

Water-Data Report 2010

**03161000 SOUTH FORK NEW RIVER NEAR JEFFERSON, NC**

Kanawha Basin  
Upper New Subbasin

LOCATION.--Lat 36°23'36", long 81°24'25" referenced to North American Datum of 1983, Ashe County, NC, Hydrologic Unit 05050001, on right bank 600 ft upstream from bridge on North Carolina Highways 16/88, 0.2 mi downstream of Bear Creek, and 4 mi southeast of Jefferson.

DRAINAGE AREA.--205 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1925-26(M), 1928-30(M), 1931-32, 1933-35(M), 1941-42(m), 1944(m). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,657.04 ft above NGVD of 1929. Prior to October 14, 1934, nonrecording gage on bridge 400 ft downstream at same datum. October 14, 1934, to March 25, 1935, nonrecording gage at present site and datum. Satellite telemetry at streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge for period of record, from rating curve extended above 14,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow. Minimum discharge for period of record result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 15, 1916, reached a stage of 18.0 ft, from floodmarks witnessed by local resident; discharge, 35,200 ft<sup>3</sup>/s.

## 03161000 SOUTH FORK NEW RIVER NEAR JEFFERSON, NC—Continued

**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	409	663	430	641	742	534	723	428	397	214	208	178
2	384	657	564	e620	759	533	686	426	360	211	212	173
3	365	545	1,350	e572	887	529	656	467	346	203	195	168
4	344	494	776	e548	760	510	637	532	333	200	200	161
5	335	461	649	e529	794	493	614	437	344	196	202	154
6	340	433	594	e514	922	482	598	416	345	189	369	153
7	325	411	539	e502	790	486	580	402	321	184	279	152
8	317	396	523	e492	701	504	605	396	312	179	199	156
9	297	379	1,350	e485	e655	579	1,030	383	302	183	183	160
10	290	406	1,180	e480	e628	645	690	373	307	272	174	159
11	286	1,900	783	e475	e602	714	620	376	302	266	167	155
12	287	1,670	666	e472	e588	924	592	387	292	200	179	202
13	306	960	715	e470	e570	1,970	572	377	285	229	181	205
14	328	749	793	e469	e557	1,400	551	366	303	268	231	161
15	520	641	654	e468	e547	1,030	536	607	324	210	261	149
16	436	574	599	e482	e540	865	525	505	350	193	260	144
17	379	530	558	1,890	536	769	517	697	336	189	258	146
18	345	516	560	1,550	530	712	509	603	284	220	613	155
19	325	747	618	1,120	524	670	492	501	268	224	549	150
20	313	703	562	930	524	635	484	439	270	266	411	144
21	303	570	519	999	547	653	506	411	250	217	329	139
22	295	525	501	1,090	641	2,800	495	425	250	195	367	136
23	294	555	501	1,030	833	1,610	470	426	241	181	338	136
24	1,010	556	506	1,090	828	1,120	474	391	237	171	260	132
25	1,000	502	1,110	3,990	696	945	524	464	231	161	260	128
26	577	480	1,900	1,980	630	887	506	482	232	157	246	149
27	501	464	998	1,310	592	805	488	398	224	236	220	247
28	877	438	801	1,060	557	818	497	394	232	288	215	292
29	684	425	697	930	---	1,100	456	383	238	235	204	219
30	557	420	632	903	---	858	440	366	219	203	194	217
31	525	---	614	823	---	771	---	377	---	216	186	---
<b>Total</b>	13,554	18,770	23,242	28,914	18,480	27,351	17,073	13,635	8,735	6,556	8,150	5,020
<b>Mean</b>	437	626	750	933	660	882	569	440	291	211	263	167
<b>Max</b>	1,010	1,900	1,900	3,990	922	2,800	1,030	697	397	288	613	292
<b>Min</b>	286	379	430	468	524	482	440	366	219	157	167	128
<b>Cfsm</b>	2.13	3.05	3.66	4.55	3.22	4.30	2.78	2.15	1.42	1.03	1.28	0.82
<b>In.</b>	2.46	3.41	4.22	5.25	3.35	4.96	3.10	2.47	1.59	1.19	1.48	0.91

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2010, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	350	404	409	471	505	578	553	449	389	328	344	333
<b>Max</b>	901	1,889	797	1,346	1,173	1,316	1,350	1,052	1,036	904	2,613	1,556
<b>(WY)</b>	(1991)	(1978)	(1958)	(1995)	(1998)	(1979)	(1983)	(1973)	(1992)	(1941)	(1940)	(2004)
<b>Min</b>	111	124	146	140	188	222	236	220	158	111	93.7	99.5
<b>(WY)</b>	(2001)	(1932)	(1934)	(1940)	(2001)	(1988)	(1986)	(2001)	(1988)	(1930)	(1925)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1925 - 2010	
<b>Annual total</b>	173,103		189,480			
<b>Annual mean</b>	474		519		425	
<b>Highest annual mean</b>					669	1949
<b>Lowest annual mean</b>					215	2002
<b>Highest daily mean</b>	2,130	May 27	3,990	Jan 25	27,700	Aug 14, 1940
<b>Lowest daily mean</b>	163	Feb 5	128	Sep 25	65	Sep 9, 1925
<b>Annual seven-day minimum</b>	228	Jan 30	138	Sep 20	72	Aug 21, 1925
<b>Maximum peak flow</b>			5,240	Jan 17	<sup>a</sup> 52,800	Aug 14, 1940
<b>Maximum peak stage</b>			7.25	Jan 17	22.50	Aug 14, 1940
<b>Instantaneous low flow</b>			125	Sep 25	<sup>a</sup> 52	Dec 24, 1943
<b>Annual runoff (cfsm)</b>	2.31		2.53		2.07	
<b>Annual runoff (inches)</b>	31.41		34.38		28.19	
<b>10 percent exceeds</b>	760		893		702	
<b>50 percent exceeds</b>	389		470		342	
<b>90 percent exceeds</b>	250		185		167	

<sup>a</sup> See Remarks.

