, 1973
Lowest daily mean	3.5	Jul 18	2.1	Sep 12	0.94	Aug 13, 2002
Annual seven-day minimum	3.9	Aug 14	2.4	Sep 6	1.3	Aug 8, 2002
Maximum peak flow			183	Nov 22	352	Apr 1, 1973
Maximum peak stage			4.52	Nov 22	7.30	Apr 1, 1973
Instantaneous low flow			1.7	Sep 12	^a 0.38	Aug 14, 2002
Annual runoff (cfsm)	1.27		1.28		1.52	
Annual runoff (inches)	17.20		17.44		20.69	
10 percent exceeds	14		15		19	
50 percent exceeds	7.1		9.1		9.5	
90 percent exceeds	5.0		3.1		5.2	

^a See Remarks.



02102908 FLAT CREEK NEAR INVERNESS, NC—Continued

CLIMATOLOGICAL RECORDS

PERIOD OF RECORD.--April 2000 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 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	0.18	0.09	0.73	0.61	0.05	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.11	0.94	0.07	0.00	0.20	0.00	0.00	0.00
3	0.00	0.00	0.16	0.00	0.00	0.02	0.11	0.00	1.84	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.07	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00
6	0.09	0.00	0.00	0.42	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
7	0.32	2.26	0.00	0.28	0.00	0.00	0.02	0.00	0.00	0.10	0.00	0.00
8	0.84	0.18	0.00	0.30	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00
9	0.05	0.00	0.00	0.01	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.06	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.59	0.00	0.00
12	0.00	0.55	0.00	0.00	0.00	0.00	0.26	0.29	0.27	0.01	0.00	0.00
13	0.00	0.00	0.00	---	1.09	0.00	0.00	0.00	0.02	0.00	0.00	0.00
14	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
15	0.00	0.00	0.00	---	0.00	0.00	1.29	0.00	0.00	0.09	0.00	0.26
16	0.00	0.97	0.00	---	0.00	2.10	0.00	0.28	0.00	0.00	0.00	0.00
17	0.97	0.00	0.00	---	0.00	0.01	0.00	0.13	0.81	0.00	0.00	0.00
18	0.01	0.00	0.00	0.41	0.01	0.00	0.00	0.00	0.00	0.43	0.00	0.00
19	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00
20	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.11	0.00	0.23
21	0.00	1.31	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00
22	0.11	2.95	1.12	0.29	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
23	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
25	0.00	0.00	2.27	0.00	0.50	0.00	0.00	0.00	0.00	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	0.02	0.00
27	0.78	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.07	0.00	0.00	0.00
28	0.06	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.10	0.00	0.00	2.03	0.00	0.04	0.00
30	0.00	0.05	0.00	0.00	---	0.00	0.00	0.00	1.36	0.07	0.00	0.00
31	0.00	---	0.16	0.07	---	0.00	---	0.00	---	0.00	0.00	---
Total	3.24	8.30	3.94	---	2.46	3.79	2.62	0.94	7.33	1.41	0.47	1.46

02102908 FLAT CREEK NEAR INVERNESS, NC—Continued

