

Water-Data Report 2010

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: 1922-27, maximum discharge; 1929-32, maximum discharge; 1921, daily discharges; 1923, daily discharges; 1926, daily discharges.

GAGE.--Water-stage recorder. Datum of gage is 2,115.13 ft above National Geodetic Vertical Datum 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 streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge for period of record is estimated. Minimum discharge for current year also occurred September 26.

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 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	165	373	165	266	247	171	191	123	150	77	52	52
2	154	271	478	244	315	177	180	129	145	72	51	49
3	145	229	402	227	287	167	172	223	154	69	48	48
4	133	202	292	215	268	161	164	164	142	65	45	46
5	188	183	257	204	540	158	159	143	129	61	47	44
6	148	169	228	194	511	155	153	133	109	58	44	43
7	135	159	212	189	378	155	149	125	97	56	42	42
8	122	150	227	181	331	155	184	118	89	54	44	43
9	119	143	745	e172	321	159	172	110	86	61	41	43
10	117	241	399	e167	302	169	152	109	85	56	40	41
11	111	856	319	e162	274	201	146	112	95	53	40	51
12	125	417	283	157	261	264	143	109	90	76	44	68
13	116	314	373	151	245	295	139	104	80	61	39	44
14	158	267	324	149	230	235	134	99	75	60	99	40
15	163	236	288	146	228	206	131	98	105	51	102	39
16	147	214	259	146	211	188	129	116	126	55	80	38
17	132	201	241	450	201	178	126	119	104	52	75	37
18	122	656	257	279	194	173	122	100	84	51	74	37
19	115	468	240	234	189	164	119	93	78	54	70	36
20	111	346	216	217	186	156	120	89	72	48	55	35
21	106	295	203	284	188	204	122	104	67	46	266	35
22	102	277	196	279	233	515	113	96	79	50	179	38
23	141	279	194	242	232	277	110	88	74	55	100	38
24	412	247	196	809	224	234	144	85	70	48	80	34
25	205	229	1,140	1,040	205	213	329	92	81	48	74	34
26	167	214	571	518	192	200	185	83	105	74	76	51
27	250	200	411	396	185	183	158	79	147	92	83	89
28	397	188	348	339	178	278	141	77	125	80	72	78
29	259	180	306	310	---	277	132	75	95	61	64	52
30	214	176	280	307	---	231	126	73	85	51	59	76
31	264	---	280	264	---	206	---	162	---	50	55	---
Total	5,243	8,380	10,330	8,938	7,356	6,505	4,545	3,430	3,023	1,845	2,240	1,401
Mean	169	279	333	288	263	210	152	111	101	59.5	72.3	46.7
Max	412	856	1,140	1,040	540	515	329	223	154	92	266	89
Min	102	143	165	146	178	155	110	73	67	46	39	34
Cfsm	4.19	6.91	8.25	7.14	6.50	5.19	3.75	2.74	2.49	1.47	1.79	1.16
In.	4.83	7.72	9.51	8.23	6.77	5.99	4.18	3.16	2.78	1.70	2.06	1.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2010^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	94.5	107	133	156	166	181	169	138	111	91.9	96.1	96.3
Max	379	362	333	374	363	466	349	293	263	285	404	667
(WY)	(1965)	(1980)	(2010)	(1937)	(1939)	(1929)	(1957)	(1923)	(2005)	(1989)	(1928)	(2004)
Min	18.2	24.5	31.7	37.8	65.5	74.1	57.7	54.6	37.9	31.4	24.0	17.5
(WY)	(1955)	(1955)	(1940)	(1956)	(2009)	(1988)	(1986)	(1941)	(1988)	(2008)	(1925)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1921 - 2010 ^a	
Annual total	58,361		63,236			
Annual mean	160		173		128	
Highest annual mean					208	1949
Lowest annual mean					70.6	1988
Highest daily mean	2,710	Sep 21	1,140	Dec 25	3,940	Sep 8, 2004
Lowest daily mean	32	Sep 6	34	Sep 24	14	Sep 28, 1954
Annual seven-day minimum	35	Sep 2	36	Sep 19	15	Sep 25, 1954
Maximum peak flow			2,520	Jan 24	^b 8,400	Aug 15, 1928
Maximum peak stage			5.70	Jan 24	12.08	Aug 17, 1994
Instantaneous low flow			^b 32	Sep 25	13	Oct 11, 1954
Annual runoff (cfsm)	3.96		4.29		3.17	
Annual runoff (inches)	53.74		58.23		43.13	
10 percent exceeds	290		306		228	
50 percent exceeds	111		147		100	
90 percent exceeds	41		49		41	

^a See Period of Record.

^b See Remarks.

