

Water-Data Report 2010

**03439000 FRENCH BROAD RIVER AT ROSMAN, NC**

French Broad-Holston Basin  
Upper French Broad Subbasin

LOCATION.--Lat 35°08'36", long 82°49'29" referenced to North American Datum of 1983, Transylvania County, NC, Hydrologic Unit 06010105, on left bank 50 ft upstream from bridge on U.S. Highway 178 at Rosman, 1.0 mi upstream from East Fork, and at river mile 216.4.

DRAINAGE AREA.--67.9 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--May 1907 to June 1909, October 1935 to current year. Monthly discharge only for some periods published in WSP1306.

REVISED RECORDS.--WSP 823: Drainage area. WSP 1306: 1908, maximum discharge. WSP 1910: 1936, maximum discharge; 1938-40, maximum discharge; 1942-43, maximum discharge; 1939-40, daily discharges; 1942-43, daily discharges.

GAGE.--Water-stage recorder. Datum of gage is 2,173.83 ft above National Geodetic Vertical Datum of 1929. Prior to June 30, 1909, nonrecording gage at site 500 ft downstream at different datum. January 1, 1936, to July 6, 1937, nonrecording gage at present site and datum. Satellite telemetry at streamgage.

REMARKS.--No estimated daily discharges. Records good. Minimum discharge for period of record result of freezeup. Minimum discharge for current water year also occurred on September 22, 23, 24, 25, 26.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of 13.9 ft, from floodmarks.

## 03439000 FRENCH BROAD RIVER AT ROSMAN, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	268	630	306	454	424	301	306	231	249	130	97	86
2	253	475	977	425	507	308	294	233	225	126	98	84
3	239	412	731	401	473	294	283	426	206	125	101	81
4	223	371	521	384	445	284	273	317	218	121	94	79
5	317	344	457	369	1,010	277	263	275	207	116	88	77
6	255	322	410	354	923	270	255	254	184	112	98	77
7	237	306	384	344	673	265	248	234	170	108	102	75
8	215	291	426	333	584	264	299	222	159	105	98	75
9	212	278	1,170	315	558	267	284	209	158	106	88	76
10	217	422	653	306	524	274	249	204	160	110	88	74
11	200	1,230	530	298	477	328	240	214	172	102	89	106
12	235	648	472	293	458	430	233	205	176	149	93	127
13	221	506	618	284	434	457	226	196	154	125	92	83
14	269	438	533	277	411	374	221	189	145	116	300	77
15	322	396	478	272	407	333	216	205	201	104	147	74
16	300	367	434	273	379	308	212	278	240	107	128	72
17	260	350	409	803	364	294	208	275	189	105	106	72
18	236	1,170	458	460	352	284	202	225	157	114	105	70
19	222	810	455	389	344	270	197	203	153	115	124	70
20	213	602	404	362	337	259	199	191	145	101	101	70
21	203	517	378	487	335	312	206	211	135	96	355	70
22	196	486	364	459	391	653	196	200	171	92	248	71
23	333	470	355	399	379	398	193	185	163	95	153	69
24	908	425	351	1,280	369	352	257	176	152	98	122	68
25	432	399	1,920	1,590	347	329	670	179	159	102	113	68
26	350	377	944	803	330	314	342	170	187	89	106	109
27	476	359	696	627	320	292	293	166	166	108	108	157
28	709	341	597	547	309	434	263	164	167	98	104	146
29	474	328	530	505	---	414	246	160	141	105	96	99
30	403	322	489	506	---	352	236	158	137	97	93	107
31	499	---	482	450	---	324	---	258	---	94	89	---
<b>Total</b>	9,897	14,392	17,932	15,049	12,864	10,315	7,810	6,813	5,246	3,371	3,824	2,569
<b>Mean</b>	319	480	578	485	459	333	260	220	175	109	123	85.6
<b>Max</b>	908	1,230	1,920	1,590	1,010	653	670	426	249	149	355	157
<b>Min</b>	196	278	306	272	309	259	193	158	135	89	88	68
<b>Cfsm</b>	4.70	7.07	8.52	7.15	6.77	4.90	3.83	3.24	2.58	1.60	1.82	1.26
<b>In.</b>	5.42	7.88	9.82	8.24	7.05	5.65	4.28	3.73	2.87	1.85	2.10	1.41

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2010 <sup>a</sup>, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	174	205	249	282	310	328	312	255	214	174	180	173
<b>Max</b>	734	635	578	672	648	787	582	551	882	624	543	848
<b>(WY)</b>	(1965)	(1993)	(2010)	(1937)	(1939)	(1979)	(1983)	(1909)	(1909)	(1989)	(1994)	(2004)
<b>Min</b>	42.2	56.7	72.6	72.0	110	135	108	110	79.8	67.7	57.7	43.6
<b>(WY)</b>	(1955)	(1955)	(1940)	(1981)	(2009)	(1988)	(1986)	(2006)	(1988)	(2008)	(2007)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1908 - 2010 <sup>a</sup>	
<b>Annual total</b>	99,285		110,082			
<b>Annual mean</b>	272		302		236	
<b>Highest annual mean</b>					370	1949
<b>Lowest annual mean</b>					136	1981
<b>Highest daily mean</b>	3,790	Sep 21	1,920	Dec 25	5,630	Oct 4, 1964
<b>Lowest daily mean</b>	68	Sep 14	68	Sep 24	33	Aug 21, 2007
<b>Annual seven-day minimum</b>	75	Sep 3	69	Sep 19	36	Aug 15, 2007
<b>Maximum peak flow</b>			4,050	Jan 24	13,500	Oct 4, 1964
<b>Maximum peak stage</b>			8.60	Jan 24	14.95	Oct 4, 1964
<b>Instantaneous low flow</b>			<sup>b</sup> 68	Sep 21	<sup>b</sup> 23	Jan 3, 1940
<b>Annual runoff (cfsm)</b>	4.01		4.44		3.48	
<b>Annual runoff (inches)</b>	54.39		60.31		47.24	
<b>10 percent exceeds</b>	495		511		411	
<b>50 percent exceeds</b>	196		260		188	
<b>90 percent exceeds</b>	89		96		85	

<sup>a</sup> See Period of Record.

<sup>b</sup> See Remarks

