

Water-Data Report 2008

02087580 SWIFT CREEK NEAR APEX, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 35°43'08", long 78°45'08" referenced to North American Datum of 1983, Wake County, NC, Hydrologic Unit 03020201, on right bank at downstream side of bridge on Secondary Road 1152, 2.8 mi downstream from Williams Creek, and 6 mi east of Apex.

DRAINAGE AREA.--21 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.-- March 2002 to current year. Occasional discharge measurements, water years 1953-1969.

REVISED RECORDS.--WDR NC-03-1A: 2002 (daily discharges, peak flow)

GAGE.--Water-stage recorder. Datum of gage is 292.22 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, and those discharges below 5ft³/s, which are poor. No flow occurs most years. Maximum discharge for period of record, 5,260 ft³/s, June 14, 2006, from rating curve extended above 3,000 ft³/s by logarithmic plotting; maximum gage height for period of record, 13.86 ft, from crest-stage gage reading.

02087580 SWIFT CREEK NEAR APEX, 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	0.17	0.42	e0.38	22	35	5.2	73	12	2.4	6.9	1.2	5.5
2	0.07	0.75	e0.38	11	26	4.0	21	9.1	2.9	2.7	0.87	1.7
3	0.01	0.49	e0.38	6.2	9.1	3.5	12	7.5	2.2	1.7	0.69	0.92
4	0.03	e0.43	e0.39	4.0	5.5	3.9	27	6.7	1.9	1.6	0.59	0.64
5	0.10	e0.59	e0.41	3.8	4.5	168	146	6.0	1.7	96	0.52	2.4
6	0.16	e0.69	e0.35	3.6	4.9	22	56	5.2	1.6	64	0.47	1,100
7	0.03	e0.60	e0.52	3.2	3.9	129	25	5.2	1.6	93	0.48	73
8	0.00	e0.58	e0.40	3.1	3.2	127	15	5.2	1.5	10	0.59	14
9	0.00	e0.48	e0.40	3.2	2.7	33	11	9.8	1.5	29	0.52	6.9
10	0.00	e0.42	e0.38	3.1	2.8	15	9.1	24	1.4	64	0.49	e70
11	0.72	e0.40	e0.41	3.0	3.7	10	8.8	24	1.4	7.8	0.52	e30
12	3.0	e0.33	e0.40	3.2	2.5	9.0	8.6	62	1.3	3.3	0.55	e15
13	0.00	e0.34	e0.41	2.7	69	6.5	9.0	13	1.3	2.0	1.1	e10
14	0.00	e0.35	e0.44	2.4	47	5.6	6.4	7.3	1.7	9.3	1.2	e7.0
15	0.00	e4.0	e1.5	2.3	14	37	6.3	6.6	21	13	9.6	e5.0
16	0.00	e1.2	e68	2.1	7.6	95	4.5	34	5.1	3.7	12	e53
17	0.00	e0.41	e8.6	12	5.1	18	4.2	38	2.6	1.9	e1.3	49
18	0.00	e0.38	e2.4	14	38	9.8	4.0	22	2.0	4.4	e0.69	7.9
19	2.4	e0.39	e1.2	13	16	11	3.9	32	1.6	6.6	e0.80	3.5
20	1.3	e0.48	e0.76	21	7.2	18	12	27	18	9.3	e0.63	2.1
21	0.87	e0.47	e0.61	8.6	5.0	8.6	15	35	8.4	2.8	e0.38	1.5
22	0.42	e0.51	e0.62	5.0	8.9	7.1	16	11	33	1.6	e0.32	1.2
23	0.45	e0.38	e0.61	5.6	9.1	6.9	23	6.9	7.7	1.2	e0.27	1.1
24	31	e0.36	e1.8	4.8	6.1	6.3	12	6.4	15	1.3	e0.25	1.1
25	44	e0.35	e0.86	4.2	4.6	5.6	8.0	5.5	4.2	1.2	e0.21	1.4
26	135	e2.1	e44	2.6	18	5.4	6.5	4.1	2.3	0.87	e0.19	72
27	532	e3.1	e21	2.5	62	5.3	46	2.5	1.6	0.74	30	14
28	15	e0.93	e4.7	2.5	14	5.2	182	7.4	1.4	0.74	156	46
29	2.7	e0.41	e2.7	2.4	6.7	5.6	83	9.0	1.4	0.83	12	6.3
30	0.99	e0.38	e395	4.5	---	7.8	20	4.1	37	0.68	19	2.9
31	0.59	---	118	3.6	---	82	---	2.9	---	1.1	91	---
Total	771.01	22.72	678.01	185.2	442.1	876.3	874.3	451.4	186.7	443.26	344.43	1,605.06
Mean	24.9	0.76	21.9	5.97	15.2	28.3	29.1	14.6	6.22	14.3	11.1	53.5
Max	532	4.0	395	22	69	168	182	62	37	96	156	1,100
Min	0.00	0.33	0.35	2.1	2.5	3.5	3.9	2.5	1.3	0.68	0.19	0.64
Cfsm	1.18	0.04	1.04	0.28	0.73	1.35	1.39	0.69	0.30	0.68	0.53	2.55
In.	1.37	0.04	1.20	0.33	0.78	1.55	1.55	0.80	0.33	0.79	0.61	2.84

