

Water-Data Report 2013

02112120 ROARING RIVER NEAR ROARING RIVER, NC

Upper Pee Dee Basin
Upper Yadkin Subbasin

LOCATION.--Lat 36°15'01", long 81°02'40" referenced to North American Datum of 1983, Wilkes County, NC, Hydrologic Unit 03040101, on left bank at downstream end of old bridge pier, 800 ft upstream from bridge on Secondary Road 1990, 3.8 mi northwest of Roaring River, and 4.1 mi upstream from mouth.

DRAINAGE AREA.--128 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1964 to current year. Occasional low-flow measurements water years 1925, 1947, 1949-56, 1963.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 964.85 ft above National Geodetic Vertical Datum of 1929. Prior to May 1, 1964, nonrecording gage on downstream side of bridge at same site and datum. Satellite telemetry at streamgage.

REMARKS.--No estimated daily discharges. Records good. Maximum discharge for period of record and current water year, from rating curve extended above 2,400 ft³/s on basis of slope-area measurement of peak flow at gage heights 22.54, 14.40, and 10.83 ft. Minimum discharge for period of record also occurred August 13, 23-25, 2008.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 28 ft; estimated discharge, 45,000 ft³/s. The flood of August 1940 reached a stage of about 24 ft; estimated discharge, 31,000 ft³/s, from information by local residents and rating curve extended as explained above. A discharge of 24 ft³/s was measured September 18, 1956.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	132	97	82	134	541	256	208	249	227	292	388	324
2	339	92	82	137	393	235	195	238	226	692	350	308
3	226	92	82	124	335	218	188	228	237	810	328	259
4	173	92	82	117	289	206	217	217	216	1,360	313	238
5	149	92	82	113	264	236	319	230	213	2,850	292	229
6	139	90	81	111	242	345	241	1,620	649	958	287	220
7	151	92	81	107	231	242	221	1,130	643	1,280	356	218
8	139	90	82	105	278	223	212	766	418	1,290	379	216
9	133	89	81	105	228	211	204	530	410	716	310	212
10	127	89	83	103	213	204	199	425	817	574	537	207
11	118	89	83	110	222	201	197	376	558	767	561	223
12	114	91	77	109	206	593	483	335	414	712	356	215
13	111	128	75	105	219	364	317	303	355	565	371	204
14	109	100	75	488	209	291	266	284	319	726	319	191
15	146	94	75	1,910	197	263	296	271	286	624	284	189
16	124	92	90	1,450	191	246	273	254	269	501	273	189
17	111	90	115	1,880	181	232	257	243	264	447	266	186
18	110	89	93	1,520	174	231	246	275	273	457	326	186
19	109	90	84	623	176	253	345	701	274	379	592	188
20	105	90	92	440	170	219	416	821	256	362	397	196
21	102	88	149	354	164	211	308	489	240	350	338	244
22	102	85	96	294	177	202	275	427	226	385	307	274
23	102	85	88	258	183	199	257	512	218	1,010	286	195
24	101	84	149	235	177	291	244	432	215	364	271	187
25	99	82	148	217	166	304	231	346	220	320	255	190
26	99	82	729	204	507	248	217	313	209	300	249	195
27	100	87	327	192	441	229	213	291	210	1,820	243	181
28	99	86	195	189	300	218	287	274	205	925	237	175
29	94	82	175	184	---	210	339	259	197	577	232	175
30	94	82	154	658	---	205	276	245	199	455	389	174
31	97	---	139	1,500	---	216	---	235	---	411	316	---
Total	3,954	2,711	4,026	14,076	7,074	7,802	7,947	13,319	9,463	23,279	10,408	6,388
Mean	128	90.4	130	454	253	252	265	430	315	751	336	213
Max	339	128	729	1,910	541	593	483	1,620	817	2,850	592	324
Min	94	82	75	103	164	199	188	217	197	292	232	174
Cfsm	1.00	0.71	1.01	3.55	1.97	1.97	2.07	3.36	2.46	5.87	2.62	1.66
In.	1.15	0.79	1.17	4.09	2.06	2.27	2.31	3.87	2.75	6.77	3.02	1.86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2013, BY WATER YEAR (WY)

