

Water-Data Report 2008

03463300 SOUTH TOE RIVER NEAR CELO, NC

French Broad-Holston Basin
Nolichucky Subbasin

LOCATION.--Lat 35°49'53", long 82°11'03" referenced to North American Datum of 1983, Yancey County, NC, Hydrologic Unit 06010108, on right bank on Secondary Road 1168, 800 ft upstream from bridge on Secondary Road 1167, 0.3 mi downstream of Whiteoak Creek, 1.9 mi southeast of Celo, and at river mile 20.1.

DRAINAGE AREA.--43.3 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1957 to current year.

REVISED RECORDS.--WSP 1910: 1958-59. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 2,658 ft above NGVD of 1929, from topographic map. 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 5,000 ft³/s on basis of slope-area measurement of peak flow; gage height from outside floodmarks. Minimum discharge for period of record and current water year also occurred August 12, 20, 21, 22, 23, 24, 25.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11	28	25	110	219	85	85	62	48	25	18	845
2	11	27	24	e87	128	79	80	60	44	23	15	318
3	12	25	38	e74	101	77	81	59	43	22	23	211
4	17	23	31	e68	201	948	92	57	40	22	17	160
5	182	23	27	68	191	519	112	56	37	23	13	133
6	49	27	27	65	166	247	201	53	34	24	12	115
7	29	26	25	61	158	286	128	51	51	25	11	102
8	23	23	26	57	119	283	110	52	56	23	10	92
9	20	22	30	54	105	200	100	63	45	25	9.8	113
10	22	22	32	60	92	167	94	55	55	30	10	105
11	19	21	30	241	84	147	88	56	53	33	9.3	146
12	15	20	28	114	80	130	96	76	44	24	8.9	111
13	15	20	28	92	84	118	84	64	44	26	14	99
14	15	21	27	82	74	109	79	58	46	32	15	88
15	14	70	28	72	70	153	76	57	47	24	13	81
16	14	39	100	67	66	205	73	76	39	21	11	85
17	14	28	54	75	83	138	69	64	35	19	10	86
18	14	26	42	72	287	122	66	67	33	18	10	80
19	19	25	39	67	127	198	68	99	32	17	10	73
20	23	26	37	e58	107	262	80	71	31	16	9.4	71
21	17	24	58	e57	98	170	69	65	31	15	9.0	69
22	15	27	65	e56	93	146	65	59	31	15	8.9	65
23	54	27	407	59	87	128	64	56	30	15	8.9	63
24	112	23	153	54	81	115	61	54	28	14	8.9	60
25	298	22	98	e46	78	105	59	51	27	13	11	57
26	135	40	88	49	113	99	60	49	28	15	2,140	226
27	69	55	83	47	102	94	60	48	32	17	1,970	456
28	50	36	126	44	85	88	87	59	30	15	640	183
29	40	30	173	46	82	98	76	69	29	31	306	134
30	35	27	147	59	---	92	66	56	28	19	183	111
31	31	---	152	49	---	88	---	51	---	18	146	---
Total	1,394	853	2,248	2,210	3,361	5,696	2,529	1,873	1,151	659	5,681.1	4,538
Mean	45.0	28.4	72.5	71.3	116	184	84.3	60.4	38.4	21.3	183	151
Max	298	70	407	241	287	948	201	99	56	33	2,140	845
Min	11	20	24	44	66	77	59	48	27	13	8.9	57
Cfsm	1.04	0.66	1.67	1.65	2.68	4.24	1.95	1.40	0.89	0.49	4.23	3.49
In.	1.20	0.73	1.93	1.90	2.89	4.89	2.17	1.61	0.99	0.57	4.88	3.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	121	143	136	159	173	216	184	146	122	84.2	97.2	128
Max	359	714	277	428	466	596	361	373	415	338	323	1,268
(WY)	(1996)	(1978)	(1984)	(1995)	(1998)	(1979)	(1983)	(1976)	(1972)	(2005)	(1994)	(2004)
Min	15.8	24.9	41.5	62.2	70.5	69.1	59.7	53.1	34.8	21.3	19.0	14.6
(WY)	(1994)	(1999)	(1966)	(1966)	(2007)	(1988)	(1986)	(1986)	(1988)	(2008)	(2007)	(1998)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1957 - 2008	
Annual total	25,369		32,193.1			
Annual mean	69.5		88.0		142	
Highest annual mean					227	
Lowest annual mean					79.4	
Highest daily mean	869	Jan 1	2,140	Aug 26	9,960	Nov 6, 1977
Lowest daily mean	11	Aug 19	8.9	Aug 12	8.9	Aug 12, 2008
Annual seven-day minimum	11	Sep 7	9.3	Aug 18	9.3	Aug 18, 2008
Maximum peak flow			10,000	Aug 26	^a 32,900	Nov 6, 1977
Maximum peak stage			8.26	Aug 26	^a 17.41	Nov 6, 1977
Instantaneous low flow			^a 8.5	Aug 11	^a 8.5	Aug 11, 2008
Annual runoff (cfs)	1.61		2.03		3.29	
Annual runoff (inches)	21.80		27.66		44.68	
10 percent exceeds	140		153		257	
50 percent exceeds	44		57		97	
90 percent exceeds	15		15		35	

^aSee Remarks.