

Water-Data Report 2008

02082770 SWIFT CREEK AT HILLIARDSTON, NC

Pamlico Basin
Upper Tar Subbasin

LOCATION.--Lat 36°06'44", long 77°55'12" referenced to North American Datum of 1983, Nash County, NC, Hydrologic Unit 03020101, near left bank at downstream side of bridge on Secondary Road 1310, 0.7 mi northeast of Hilliardston, and 2.8 mi downstream of Gideon Swamp.

DRAINAGE AREA.--166 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1963 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 129.41 ft above North American Vertical Datum of 1988. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Maximum discharge for period of record, on basis of slope-conveyance of peak flow; maximum gage height for period of record, 21.30 ft, from flood marks.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1924 reached a stage of 14.5 ft, from information by North Carolina State Highway Commission, discharge not determined.

02082770 SWIFT CREEK AT HILLIARDSTON, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.4	34	21	370	85	78	207	248	49	18	22	59
2	2.4	25	21	364	138	71	308	163	43	36	18	37
3	2.4	20	22	189	112	66	237	113	37	47	12	25
4	2.3	17	21	113	101	64	186	92	33	35	9.6	19
5	2.3	15	22	86	87	141	313	80	30	32	8.3	16
6	2.2	13	22	75	77	157	502	71	28	71	8.8	236
7	2.1	12	22	69	71	268	381	66	24	49	9.9	353
8	2.2	11	23	65	66	519	257	62	22	97	9.1	219
9	2.1	13	23	62	62	457	191	70	20	63	7.9	298
10	2.2	11	23	59	58	369	157	67	19	45	7.5	162
11	2.1	11	22	58	55	227	138	69	16	36	7.7	92
12	2.1	11	22	56	53	153	125	130	14	29	7.0	65
13	2.2	11	22	55	58	124	118	127	13	25	9.4	52
14	2.2	12	21	53	101	107	108	83	12	24	8.9	45
15	2.2	13	21	52	116	96	99	70	12	24	8.2	40
16	2.1	14	27	50	107	176	95	63	12	28	13	36
17	2.1	18	49	50	89	210	88	68	16	29	11	35
18	2.3	20	59	60	96	181	83	78	14	22	14	38
19	2.5	19	53	75	104	138	79	88	12	17	26	33
20	2.6	18	38	93	87	123	393	88	11	14	25	29
21	2.8	18	31	93	76	102	175	72	9.9	12	18	29
22	3.2	18	27	76	78	91	153	69	9.6	9.8	14	29
23	2.8	18	26	73	103	85	131	60	8.6	8.9	11	26
24	5.8	19	25	71	115	78	110	53	8.4	9.2	9.1	23
25	13	22	25	67	109	73	91	52	9.1	12	7.9	21
26	9.6	22	39	61	99	71	78	47	8.4	13	6.9	21
27	19	22	101	58	103	69	73	42	7.7	10	6.5	23
28	145	21	84	57	97	68	165	43	8.8	17	16	30
29	172	23	75	55	84	68	462	48	8.1	13	73	32
30	153	22	92	54	---	72	322	52	16	15	31	35
31	57	---	304	53	---	93	---	51	---	27	88	---
Total	628.2	523	1,383	2,772	2,587	4,595	5,825	2,485	531.6	887.9	524.7	2,158
Mean	20.3	17.4	44.6	89.4	89.2	148	194	80.2	17.7	28.6	16.9	71.9
Max	172	34	304	370	138	519	502	248	49	97	88	353
Min	2.1	11	21	50	53	64	73	42	7.7	8.9	6.5	16
Cfsm	0.12	0.11	0.27	0.54	0.54	0.89	1.17	0.48	0.11	0.17	0.10	0.43
In.	0.14	0.12	0.31	0.62	0.58	1.03	1.31	0.56	0.12	0.20	0.12	0.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	91.8	122	157	231	268	295	220	144	128	103	92.6	138
Max	420	513	401	500	605	718	774	466	552	488	326	2,180
(WY)	(1972)	(2007)	(2003)	(1987)	(1998)	(1998)	(1987)	(1984)	(2006)	(2000)	(1986)	(1999)
Min	9.65	17.4	37.3	59.5	89.2	77.6	72.9	46.2	6.98	12.0	9.02	4.90
(WY)	(1971)	(2008)	(1966)	(1981)	(2008)	(1988)	(1981)	(2002)	(2002)	(2002)	(2007)	(1968)

02082770 SWIFT CREEK AT HILLIARDSTON, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1963 - 2008	
Annual total	34,039.9		24,900.4			
Annual mean	93.3		68.0		165	
Highest annual mean					308	2003
Lowest annual mean					51.0	1981
Highest daily mean	985	Mar 29	519	Mar 8	22,000	Sep 17, 1999
Lowest daily mean	2.1	Oct 7	2.1	Oct 7	0.60	Sep 25, 1968
Annual seven-day minimum	2.1	Oct 6	2.1	Oct 6	1.1	Sep 21, 1968
Maximum peak flow			744	Apr 20	^a 23,000	Sep 17, 1999
Maximum peak stage			7.04	Apr 20	^a 21.30	Sep 17, 1999
Instantaneous low flow			2.0	Oct 17	0.60	Sep 25, 1968
Annual runoff (cfs)	0.562		0.410		0.994	
Annual runoff (inches)	7.63		5.58		13.50	
10 percent exceeds	212		154		345	
50 percent exceeds	34		42		92	
90 percent exceeds	4.5		8.4		23	

^aSee Remarks.