

02087580 SWIFT CREEK NEAR APEX, NC

LOCATION.--Lat 35°43'08", long 78°45'08", Wake County, 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, NC.

DRAINAGE AREA.--21.0 mi<sup>2</sup>

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional discharge measurements, water years 1953-69. March 2002 to current year.

REVISED RECORDS.--WDR NC-02-1A.

GAGE.--Water-stage recorder. Datum of gage is 306.22 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No flow occurred several days in Aug. 2002. Minimum discharge for current water year also occurred Oct. 7, 8, 9, 10.

REVISIONS.--Revised figures of discharge for the water year 2002, superseding those published in the report for 2002 are given below.

DISCHARGE, CUBIC FEET PER SECOND  
FOR PERIOD MARCH TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	2.4	549	0.89	2.6	0.83	e0.02	122
2	---	---	---	---	---	28	49	0.93	5.2	0.35	e0.01	31
3	---	---	---	---	---	65	26	0.91	1.4	0.17	0.00	15
4	---	---	---	---	---	22	17	9.3	0.92	0.16	0.00	8.6
5	---	---	---	---	---	10	11	8.6	0.74	18	0.00	4.8
6	---	---	---	---	---	7.6	9.0	2.3	0.66	28	0.00	2.2
7	---	---	---	---	---	6.8	6.4	1.4	7.4	2.0	0.00	1.3
8	---	---	---	---	---	5.5	5.7	1.2	1.5	0.66	0.00	0.93
9	---	---	---	---	---	5.3	6.0	0.96	0.75	0.25	0.00	0.85
10	---	---	---	---	---	7.0	48	0.77	0.44	0.16	0.00	1.1
11	---	---	---	---	---	3.9	20	0.77	0.25	6.4	0.00	0.78
12	---	---	---	---	---	3.7	9.7	0.73	0.14	0.98	0.00	0.53
13	---	---	---	---	---	9.3	7.8	2.1	0.08	0.85	0.00	0.47
14	---	---	---	---	---	9.9	6.2	11	0.06	15	0.00	1.8
15	---	---	---	---	---	7.5	5.4	1.7	0.09	4.5	3.7	12
16	---	---	---	---	---	6.1	4.1	0.79	0.10	1.1	22	57
17	---	---	---	---	---	22	2.9	0.57	0.24	0.54	28	23
18	---	---	---	---	---	21	2.6	1.8	0.39	e0.22	7.0	9.1
19	---	---	---	---	---	10	2.3	2.0	0.11	e6.0	22	4.0
20	---	---	---	---	---	11	2.1	0.92	0.10	1.4	15	2.3
21	---	---	---	---	---	36	1.9	0.60	0.08	0.83	2.0	1.4
22	---	---	---	---	---	24	2.5	0.47	0.08	0.46	0.66	0.89
23	---	---	---	---	---	8.4	1.5	0.41	0.05	4.3	0.30	0.67
24	---	---	---	---	---	5.8	1.2	0.41	e0.10	5.2	0.14	0.66
25	---	---	---	---	---	5.3	1.2	0.36	e0.02	55	0.09	0.46
26	---	---	---	---	---	25	1.1	0.32	0.01	23	3.0	0.58
27	---	---	---	---	---	100	1.1	0.27	5.3	6.1	21	3.3
28	---	---	---	---	---	23	1.2	0.24	1.1	1.6	20	3.0
29	---	---	---	---	---	12	1.3	0.26	19	e0.60	7.9	1.1
30	---	---	---	---	---	9.3	0.98	0.27	2.0	e0.30	101	0.61
31	---	---	---	---	---	181	---	0.34	---	e0.03	420	---
TOTAL	---	---	---	---	---	693.8	804.18	53.59	50.91	184.99	673.82	311.43
MEAN	---	---	---	---	---	22.4	26.8	1.73	1.70	5.97	21.7	10.4
MAX	---	---	---	---	---	181	549	11	19	55	420	122
MIN	---	---	---	---	---	2.4	0.98	0.24	0.01	0.03	0.00	0.46
CFSM	---	---	---	---	---	1.15	1.37	0.09	0.09	0.31	1.11	0.53
IN.	---	---	---	---	---	1.32	1.53	0.10	0.10	0.35	1.29	0.59

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD MARCH TO SEPTEMBER 2002

MEAN	---	---	---	---	---	22.4	26.8	1.73	1.70	5.97	21.7	10.4
MAX	---	---	---	---	---	22.4	26.8	1.73	1.70	5.97	21.7	10.4
(WY)	---	---	---	---	---	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)
MIN	---	---	---	---	---	22.4	26.8	1.73	1.70	5.97	21.7	10.4
(WY)	---	---	---	---	---	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

