



Water-Data Report 2010

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, annual maximum discharge)

GAGE.--Water-stage recorder. Datum of gage is 292.22 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at streamgage.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. 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. No flow occurs at times most years.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.3	24	12	18	21	6.1	9.1	2.2	26	1.6	23	e1.7
2	0.81	16	130	12	42	7.0	7.0	2.2	38	1.1	7.4	e1.5
3	0.60	5.2	663	7.6	115	38	5.9	2.2	25	0.92	2.8	e1.3
4	0.55	2.8	43	6.6	56	22	6.0	2.4	9.2	0.81	1.6	e1.1
5	0.83	2.2	73	5.9	339	12	6.0	2.2	4.9	0.76	310	e0.90
6	1.3	2.0	40	6.7	400	8.2	4.5	2.0	3.6	0.73	161	e0.80
7	1.4	2.0	21	5.8	45	6.8	3.9	1.9	21	0.72	15	e0.90
8	0.92	2.0	18	7.4	22	6.4	3.6	1.8	4.5	0.71	5.1	e1.0
9	0.67	1.8	247	5.5	50	6.8	41	1.7	2.5	0.81	2.7	e0.90
10	0.60	4.3	56	4.6	59	7.1	11	1.6	1.9	1.4	1.6	e0.80
11	0.58	601	24	4.4	21	28	6.0	1.7	1.7	1.0	1.2	e1.0
12	0.81	250	18	5.2	14	36	4.5	1.7	1.4	0.81	1.1	e1.1
13	1.9	56	32	5.1	21	131	3.9	1.6	21	0.91	1.0	e1.3
14	2.0	24	28	5.0	17	32	3.6	1.6	5.9	1.5	0.85	e1.2
15	4.4	16	19	5.0	13	17	3.4	1.5	3.3	1.1	0.74	e1.0
16	2.3	13	17	4.8	12	12	3.4	2.6	5.3	0.92	0.71	e1.1
17	1.5	12	14	202	10	8.4	2.6	13	3.4	6.0	0.62	e1.2
18	0.97	16	14	81	8.8	7.8	2.4	55	2.0	3.6	0.80	e1.2
19	0.67	27	177	22	7.9	7.1	1.9	148	1.4	1.4	1.4	e1.1
20	0.76	16	43	14	7.3	6.3	1.9	21	1.2	1.0	233	e1.0
21	0.52	12	23	52	6.9	5.7	e4.0	7.4	1.0	0.88	19	e1.0
22	0.53	5.3	17	157	19	6.1	e9.1	13	0.95	0.78	5.5	e1.0
23	0.58	39	14	28	21	5.8	4.2	176	0.90	0.67	10	e1.0
24	0.63	25	13	17	13	5.3	3.2	101	1.0	0.59	236	e0.90
25	0.77	12	78	234	17	4.4	18	30	1.1	0.55	75	e0.90
26	0.82	6.9	68	43	11	5.6	10	14	0.96	0.50	12	e25
27	0.87	5.2	24	19	8.2	5.1	5.2	6.8	0.90	140	5.5	305
28	0.99	3.8	17	13	7.9	4.1	3.7	4.7	0.87	25	3.5	153
29	0.74	3.3	13	11	---	215	2.8	41	1.7	5.3	2.7	198
30	0.81	3.3	8.5	23	---	37	2.3	11	5.1	86	2.2	729
31	0.94	---	23	17	---	14	---	5.3	---	7.3	1.9	---
Total	33.07	1,209.1	1,987.5	1,042.6	1,385.0	714.1	194.1	678.1	197.68	295.37	1,144.92	1,436.90
Mean	1.07	40.3	64.1	33.6	49.5	23.0	6.47	21.9	6.59	9.53	36.9	47.9
Max	4.4	601	663	234	400	215	41	176	38	140	310	729
Min	0.52	1.8	8.5	4.4	6.9	4.1	1.9	1.5	0.87	0.50	0.62	0.80
Cfsm	0.05	1.92	3.05	1.60	2.36	1.10	0.31	1.04	0.31	0.45	1.76	2.28
In.	0.06	2.14	3.52	1.85	2.45	1.26	0.34	1.20	0.35	0.52	2.03	2.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2010, BY WATER YEAR (WY)

