

Water-Data Report 2008

03441000 DAVIDSON RIVER NEAR BREVARD, NC

French Broad-Holston Basin
Upper French Broad Subbasin

LOCATION.--Lat 35°16'23", long 82°42'21" referenced to North American Datum of 1983, Transylvania County, NC, Hydrologic Unit 06010105, on right bank 150 ft upstream of bridge on North Carolina Highway 280, 2.1 mi downstream of Avery Creek, 3.3 mi northeast of Brevard, and at river mile 2.2.

DRAINAGE AREA.--40.4 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1920 to September 1990, October 1993 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 823: Drainage Area. WSP 1336: 1921, 1922 (M), 1923, 1924-25(M), 1926, 1927(M), 1929-32(M).

GAGE.--Water-stage recorder. Datum of gage is 2,115.13 ft above NGVD of 1929 (levels by Tennessee Valley Authority). Prior to May 17, 1934, nonrecording gage at site 50 ft downstream at same datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge for period of record is estimated.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1876 reached a stage of 11.9 ft, from studies by Tennessee Valley Authority.

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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	24	41	42	131	403	106	123	95	60	36	25	45
2	24	39	41	108	226	99	118	92	58	34	23	43
3	24	38	44	97	159	96	128	90	57	34	22	39
4	34	37	39	e88	145	916	137	88	54	34	21	36
5	50	36	38	80	129	622	165	85	52	37	21	34
6	35	36	37	77	154	319	239	82	50	39	20	32
7	29	35	37	72	146	433	171	80	49	45	19	31
8	27	34	37	68	126	503	152	79	48	37	19	31
9	29	34	37	66	115	343	140	83	47	36	18	36
10	35	34	37	76	105	277	132	88	62	34	21	34
11	26	33	36	240	99	239	128	95	55	35	19	62
12	24	32	35	128	96	211	130	81	47	32	18	70
13	24	32	35	107	115	189	118	76	45	33	44	52
14	24	32	34	96	95	177	114	75	80	32	45	42
15	24	60	37	86	90	213	110	76	61	30	26	37
16	24	38	95	80	87	203	106	99	49	29	24	37
17	24	35	52	103	149	172	104	78	45	28	27	37
18	25	34	46	93	348	162	101	76	42	27	24	35
19	37	33	43	91	173	282	104	76	41	27	22	32
20	30	33	42	81	144	288	100	73	40	27	21	31
21	25	32	62	86	131	219	96	75	47	26	20	31
22	30	60	54	76	137	194	95	68	61	26	20	30
23	273	42	342	81	122	174	93	66	45	27	19	29
24	302	37	159	79	113	160	90	66	41	30	19	28
25	119	37	106	71	108	150	90	63	39	25	33	27
26	80	76	101	70	142	143	90	62	38	31	685	27
27	63	75	91	69	125	137	97	61	45	31	301	29
28	54	54	142	66	112	132	157	70	39	25	116	28
29	48	48	170	67	107	132	109	67	40	30	80	27
30	45	45	181	93	---	126	99	62	39	29	58	34
31	42	---	174	77	---	122	---	59	---	26	49	---
Total	1,654	1,232	2,426	2,803	4,201	7,539	3,636	2,386	1,476	972	1,879	1,086
Mean	53.4	41.1	78.3	90.4	145	243	121	77.0	49.2	31.4	60.6	36.2
Max	302	76	342	240	403	916	239	99	80	45	685	70
Min	24	32	34	66	87	96	90	59	38	25	18	27
Cfsm	1.32	1.02	1.94	2.24	3.59	6.02	3.00	1.91	1.22	0.78	1.50	0.90
In.	1.52	1.13	2.23	2.58	3.87	6.94	3.35	2.20	1.36	0.90	1.73	1.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2008^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	94.4	106	131	155	166	182	169	138	111	92.7	97.1	94.3
Max	379	362	323	374	363	466	349	293	263	285	404	667
(WY)	(1965)	(1980)	(1933)	(1937)	(1939)	(1929)	(1957)	(1923)	(2005)	(1989)	(1928)	(2004)
Min	18.2	24.5	31.7	37.8	66.5	74.1	57.7	54.6	37.9	31.4	24.0	17.5
(WY)	(1955)	(1955)	(1940)	(1956)	(1941)	(1988)	(1986)	(1941)	(1988)	(2008)	(1925)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1921 - 2008 ^a	
Annual total	30,807		31,290			
Annual mean	84.4		85.5		128	
Highest annual mean					208	
Lowest annual mean					70.6	
Highest daily mean	1,230	Jan 1	916	Mar 4	3,940	Sep 8, 2004
Lowest daily mean	22	Aug 21	18	Aug 9	14	Sep 28, 1954
Annual seven-day minimum	23	Sep 7	19	Aug 6	15	Sep 25, 1954
Maximum peak flow			3,360	Aug 26	^b 8,400	Aug 15, 1928
Maximum peak stage			6.76	Aug 26	12.08	Aug 17, 1994
Instantaneous low flow			17	Aug 9	13	Oct 11, 1954
Annual runoff (cfs)	2.09		2.12		3.17	
Annual runoff (inches)	28.37		28.81		43.02	
10 percent exceeds	155		161		227	
50 percent exceeds	54		58		100	
90 percent exceeds	27		26		42	

^aSee Period of Record.^bSee Remarks.