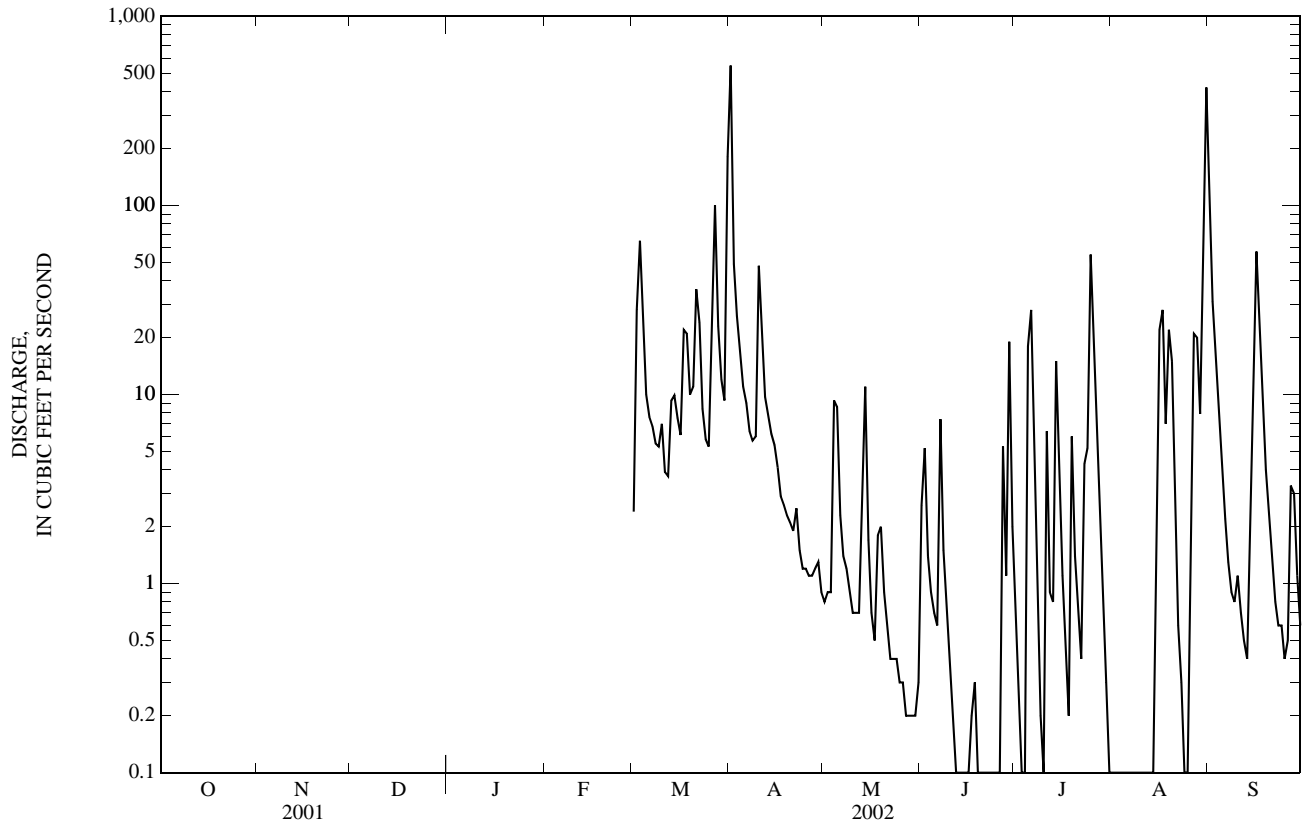
SUMMARY STATISTICS

FOR PERIOD  
MARCH TO SEPTEMBER 2002

INSTANTANEOUS PEAK FLOW 1,560 Apr 1  
INSTANTANEOUS PEAK STAGE 10.24 Apr 1  
INSTANTANEOUS LOW FLOW 0.00\* Aug 3

e Estimated.  
\* See REMARKS.