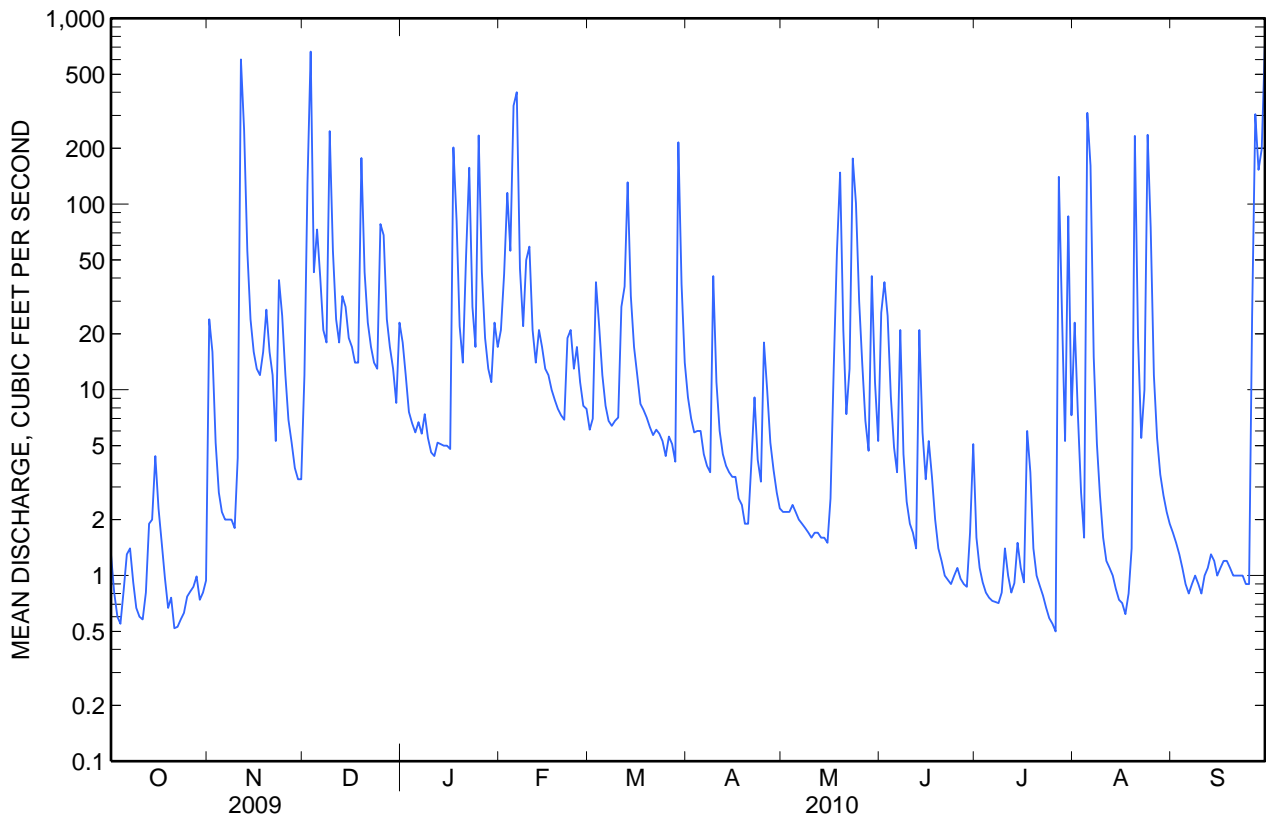
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	16.5	30.4	35.1	18.9	28.8	36.0	26.0	15.0	24.5	11.8	26.8	25.7
Max	56.8	101	64.1	33.6	67.6	73.8	64.0	23.1	98.9	24.4	80.0	53.5
(WY)	(2003)	(2007)	(2010)	(2010)	(2003)	(2009)	(2003)	(2006)	(2006)	(2003)	(2004)	(2008)
Min	1.07	0.94	10.8	5.97	8.24	6.08	6.47	1.73	1.70	3.98	0.42	2.71
(WY)	(2010)	(2008)	(2005)	(2008)	(2009)	(2006)	(2010)	(2002)	(2002)	(2009)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 2002 - 2010	
Annual total	9,314.31		10,318.44			
Annual mean	25.5		28.3		25.4	
Highest annual mean					43.3	2003
Lowest annual mean					17.6	2005
Highest daily mean	941	Jun 16	729	Sep 30	1,180	Nov 22, 2006
Lowest daily mean	0.16	Sep 6	0.50	Jul 26	0.00	Aug 3, 2002
Annual seven-day minimum	0.41	Sep 14	0.64	Oct 19	0.00	Aug 3, 2002
Maximum peak flow			2,070	Dec 3	^a 5,260	Jun 14, 2006
Maximum peak stage			10.73	Dec 3	^a 13.86	Jun 14, 2006
Instantaneous low flow			0.37	Oct 29	^a 0.00	Aug 3, 2002
Annual runoff (cfsm)	1.22		1.35		1.21	
Annual runoff (inches)	16.50		18.28		16.41	
10 percent exceeds	43		55		52	
50 percent exceeds	6.2		5.3		6.8	
90 percent exceeds	0.68		0.84		0.79	