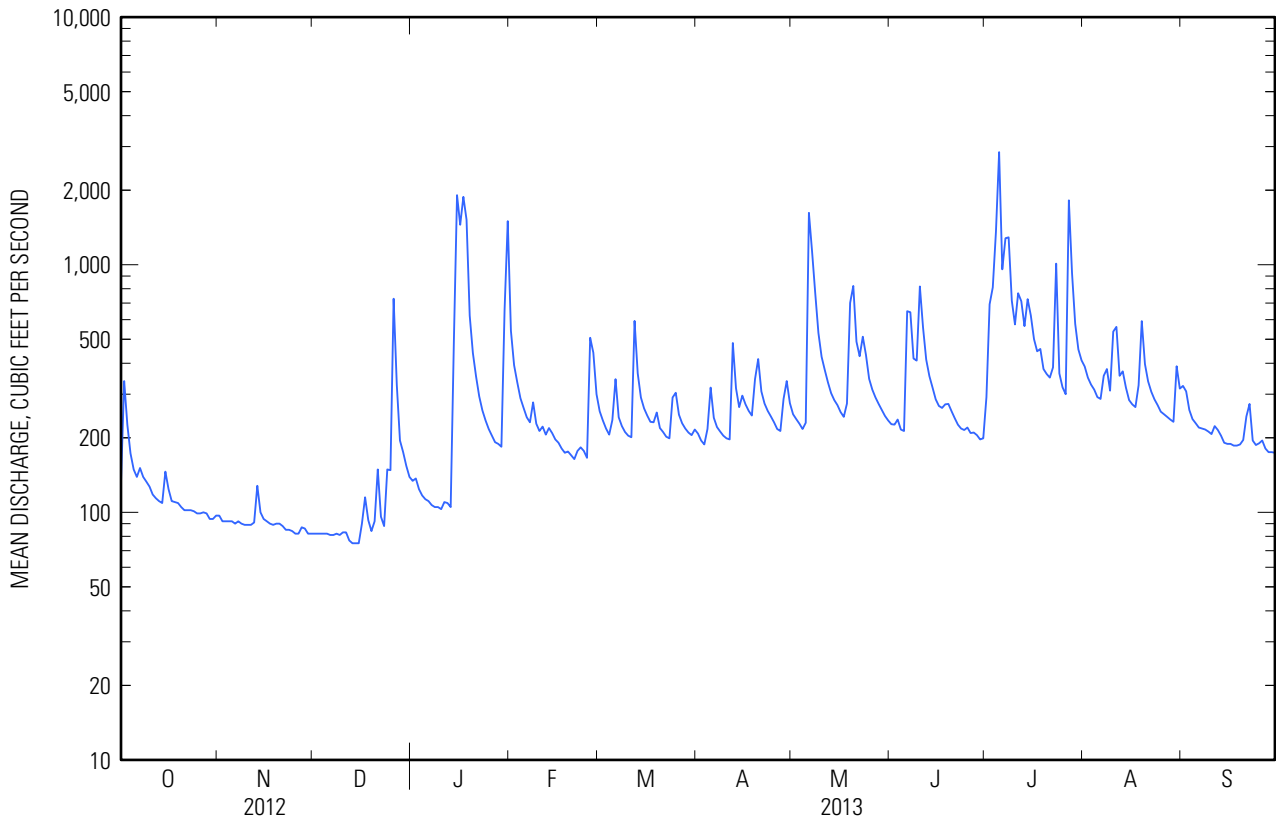
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	139	151	177	205	208	250	243	205	185	159	142	139
Max	422	426	389	454	413	610	637	430	453	751	461	449
(WY)	(1977)	(1978)	(1997)	(2013)	(1990)	(1993)	(1980)	(1991)	(2003)	(2013)	(1994)	(2004)
Min	42.0	46.9	59.2	70.2	67.4	95.0	97.9	66.2	39.5	36.4	23.6	46.3
(WY)	(2001)	(2002)	(2001)	(2001)	(2001)	(2006)	(2006)	(2002)	(2002)	(2008)	(2002)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1964 - 2013	
Annual total	64,625		110,447			
Annual mean	177		303		184	
Highest annual mean					303	2013
Lowest annual mean					69.8	2002
Highest daily mean	1,570	May 14	2,850	Jul 5	7,460	Aug 17, 1994
Lowest daily mean	75	Dec 13	75	Dec 13	13	Aug 12, 2008
Annual seven-day minimum	78	Dec 9	78	Dec 9	14	Aug 19, 2008
Maximum peak flow			^a 6,040	Jan 17	^a 26,600	Oct 17, 1975
Maximum peak stage			9.76	Jan 17	22.54	Oct 17, 1975
Instantaneous low flow			73	Dec 14	^a 13	Aug 12, 2008
Annual runoff (cfsm)	1.38		2.36		1.44	
Annual runoff (inches)	18.78		32.10		19.52	
10 percent exceeds	256		563		304	
50 percent exceeds	154		226		140	
90 percent exceeds	90		90		71	