02087580 SWIFT CREEK NEAR APEX, NC—Continued



## NEUSE RIVER BASIN

02087580 SWIFT CREEK NEAR APEX, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.43	21	4.8	123	19	52	19	6.9	35	57	21	46
2	0.46	15	3.1	52	11	170	13	5.9	9.4	258	60	13
3	0.36	10	3.2	45	10	44	11	5.1	4.4	101	19	7.0
4	0.26	11	3.6	28	18	24	9.2	4.0	9.8	23	9.7	24
5	0.24	18	228	15	16	36	12	6.0	9.1	13	120	40
6	0.12	163	71	12	16	388	12	21	2.7	9.3	31	9.7
7	0.11	37	44	9.3	172	68	87	14	88	5.9	16	4.9
8	0.09	20	22	5.5	39	30	52	8.3	171	3.3	914	45
9	0.09	14	13	6.3	17	21	321	5.1	40	2.6	273	26
10	0.12	11	8.4	6.0	62	16	865	3.5	17	2.6	131	10
11	836	21	56	3.5	34	12	147	2.7	6.5	3.3	60	5.8
12	107	154	34	2.8	17	12	47	2.4	18	6.0	20	4.0
13	26	152	212	2.0	9.2	13	27	1.9	15	2.3	11	3.3
14	19	40	101	2.2	7.4	34	21	1.3	3.4	13	30	2.6
15	9.8	23	31	2.8	15	14	17	1.7	108	8.7	20	2.1
16	96	26	18	1.8	17	146	16	8.4	257	3.7	8.8	26
17	31	141	9.7	5.8	26	48	14	3.7	41	13	7.5	11
18	16	76	7.8	3.1	61	25	11	5.5	18	5.2	31	154
19	8.4	29	13	2.1	58	18	12	54	65	8.0	39	98
20	4.6	19	123	1.9	39	571	12	15	61	3.7	12	19
21	157	15	47	1.8	25	111	12	6.8	31	2.1	6.5	10
22	66	15	19	1.8	460	39	17	162	14	1.3	5.7	14
23	32	11	12	4.6	177	24	10	92	10	1.4	6.3	65
24	18	8.2	81	3.7	37	18	7.0	31	6.5	1.5	2.9	19
25	14	7.4	136	1.3	21	14	17	27	4.0	1.0	1.7	9.7
26	12	6.8	41	1.7	16	13	48	25	2.8	0.80	1.3	7.1
27	9.3	6.7	19	2.0	260	11	47	15	2.4	0.67	1.0	4.8
28	60	4.8	13	1.2	233	9.0	17	11	2.8	0.52	0.89	4.0
29	92	2.9	10	1.5	---	17	11	12	4.4	41	0.68	3.6
30	105	3.2	8.0	43	---	88	8.6	25	29	143	0.51	2.1
31	38	---	7.3	60	---	46	---	20	---	19	161	---
TOTAL	1,759.38	1,082.0	1,399.9	452.7	1,892.6	2,132.0	1,919.8	603.2	1,086.2	754.89	2,022.48	690.7
MEAN	56.8	36.1	45.2	14.6	67.6	68.8	64.0	19.5	36.2	24.4	65.2	23.0
MAX	836	163	228	123	460	571	865	162	257	258	914	154
MIN	0.09	2.9	3.1	1.2	7.4	9.0	7.0	1.3	2.4	0.52	0.51	2.1
CFSM	2.91	1.85	2.32	0.75	3.47	3.53	3.28	1.00	1.86	1.25	3.35	1.18
IN.	3.36	2.06	2.67	0.86	3.61	4.07	3.66	1.15	2.07	1.44	3.86	1.32

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

	2002	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003
MEAN	56.8	36.1	45.2	14.6	67.6	45.6	45.4	10.6	19.0	15.2	43.5	16.7
MAX	56.8	36.1	45.2	14.6	67.6	68.8	64.0	19.5	36.2	24.4	65.2	23.0
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)
MIN	56.8	36.1	45.2	14.6	67.6	22.4	26.8	1.73	1.70	5.97	21.7	10.4
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

## SUMMARY STATISTICS

## FOR 2003 WATER YEAR

## WATER YEARS 2002 - 2003

ANNUAL TOTAL	95.85	
ANNUAL MEAN	43.3	43.3
HIGHEST ANNUAL MEAN		43.3
LOWEST ANNUAL MEAN		43.3
HIGHEST DAILY MEAN	14	914
LOWEST DAILY MEAN	0.09	0.00
ANNUAL SEVEN-DAY MINIMUM	0.15	0.00
MAXIMUM PEAK FLOW	20	2,720
MAXIMUM PEAK STAGE	11.71	11.71
INSTANTANEOUS LOW FLOW	0.09*	0.00*
ANNUAL RUNOFF (CFSM)	2.22	2.22
ANNUAL RUNOFF (INCHES)	30.13	30.15
10 PERCENT EXCEEDS	07	107
50 PERCENT EXCEEDS	14	14
90 PERCENT EXCEEDS	2.1	2.1

\* See REMARKS.

02087580 SWIFT CREEK NEAR APEX, NC—Continued

