

Water-Data Report 2007

**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 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

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

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

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

REMARKS.--No estimated daily discharges. Records good. Maximum discharge for period of record and current water year, from rating curve extended above 2,400 ft<sup>3</sup>/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 15, 24, 25, Sept. 11-14, 2002. Minimum discharge for current water year also occurred September 14.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 28 ft; estimated discharge, 45,000 ft<sup>3</sup>/s. The flood of August 1940 reached a stage of about 24 ft; estimated discharge, 31,000 ft<sup>3</sup>/s, from information by local residents and rating curve extended as explained above. A discharge of 24 ft<sup>3</sup>/s was measured September 18, 1956.

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**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	64	74	174	1,820	128	163	162	127	97	63	74	66
2	61	83	151	592	131	1,450	160	122	83	57	60	53
3	59	74	130	380	125	424	152	121	140	56	54	42
4	59	69	122	303	121	280	151	128	125	54	54	39
5	58	69	115	338	e124	226	143	127	87	61	52	36
6	71	68	110	326	e123	199	142	125	81	64	51	35
7	59	97	108	298	e122	181	141	117	77	54	49	33
8	63	393	102	835	117	170	139	117	74	52	50	32
9	64	173	102	459	113	160	139	117	70	49	46	31
10	58	124	105	339	112	155	136	113	66	55	43	30
11	56	111	98	285	e115	150	148	109	66	67	39	30
12	61	171	96	256	110	142	200	117	69	57	38	29
13	54	121	99	235	126	140	149	107	66	51	38	28
14	53	109	96	217	235	138	146	101	69	54	35	160
15	52	103	94	205	140	136	373	100	86	51	34	126
16	54	715	92	193	128	721	474	100	87	50	33	53
17	136	337	90	177	124	459	268	101	76	114	33	45
18	116	214	89	172	121	289	223	96	65	86	31	42
19	76	172	88	169	e122	236	201	95	62	60	29	41
20	90	148	87	159	e120	214	201	92	78	56	29	39
21	77	135	87	165	129	217	179	89	63	54	29	40
22	69	150	696	194	122	197	170	88	58	49	30	44
23	64	186	638	170	112	187	164	88	57	48	32	52
24	61	144	284	158	110	179	157	91	59	62	32	42
25	61	130	514	152	144	172	154	86	77	91	32	40
26	61	122	506	145	150	167	148	85	71	81	60	39
27	75	116	302	143	128	164	161	86	58	66	64	38
28	184	111	234	140	122	162	143	81	65	61	41	37
29	98	108	201	132	---	177	138	79	71	61	61	34
30	83	114	181	132	---	164	133	76	82	63	47	33
31	77	---	223	129	---	158	---	78	---	62	63	---
<b>Total</b>	2,274	4,741	6,014	9,418	3,574	7,977	5,395	3,159	2,285	1,909	1,363	1,389
<b>Mean</b>	73.4	158	194	304	128	257	180	102	76.2	61.6	44.0	46.3
<b>Max</b>	184	715	696	1,820	235	1,450	474	128	140	114	74	160
<b>Min</b>	52	68	87	129	110	136	133	76	57	48	29	28
<b>Cfsm</b>	0.57	1.23	1.52	2.37	1.00	2.01	1.40	0.80	0.60	0.48	0.34	0.36
<b>In.</b>	0.66	1.38	1.75	2.74	1.04	2.32	1.57	0.92	0.66	0.55	0.40	0.40

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2007, BY WATER YEAR (WY)