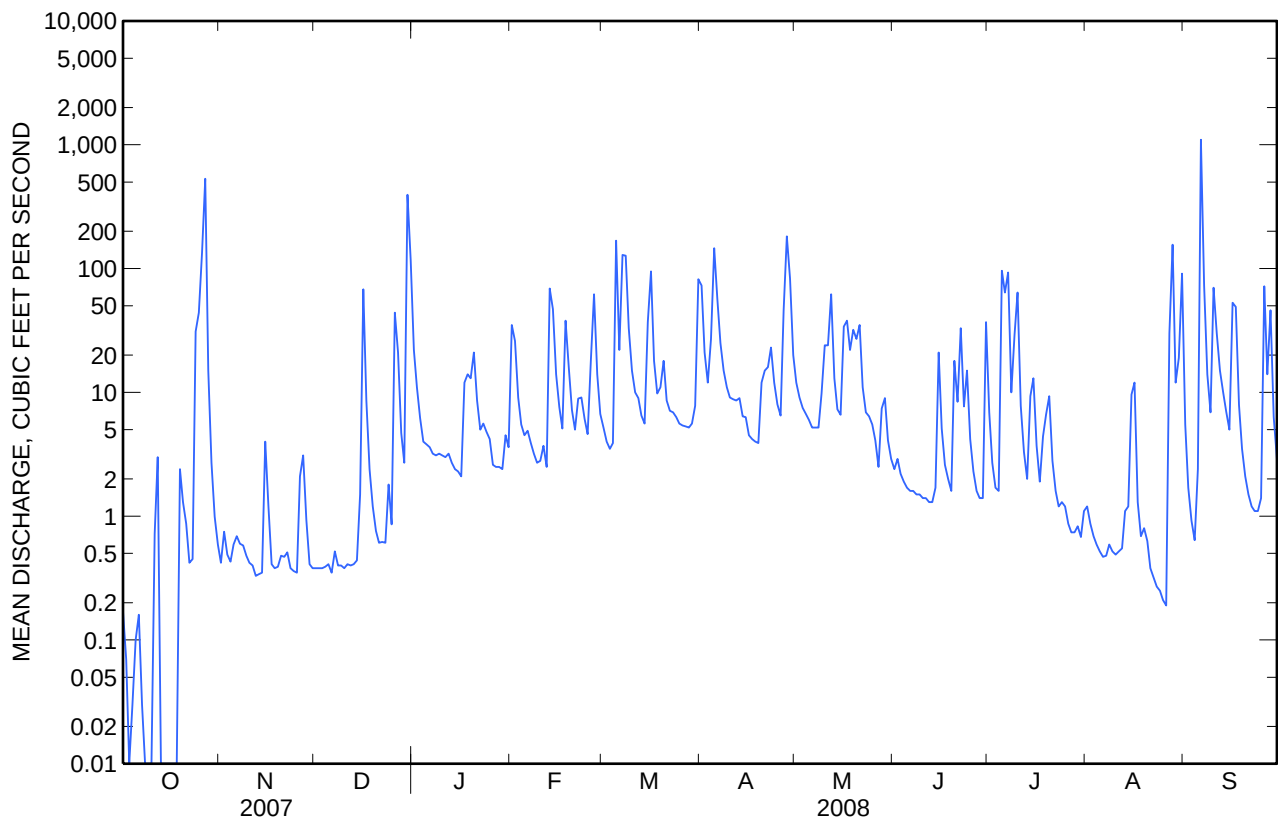
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	20.8	31.1	28.1	15.5	28.7	32.4	30.8	14.3	24.1	13.3	28.6	24.6
Max	56.8	101	45.2	29.4	67.6	68.8	64.0	24.5	98.9	24.4	80.0	53.5
(WY)	(2003)	(2007)	(2003)	(2007)	(2003)	(2003)	(2003)	(2006)	(2006)	(2003)	(2004)	(2008)
Min	4.85	0.76	10.8	5.97	12.1	6.08	14.7	1.73	1.70	5.97	0.42	2.71
(WY)	(2005)	(2008)	(2005)	(2008)	(2006)	(2006)	(2004)	(2002)	(2002)	(2002)	(2007)	(2007)

