

Water-Data Report 2007

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 station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. 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 September 14, 29, 30.

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 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	222	280	758	2,150	e380	354	375	284	223	361	187	247
2	225	288	933	1,220	e373	1,240	380	278	271	251	188	196
3	213	312	598	833	e368	808	366	272	255	222	220	157
4	206	267	513	701	e362	555	355	312	238	212	198	136
5	203	256	463	671	e358	471	340	337	221	196	172	128
6	211	251	433	813	e353	429	329	307	211	188	162	121
7	233	329	417	710	e349	401	331	293	228	223	156	115
8	246	1,530	e398	995	e345	385	333	273	200	195	150	109
9	261	944	e383	902	e342	371	327	269	190	180	146	109
10	230	589	e370	758	339	359	320	269	183	172	147	108
11	206	495	e360	661	e337	355	323	390	178	178	137	109
12	206	718	350	610	e333	347	384	333	179	187	134	108
13	205	565	344	594	e331	336	360	299	188	178	138	107
14	194	477	338	568	356	328	322	269	203	167	143	147
15	189	435	329	537	345	325	401	258	251	163	132	402
16	187	1,750	321	516	e326	661	529	250	271	158	126	248
17	438	1,380	313	487	e324	951	411	249	213	161	121	158
18	676	818	308	464	e322	565	368	244	189	e162	120	138
19	359	654	304	460	e321	482	358	236	180	e165	119	130
20	345	566	300	443	320	449	413	232	186	163	116	124
21	337	505	295	442	378	437	383	226	201	167	115	124
22	287	478	587	595	480	423	349	223	172	177	118	129
23	264	491	1,380	536	352	399	336	219	162	170	128	133
24	e247	436	675	468	321	385	329	214	176	202	127	126
25	e241	407	641	443	343	374	326	213	708	343	142	121
26	e234	389	883	e432	416	365	318	212	432	413	146	119
27	244	375	659	e420	356	359	325	228	300	323	134	114
28	505	363	560	409	329	351	317	225	289	236	125	112
29	461	353	505	e400	---	451	301	270	349	208	148	107
30	329	370	473	e393	---	451	292	228	362	203	175	105
31	297	---	493	e387	---	388	---	212	---	198	142	---
Total	8,701	17,071	15,684	20,018	9,859	14,555	10,601	8,124	7,409	6,522	4,512	4,287
Mean	281	569	506	646	352	470	353	262	247	210	146	143
Max	676	1,750	1,380	2,150	480	1,240	529	390	708	413	220	402
Min	187	251	295	387	320	325	292	212	162	158	115	105
Cfsm	1.37	2.78	2.47	3.15	1.72	2.29	1.72	1.28	1.20	1.03	0.71	0.70
In.	1.58	3.10	2.85	3.63	1.79	2.64	1.92	1.47	1.34	1.18	0.82	0.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	352	406	408	470	509	577	558	449	390	331	346	335
Max	901	1,889	797	1,346	1,173	1,316	1,350	1,052	1,036	904	2,613	1,556
(WY)	(1991)	(1978)	(1958)	(1995)	(1998)	(1979)	(1983)	(1973)	(1992)	(1941)	(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 2006		Water Year 2007		Water Years 1925 - 2007	
Annual total	140,090		127,343			
Annual mean	384		349		427	
Highest annual mean					669	1949
Lowest annual mean					215	2002
Highest daily mean	1,770	Jun 27	2,150	Jan 1	27,700	Aug 14, 1940
Lowest daily mean	149	Aug 6	105	Sep 30	65	Sep 9, 1925
Annual seven-day minimum	152	Aug 3	109	Sep 7	72	Aug 21, 1925
Maximum peak flow			2,980	Jan 1	^a 52,800	Aug 14, 1940
Maximum peak stage			5.62	Jan 1	22.50	Aug 14, 1940
Instantaneous low flow			^a 101	Sep 13	^a 52	Dec 24, 1943
Annual runoff (cfsm)	1.87		1.70		2.08	
Annual runoff (inches)	25.42		23.11		28.29	
10 percent exceeds	606		588		703	
50 percent exceeds	316		321		343	
90 percent exceeds	196		138		168	

^a See Remarks.