^a See Remarks.



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PERIOD OF RECORD.--October 2002 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with Yadkin, Inc., the North Carolina Department of Environment and Natural Resources, and the U.S. Army Corps of Engineers, Wilmington District. Precipitation data collected during freezing periods may not be accurately reflected in daily record.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.32	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.13
2	0.60	0.00	0.00	0.03	0.00	0.00	0.00	0.02	0.17	2.42	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.95	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	1.18	0.07	0.00
5	0.00	0.00	0.03	0.00	0.00	0.95	0.01	0.73	0.00	2.29	0.06	0.00
6	0.19	0.00	0.01	0.01	0.00	0.01	0.00	2.09	2.45	0.40	0.00	0.00
7	0.48	0.00	0.00	0.00	0.53	0.00	0.00	0.98	0.20	0.71	0.92	0.00
8	0.02	0.00	0.00	0.00	0.07	0.00	0.00	0.03	0.31	0.01	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.04	0.00
10	0.00	0.00	0.12	0.00	0.07	0.00	0.00	0.00	0.12	0.00	0.15	0.00
11	0.00	0.00	0.00	0.12	0.05	0.25	0.28	0.33	0.04	0.08	0.00	0.00
12	0.00	0.39	0.00	0.01	0.04	0.98	0.78	0.00	0.00	0.01	0.14	0.04
13	0.00	0.11	0.00	0.00	0.16	0.00	0.00	0.00	0.06	0.03	0.20	0.00
14	0.00	0.00	0.00	1.88	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.00
15	0.68	0.00	0.00	1.82	0.01	0.00	0.38	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.49	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.04	1.96	0.00	0.00	0.02	0.02	0.00	0.00	0.14	0.00
18	0.00	0.00	0.01	0.00	0.00	0.39	0.00	0.19	0.19	0.00	0.51	0.00
19	0.00	0.00	0.00	0.00	0.02	0.01	0.63	0.94	0.00	0.00	0.78	0.01
20	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.01
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.65
22	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.49	0.00	1.46	0.00	0.00
23	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.34	0.00	0.24	0.02	0.00
24	0.00	0.00	0.74	0.00	0.00	0.76	0.00	0.00	0.00	0.14	0.00	0.00
25	0.00	0.00	0.03	0.11	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.22
26	0.00	0.00	1.72	0.00	1.34	0.00	0.00	0.00	0.00	0.00	0.00	0.01
27	0.00	0.12	0.00	0.00	0.01	0.00	0.03	0.00	0.04	2.56	0.00	0.00
28	0.00	0.00	0.00	0.05	0.00	0.00	0.92	0.00	0.02	0.01	0.00	0.00
29	0.00	0.00	0.15	0.00	---	0.00	0.12	0.00	0.00	0.00	0.36	0.00
30	0.00	0.00	0.00	1.92	---	0.00	0.00	0.00	0.10	0.00	0.00	0.00
31	0.00	---	0.00	0.01	---	0.25	---	0.00	---	0.05	0.27	---
Total	2.29	0.62	4.04	8.66	2.73	3.63	4.10	6.32	4.33	13.21	3.70	1.07

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