

Water-Data Report 2013

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 mi².

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 ft³/s on basis of slope-area measurement of peak flow. Minimum discharge for period of record result of freezeup. Minimum discharge for current water year also occurred December 16.

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 ft³/s.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	305	226	170	320	e1,750	708	658	623	553	1,030	1,170	573
2	1,010	221	171	334	e1,200	640	621	617	542	1,550	1,030	591
3	938	220	171	343	e980	595	568	631	582	1,650	928	513
4	489	230	171	311	e860	556	560	601	535	4,060	899	487
5	374	242	170	291	777	564	706	703	517	4,430	836	469
6	326	233	168	280	718	915	693	6,320	559	2,440	796	451
7	315	218	168	274	675	730	609	4,000	815	2,810	775	445
8	325	211	167	263	763	636	575	2,040	848	3,430	819	438
9	292	204	165	257	738	593	551	1,490	774	1,820	851	432
10	273	199	167	257	655	572	531	1,190	2,080	1,430	792	426
11	256	193	171	264	663	562	517	1,130	1,690	1,460	790	433
12	246	193	169	284	660	962	1,350	987	1,020	1,140	734	504
13	237	220	162	269	650	978	1,110	870	831	1,140	734	450
14	234	267	159	350	689	770	802	797	810	1,840	791	405
15	258	216	158	1,750	616	690	737	746	684	2,190	674	397
16	318	205	169	2,130	584	647	701	703	628	1,410	646	389
17	252	198	218	1,480	555	616	648	680	611	1,260	625	381
18	233	195	235	2,040	523	596	648	774	617	1,380	855	381
19	227	193	196	1,170	522	679	713	1,370	647	1,210	1,810	381
20	221	193	191	916	505	596	1,120	968	600	1,220	1,120	381
21	214	190	276	796	480	563	807	846	545	1,020	859	399
22	211	186	274	683	502	541	718	815	517	945	766	492
23	208	184	211	583	553	525	668	1,100	505	1,230	710	404
24	209	182	256	557	549	593	636	904	551	973	709	369
25	206	179	378	556	500	831	613	798	596	860	635	367
26	204	176	785	511	719	673	578	726	527	823	605	387
27	202	178	1,020	494	1,250	608	558	685	496	2,920	587	364
28	202	180	512	447	828	574	630	655	513	3,380	567	345
29	200	178	440	480	---	566	877	627	496	1,850	547	341
30	204	173	424	1,590	---	559	689	600	470	1,340	572	335
31	221	---	348	7,390	---	583	---	575	---	1,170	549	---
Total	9,410	6,083	8,440	27,670	20,464	20,221	21,192	35,571	21,159	55,411	24,781	12,730
Mean	304	203	272	893	731	652	706	1,147	705	1,787	799	424
Max	1,010	267	1,020	7,390	1,750	978	1,350	6,320	2,080	4,430	1,810	591
Min	200	173	158	257	480	525	517	575	470	823	547	335
Cfsm	1.48	0.99	1.33	4.35	3.57	3.18	3.45	5.60	3.44	8.72	3.90	2.07
In.	1.71	1.10	1.53	5.02	3.71	3.67	3.85	6.45	3.84	10.06	4.50	2.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	347	399	411	475	504	578	558	458	392	343	346	335
Max	901	1,889	797	1,346	1,173	1,316	1,350	1,147	1,036	1,787	2,613	1,556
(WY)	(1991)	(1978)	(1958)	(1995)	(1998)	(1979)	(1983)	(2013)	(1992)	(2013)	(1940)	(2004)
Min	111	124	146	140	188	222	236	220	158	111	93.7	99.5
(WY)	(2001)	(1932)	(1934)	(1940)	(2001)	(1988)	(1986)	(2001)	(1988)	(1930)	(1925)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1925 - 2013	
Annual total	130,491		263,132			
Annual mean	357		721		428	
Highest annual mean					721	2013
Lowest annual mean					215	2002
Highest daily mean	1,500	Jan 12	7,390	Jan 31	27,700	Aug 14, 1940
Lowest daily mean	158	Dec 15	158	Dec 15	65	Sep 9, 1925
Annual seven-day minimum	164	Dec 9	164	Dec 9	72	Aug 21, 1925
Maximum peak flow			10,500	Jan 31	^a 52,800	Aug 14, 1940
Maximum peak stage			10.02	Jan 31	22.50	Aug 14, 1940
Instantaneous low flow			^a 155	Dec 15	^a 52	Dec 24, 1943
Annual runoff (cfsm)	1.74		3.52		2.09	
Annual runoff (inches)	23.68		47.75		28.36	
10 percent exceeds	560		1,240		706	
50 percent exceeds	326		578		342	
90 percent exceeds	186		201		167	

^a See Remarks.

