



Water-Data Report 2010

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.--Records good except those for estimated daily discharges, which are poor. 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.

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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	24	21	83	165	190	136	315	79	137	11	23	10
2	26	39	88	150	183	132	216	77	88	9.7	15	8.3
3	26	64	354	131	264	194	185	74	87	9.9	12	7.2
4	22	85	644	114	376	212	167	73	78	9.6	11	6.2
5	19	67	1,170	102	476	165	151	73	61	8.9	11	5.2
6	17	46	1,080	e98	1,320	146	139	71	53	8.0	28	4.7
7	14	36	323	e94	1,280	133	131	68	48	7.4	89	4.2
8	12	31	245	e93	1,350	126	119	66	42	6.6	41	3.8
9	10	28	630	e91	876	121	271	63	40	6.1	26	3.7
10	9.4	26	588	e89	432	118	232	61	36	6.4	22	3.4
11	8.4	120	476	86	335	120	199	61	34	7.6	18	2.7
12	7.8	504	385	e84	282	145	160	60	31	8.5	14	2.8
13	7.0	532	210	e80	248	172	131	55	34	7.8	12	2.8
14	7.7	743	191	79	232	179	118	55	44	6.8	11	2.6
15	9.8	804	186	80	218	169	108	57	43	28	10	2.7
16	13	459	193	79	205	152	104	58	40	25	8.4	2.3
17	17	193	154	171	190	138	103	69	39	17	7.5	2.0
18	8.5	135	127	518	179	130	98	669	72	26	6.8	1.9
19	15	146	187	388	169	120	93	285	63	34	6.7	2.3
20	17	167	312	298	160	114	88	229	47	41	9.0	2.5
21	17	136	345	201	153	109	90	153	37	30	15	2.4
22	16	123	289	471	152	135	95	95	29	21	15	2.2
23	15	115	192	407	167	163	96	84	25	18	12	2.2
24	14	129	159	342	169	160	91	100	22	14	11	2.4
25	12	151	154	553	173	141	107	142	20	12	9.7	2.4
26	12	212	317	664	167	132	128	127	18	11	11	3.2
27	17	147	323	590	155	126	113	90	16	10	9.9	11
28	16	113	319	429	145	115	101	73	14	8.9	8.6	25
29	16	95	213	231	---	792	91	144	13	8.4	11	31
30	25	87	163	202	---	864	83	203	12	9.4	12	482
31	25	---	154	209	---	513	---	139	---	40	11	---
Total	475.6	5,554	10,254	7,289	10,246	6,172	4,123	3,653	1,323	468.0	507.6	645.1
Mean	15.3	185	331	235	366	199	137	118	44.1	15.1	16.4	21.5
Max	26	804	1,170	664	1,350	864	315	669	137	41	89	482
Min	7.0	21	83	79	145	109	83	55	12	6.1	6.7	1.9
Cfsm	0.09	1.12	1.99	1.42	2.20	1.20	0.83	0.71	0.27	0.09	0.10	0.13
In.	0.11	1.24	2.30	1.63	2.30	1.38	0.92	0.82	0.30	0.10	0.11	0.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	88.6	122	160	229	266	295	216	142	125	99.0	89.4	133
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	77.6	77.6	72.9	46.2	6.98	12.0	9.02	4.90
(WY)	(1971)	(2008)	(1966)	(1981)	(2009)	(1988)	(1981)	(2002)	(2002)	(2002)	(2007)	(1968)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1963 - 2010	
Annual total	43,931.6		50,710.3			
Annual mean	120		139		163	
Highest annual mean					308	2003
Lowest annual mean					51.0	1981
Highest daily mean	1,170	Dec 5	1,350	Feb 8	22,000	Sep 17, 1999
Lowest daily mean	7.0	Oct 13	1.9	Sep 18	0.60	Sep 25, 1968
Annual seven-day minimum	8.6	Oct 9	2.2	Sep 17	1.1	Sep 21, 1968
Maximum peak flow			1,400	Dec 6	^a 23,000	Sep 17, 1999
Maximum peak stage			10.13	Dec 6	^a 21.30	Sep 17, 1999
Instantaneous low flow			1.8	Sep 18	0.60	Sep 25, 1968
Annual runoff (cfsm)	0.725		0.837		0.980	
Annual runoff (inches)	9.84		11.36		13.32	
10 percent exceeds	279		328		341	
50 percent exceeds	69		84		91	
90 percent exceeds	15		7.8		22	

^a See Remarks.

