

Water-Data Report 2013

**02106500 BLACK RIVER NEAR TOMAHAWK, NC**

Cape Fear Basin  
Black Subbasin

LOCATION.--Lat 34°45'18", long 78°17'19" referenced to North American Datum of 1983, Sampson County, NC, Hydrologic Unit 03030006, on left bank 30 ft upstream from bridge on North Carolina Highway 411, 0.2 mi downstream of Clear Run Swamp, and 3.8 mi northeast of Tomahawk.

DRAINAGE AREA.--676 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

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 National Geodetic Vertical Datum of 1929. Nonrecording gage on downstream side of bridge October 1, 1951 to June 29, 1961. Water-stage recorder was at present site at datum of 24.26 ft June 30, 1961 to September 30, 1964. Satellite telemetry at streamgage.

REMARKS.--No estimated daily discharges. Records fair. Maximum gage height for period of record from floodmarks. Minimum discharge for period of record also occurred July 24, 2011.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1928 reached a stage of 22.0 ft, present datum; discharge, 14,500 ft<sup>3</sup>/s and floods in 1945 and 1948 reached a stage of 17.6 ft, present datum; discharge, 5,420 ft<sup>3</sup>/s, from information furnished by North Carolina State Highway Commission.

## 02106500 BLACK RIVER NEAR TOMAHAWK, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	42	59	98	879	379	1,230	311	487	109	1,430	271	508
2	76	59	95	842	373	1,240	311	451	93	1,810	252	421
3	154	57	96	861	340	1,070	309	395	85	2,670	237	429
4	147	53	100	834	314	902	305	359	102	3,690	218	441
5	116	53	96	753	293	820	367	336	118	3,940	228	433
6	92	53	100	649	279	730	478	320	119	3,830	364	403
7	74	53	103	566	267	635	484	337	374	3,390	419	354
8	63	53	105	515	419	556	442	361	972	2,780	397	315
9	91	51	103	469	807	495	404	328	1,090	2,240	401	289
10	157	50	105	430	907	448	373	289	1,220	1,800	367	275
11	161	50	103	398	857	407	351	258	1,600	1,480	261	263
12	148	52	107	375	763	391	330	233	1,820	1,240	211	240
13	141	54	171	358	765	459	367	210	1,830	1,200	186	213
14	127	52	294	339	838	486	403	174	1,860	1,520	205	185
15	115	57	278	318	842	454	359	148	1,740	1,920	247	158
16	112	66	254	307	747	422	324	128	1,190	2,370	269	140
17	122	81	240	298	666	395	295	111	616	2,780	279	133
18	133	90	296	407	623	374	275	97	416	3,440	470	130
19	135	98	363	549	572	363	261	86	518	3,780	699	120
20	131	109	351	513	530	352	289	83	995	3,450	865	108
21	119	114	335	461	493	330	403	100	853	2,760	1,110	116
22	105	107	357	432	457	307	380	138	524	2,160	1,250	148
23	93	104	333	403	464	291	325	175	644	1,700	1,550	253
24	84	97	302	375	631	285	283	459	752	1,310	1,930	336
25	78	92	276	349	719	338	250	625	901	938	2,560	349
26	70	84	288	330	703	392	226	491	1,010	706	2,840	300
27	67	83	485	327	941	396	207	347	972	540	2,580	257
28	65	85	599	328	1,140	383	184	248	1,070	437	2,030	225
29	66	94	624	314	---	363	186	195	1,170	385	1,520	212
30	64	100	797	302	---	338	334	154	1,260	344	1,130	207
31	61	---	886	310	---	318	---	128	---	305	755	---
<b>Total</b>	3,209	2,210	8,740	14,591	17,129	15,970	9,816	8,251	26,023	62,345	26,101	7,961
<b>Mean</b>	104	73.7	282	471	612	515	327	266	867	2,011	842	265
<b>Max</b>	161	114	886	879	1,140	1,240	484	625	1,860	3,940	2,840	508
<b>Min</b>	42	50	95	298	267	285	184	83	85	305	186	108
<b>Cfsm</b>	0.15	0.11	0.42	0.70	0.90	0.76	0.48	0.39	1.28	2.98	1.25	0.39
<b>In.</b>	0.18	0.12	0.48	0.80	0.94	0.88	0.54	0.45	1.43	3.43	1.44	0.44

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2013, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	511	521	720	1,073	1,252	1,332	1,001	518	467	511	667	698
<b>Max</b>	4,421	2,511	2,164	2,903	4,212	3,410	3,070	1,687	3,089	3,949	2,810	5,812
<b>(WY)</b>	(2000)	(2007)	(1993)	(1993)	(1998)	(1983)	(1973)	(1978)	(1995)	(2003)	(1974)	(1999)
<b>Min</b>	29.6	57.1	238	287	388	423	225	117	38.3	37.7	25.2	13.4
<b>(WY)</b>	(1955)	(1974)	(1989)	(1986)	(2012)	(2006)	(1981)	(2001)	(2011)	(2011)	(1954)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1952 - 2013	
<b>Annual total</b>	116,061		202,346			
<b>Annual mean</b>	317		554		770	
<b>Highest annual mean</b>					1,300	1960
<b>Lowest annual mean</b>					327	1986
<b>Highest daily mean</b>	1,430	Jun 3	3,940	Jul 5	27,300	Sep 18, 1999
<b>Lowest daily mean</b>	37	Jul 9	42	Oct 1	7.0	Jul 23, 2011
<b>Annual seven-day minimum</b>	43	Sep 25	52	Nov 6	8.4	Sep 8, 2007
<b>Maximum peak flow</b>			3,970	Jul 5	28,500	Sep 18, 1999
<b>Maximum peak stage</b>			15.46	Jul 5	<sup>a</sup> 27.14	Sep 18, 1999
<b>Instantaneous low flow</b>			40	Oct 1	<sup>a</sup> 6.7	Jul 23, 2011
<b>Annual runoff (cfsm)</b>	0.469		0.820		1.14	
<b>Annual runoff (inches)</b>	6.39		11.14		15.48	
<b>10 percent exceeds</b>	746		1,240		1,710	
<b>50 percent exceeds</b>	231		337		492	
<b>90 percent exceeds</b>	65		91		100	

<sup>a</sup> See Remarks.