^a See Remarks.



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

PERIOD OF RECORD.--December 2007 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.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.61	0.00	0.00	---	0.00	0.00	0.00	0.50	0.00	0.44	0.00
2	0.00	0.00	2.28	0.00	---	0.26	0.00	0.00	0.33	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	---	0.25	0.00	0.08	0.00	0.00	0.00	0.00
4	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.20	0.00	0.41	0.00	1.87	0.00	0.00	0.00	0.00	0.00	1.93	0.00
6	0.10	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.55	0.00	0.01	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
8	0.00	0.00	0.51	0.06	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.74	0.00	0.47	0.00	0.47	0.00	0.00	0.00	0.00	0.00
10	0.01	1.27	0.00	0.00	0.01	0.23	0.00	0.00	0.00	0.04	0.00	0.00
11	0.14	3.10	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.04
12	0.16	0.29	0.00	0.00	---	0.05	0.00	0.00	0.07	0.00	0.09	0.07
13	0.01	0.05	0.38	0.00	---	0.54	0.00	0.00	0.33	0.11	0.00	0.00
14	0.26	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.00	0.06	0.00	0.00
15	0.07	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.38	0.00	0.19	0.00	0.00
17	0.00	0.00	0.00	1.55	0.00	0.00	0.00	0.95	0.00	0.59	0.00	0.00
18	0.00	0.32	0.47	0.00	0.00	0.00	0.00	0.39	0.00	0.02	0.62	0.00
19	0.00	0.01	0.47	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.07	0.00
20	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00
21	0.00	0.00	0.00	1.01	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00
22	0.00	0.18	0.00	0.01	0.27	0.01	---	0.36	0.00	0.00	0.10	0.00
23	0.00	0.32	0.00	0.00	0.01	0.02	0.00	1.54	0.18	0.00	0.11	0.00
24	0.14	0.00	0.00	0.12	0.11	0.00	0.05	0.19	0.00	0.00	3.52	0.00
25	0.01	0.01	0.72	0.86	0.05	0.00	0.36	0.01	0.00	0.00	0.13	0.00
26	0.07	0.05	0.00	0.00	0.00	0.04	0.01	0.00	0.00	0.00	0.00	1.94
27	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.51	0.00	0.96
28	0.13	0.00	0.00	0.00	0.00	0.09	0.00	0.98	0.00	0.00	0.00	0.07
29	0.00	0.00	0.00	---	---	1.22	0.00	0.09	0.09	0.82	0.00	1.50
30	0.00	0.19	0.09	---	---	0.00	0.00	0.00	0.03	0.01	0.00	1.62
31	0.04	---	0.30	---	---	0.00	---	0.00	---	0.05	0.00	---
Total	1.41	6.41	6.40	---	---	3.07	---	6.06	2.11	3.40	7.79	6.20

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