

CAPE FEAR RIVER BASIN

02106500 BLACK RIVER NEAR TOMAHAWK, NC

LOCATION.--Lat 34°45'18", long 78°17'20", Sampson County, Hydrologic Unit 03030006, on left bank 30 ft upstream from bridge on State Highway 411, 0.2 mi downstream of Clear Run Swamp, and 3.8 mi northeast of Tomahawk.

DRAINAGE AREA.--676 mi².

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1723: 1955(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 24.61 ft above NGVD of 1929. Nonrecording gage on downstream side of bridge Oct. 1, 1951 to June 29, 1961. Water-stage recorder was at present site at datum of 24.26 ft June 30, 1961 to Sept. 30, 1964. Satellite telemetry at station

REMARKS.--No estimated daily discharges. Records good. Maximum gage height for period of record, from floodmarks.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1928 reached a stage of 22.0 ft, present datum; discharge, 14,500 ft³/s and floods in 1945 and 1948 reached a stage of 17.6 ft, present datum; discharge, 5,420 ft³/s, from information furnished by North Carolina State Highway Commission.

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	100	221	356	616	459	1,290	1,350	649	2,930	516	1,300	514
2	95	216	331	766	452	1,390	1,190	604	2,820	979	1,310	464
3	89	194	309	826	434	1,440	1,050	573	2,630	2,600	1,330	432
4	82	169	294	842	413	1,430	926	558	2,440	4,050	1,470	407
5	77	154	307	818	399	1,340	834	571	2,280	5,740	1,640	451
6	71	151	410	774	387	1,310	766	554	2,100	6,780	1,930	486
7	67	168	470	737	462	1,410	724	735	1,810	6,030	2,420	435
8	64	207	479	701	736	1,470	908	882	1,560	4,640	2,730	412
9	61	191	475	668	777	1,460	1,230	873	1,470	3,620	2,900	394
10	59	178	458	624	762	1,430	1,660	742	1,410	2,720	3,230	373
11	71	168	459	576	888	1,360	2,090	624	1,290	2,130	3,360	360
12	126	183	495	535	898	1,410	2,580	549	1,160	1,860	3,210	350
13	152	359	528	497	816	1,540	3,160	505	1,030	1,840	3,010	343
14	145	638	662	467	729	1,560	3,550	447	897	2,120	3,010	339
15	142	705	730	443	669	1,450	3,590	397	773	3,510	3,370	329
16	130	734	704	420	650	1,340	3,360	363	705	6,550	3,710	313
17	123	826	673	412	924	1,330	2,910	345	1,280	7,990	3,900	290
18	114	966	625	426	1,200	1,300	2,440	339	1,430	7,580	3,970	289
19	105	1,010	583	419	1,310	1,240	2,010	418	1,460	6,670	3,620	483
20	97	1,010	581	404	1,340	1,260	1,660	903	1,550	6,070	3,030	642
21	89	1,010	679	394	1,260	1,780	1,380	886	1,760	6,040	2,540	536
22	84	992	716	395	1,120	2,230	1,170	784	1,900	6,010	2,140	451
23	81	893	698	409	1,180	2,580	1,020	1,150	1,960	5,390	1,820	449
24	80	745	674	402	1,300	2,910	892	1,700	1,920	4,620	1,630	529
25	80	625	747	379	1,330	3,080	794	1,960	1,710	3,850	1,460	494
26	84	549	828	376	1,260	2,990	790	2,080	1,290	3,150	1,290	449
27	81	497	806	375	1,170	2,720	830	2,230	956	2,630	1,140	419
28	79	455	758	367	1,180	2,320	837	2,450	761	2,180	986	436
29	88	413	698	362	---	1,940	780	2,630	611	1,730	833	476
30	123	380	644	379	---	1,680	712	2,810	528	1,480	687	450
31	208	---	608	431	---	1,510	---	2,910	---	1,350	579	---
TOTAL	3,047	15,007	17,785	16,240	24,505	53,500	47,193	33,221	46,421	122,425	69,555	12,795
MEAN	98.3	500	574	524	875	1,726	1,573	1,072	1,547	3,949	2,244	426
MAX	208	1,010	828	842	1,340	3,080	3,590	2,910	2,930	7,990	3,970	642
MIN	59	151	294	362	387	1,240	712	339	528	516	579	289
CFSM	0.15	0.74	0.85	0.77	1.29	2.55	2.33	1.59	2.29	5.84	3.32	0.63
IN.	0.17	0.83	0.98	0.89	1.35	2.94	2.60	1.83	2.55	6.74	3.83	0.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2003, BY WATER YEAR (WY)

MEAN	528	495	701	1,133	1,316	1,427	1,065	535	490	539	710	714
MAX	4,421	1,412	2,164	2,903	4,212	3,410	3,070	1,687	3,089	3,949	2,810	5,812
(WY)	(2000)	(1963)	(1993)	(1993)	(1998)	(1983)	(1973)	(1978)	(1995)	(2003)	(1974)	(1999)
MIN	29.6	57.1	238	287	448	460	225	117	73.0	68.0	25.2	13.4
(WY)	(1955)	(1974)	(1989)	(1986)	(1989)	(1981)	(1981)	(2001)	(2002)	(1998)	(1954)	(1954)

02106500 BLACK RIVER NEAR TOMAHAWK, NC—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1952 - 2003	
ANNUAL TOTAL	164,406		461,694			
ANNUAL MEAN	450		1,265		802	
HIGHEST ANNUAL MEAN					1,300	1960
LOWEST ANNUAL MEAN					327	1986
HIGHEST DAILY MEAN	2,140	Apr 6	7,990	Jul 17	27,300	Sep 18, 1999
LOWEST DAILY MEAN	16	Aug 24	59	Oct 10	8.9	Sep 13, 1954
ANNUAL SEVEN-DAY MINIMUM	18	Aug 18	67	Oct 5	9.9	Oct 9, 1954
MAXIMUM PEAK FLOW			8,080	Jul 17	28,500	Sep 18, 1999
MAXIMUM PEAK STAGE			18.16	Jul 17	27.14*	Sep 18, 1999
INSTANTANEOUS LOW FLOW			57	Oct 10	8.5	Oct 13, 1954
ANNUAL RUNOFF (CFSM)	0.67		1.87		1.19	
ANNUAL RUNOFF (INCHES)	9.05		25.41		16.12	
10 PERCENT EXCEEDS	1,030		2,920		1,790	
50 PERCENT EXCEEDS	257		780		518	
90 PERCENT EXCEEDS	46		181		106	

* See REMARKS.