02087580 SWIFT CREEK NEAR APEX, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 2002 - 2008	
Annual total	5,421.99		6,880.49			
Annual mean	14.9		18.8		25.4	
Highest annual mean					43.3	
Lowest annual mean					17.6	
Highest daily mean	532	Oct 27	1,100	Sep 6	1,180	Nov 22, 2006
Lowest daily mean	0.00	Sep 3	0.00	Oct 8	0.00	Aug 3, 2002
Annual seven-day minimum	0.01	Sep 2	0.05	Oct 4	0.00	Aug 3, 2002
Maximum peak flow			2,270	Sep 6	^a 5,260	Jun 14, 2006
Maximum peak stage			11.21	Sep 6	^a 13.86	Jun 14, 2006
Instantaneous low flow			^a 0.00	Oct 3	^a 0.00	Aug 3, 2002
Annual runoff (cfs)	0.707		0.895		1.21	
Annual runoff (inches)	9.60		12.19		16.41	
10 percent exceeds	24		38		54	
50 percent exceeds	1.7		4.0		7.2	
90 percent exceeds	0.25		0.39		0.70	

^aSee Remarks.

02087580 SWIFT CREEK NEAR APEX, NC—Continued**CLIMATOLOGICAL RECORDS**

PERIOD OF RECORD.--December 2007 to September 2008.

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	0.50	0.00	0.01	0.00	0.05	0.60	0.00	0.00
2	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00
3	---	---	---	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00
4	---	---	---	0.00	0.00	0.49	0.30	0.00	0.00	0.46	0.00	0.00
5	---	---	---	0.00	0.00	0.00	0.75	0.00	0.00	0.21	0.00	0.62
6	---	---	---	0.00	0.00	0.00	0.08	0.00	0.00	1.28	0.00	3.85
7	---	---	---	0.00	0.00	0.89	0.01	0.00	0.00	0.01	0.00	0.00
8	---	---	---	0.00	0.00	0.11	0.00	0.08	0.00	0.03	0.00	0.00
9	---	---	---	0.00	0.00	0.00	0.00	0.12	0.00	0.68	0.00	0.20
10	---	---	---	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.12	0.20
11	---	---	---	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00
12	---	---	---	0.00	0.01	0.00	0.10	0.00	0.00	0.00	0.00	0.01
13	---	---	---	0.00	0.83	0.00	0.00	0.00	0.00	0.00	0.17	0.01
14	---	---	---	0.00	0.00	0.00	0.04	0.00	0.39	0.63	0.00	0.00
15	---	---	---	0.00	0.00	0.71	0.00	0.18	0.36	0.00	0.19	0.00
16	---	---	---	0.00	0.00	0.01	0.00	0.35	0.00	0.00	0.00	0.78
17	---	---	---	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	0.00	0.39	0.00	0.00	0.40	0.00	0.56	0.00	0.00
19	---	---	---	0.27	0.00	0.19	0.00	0.01	0.00	0.00	0.00	0.00
20	---	---	---	0.03	0.00	0.00	0.29	0.49	0.86	0.00	0.03	0.00
21	---	---	0.00	0.00	0.01	0.00	0.09	0.00	0.20	0.00	0.00	0.00
22	---	---	0.00	0.07	0.15	0.00	0.17	0.00	0.44	0.00	0.00	0.00
23	---	---	0.20	0.01	0.00	0.00	0.00	0.00	0.06	0.08	0.00	0.00
24	---	---	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	---	---	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.42
26	---	---	0.75	0.00	0.78	0.00	0.00	0.00	0.00	0.00	0.13	0.68
27	---	---	0.00	0.00	0.00	0.00	1.73	0.00	0.00	0.00	1.42	0.22
28	---	---	0.03	0.00	0.00	0.00	0.98	0.67	0.00	0.07	1.35	0.00
29	---	---	0.08	0.00	0.00	0.04	0.00	0.00	0.34	0.00	0.00	0.00
30	---	---	2.00	0.11	---	0.27	0.00	0.00	0.03	0.00	0.92	0.01
31	---	---	0.01	0.00	---	1.02	---	0.00	---	0.05	0.00	---
Total	---	---	---	0.97	2.70	3.73	4.85	3.25	2.73	4.66	4.39	7.00

02087580 SWIFT CREEK NEAR APEX, NC—Continued