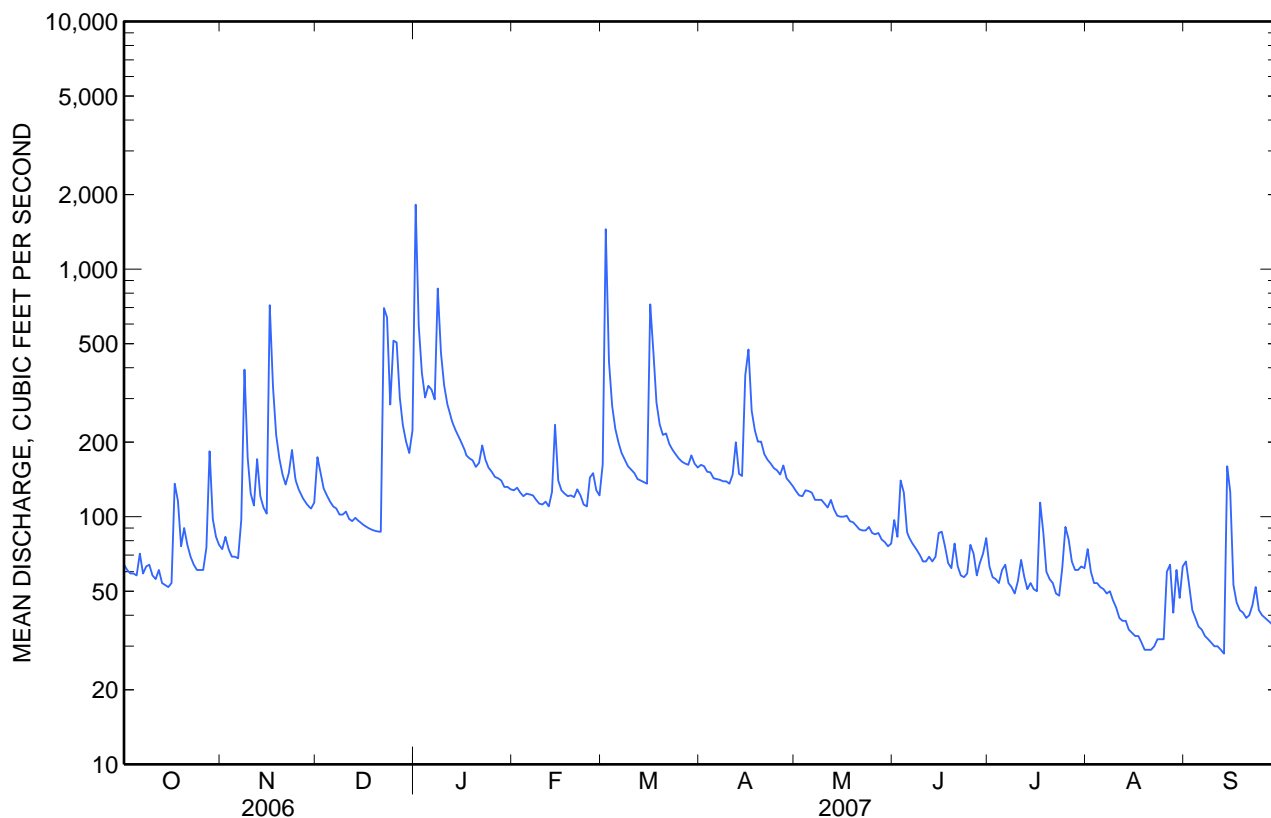
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	145	158	173	200	212	251	245	199	186	150	142	141
<b>Max</b>	422	426	389	406	413	610	637	430	453	349	461	449
<b>(WY)</b>	(1977)	(1978)	(1997)	(1996)	(1990)	(1993)	(1980)	(1991)	(2003)	(1989)	(1994)	(2004)
<b>Min</b>	42.0	46.9	59.2	70.2	67.4	95.0	97.9	66.2	39.5	48.3	23.6	46.3
<b>(WY)</b>	(2001)	(2002)	(2001)	(2001)	(2001)	(2006)	(2006)	(2002)	(2002)	(2002)	(2002)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1964 - 2007	
<b>Annual total</b>	43,530		49,498			
<b>Annual mean</b>	119		136		184	
<b>Highest annual mean</b>					269	1993
<b>Lowest annual mean</b>					69.8	2002
<b>Highest daily mean</b>	1,580	Jun 27	1,820	Jan 1	7,460	Aug 17, 1994
<b>Lowest daily mean</b>	39	Jun 22	28	Sep 13	14	Aug 15, 2002
<b>Annual seven-day minimum</b>	41	Jun 18	30	Aug 18	16	Aug 9, 2002
<b>Maximum peak flow</b>			<sup>a</sup> 4,100	Jan 1	<sup>a</sup> 26,600	Oct 17, 1975
<b>Maximum peak stage</b>			7.62	Jan 1	22.54	Oct 17, 1975
<b>Instantaneous low flow</b>			<sup>a</sup> 27	Sep 13	<sup>a</sup> 14	Aug 14, 2002
<b>Annual runoff (cfsm)</b>	0.932		1.06		1.43	
<b>Annual runoff (inches)</b>	12.65		14.39		19.48	
<b>10 percent exceeds</b>	191		223		302	
<b>50 percent exceeds</b>	91		102		140	
<b>90 percent exceeds</b>	57		42		72	

<sup>a</sup> See Remarks.



**02112120 ROARING RIVER NEAR ROARING RIVER, NC—Continued****CLIMATOLOGICAL RECORDS**

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; consequently, winter record is poor.

**PRECIPITATION, TOTAL, INCHES**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY SUM VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.10	0.26	0.03	1.06	0.04	1.71	0.01	0.00	0.01	0.00	0.00	0.04
2	0.04	0.11	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	1.12	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.01	0.00	0.00	0.00
5	0.08	0.00	0.00	0.49	0.00	0.00	0.00	0.01	0.01	0.77	0.00	0.00
6	0.11	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00
7	0.00	1.08	0.00	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.23	0.44	0.00	0.35	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
11	0.07	0.31	0.00	0.00	0.00	0.00	0.66	0.06	0.00	0.13	0.00	0.00
12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
13	0.00	0.00	0.06	0.00	1.16	0.00	0.00	0.00	0.00	0.01	0.01	0.00
14	0.00	0.00	0.00	0.00	0.02	0.00	0.17	0.00	0.06	0.00	0.00	2.01
15	0.00	1.00	0.00	0.00	0.00	0.02	1.09	0.00	0.13	0.00	0.00	0.00
16	0.04	0.85	0.00	0.00	0.00	1.47	0.00	0.02	0.03	0.00	0.00	0.00
17	1.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00
18	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.09	0.00	0.00	0.01	0.00	0.00	0.03	0.00	0.16	0.00	0.00	0.00
20	0.14	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.01	0.58	0.00	0.00
21	0.00	0.06	0.08	0.47	0.14	0.15	0.00	0.00	0.00	0.00	0.48	0.01
22	0.00	0.47	1.72	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.35	0.00	0.00
25	0.00	0.00	1.17	0.00	0.49	0.00	0.00	0.00	0.03	0.82	0.00	0.00
26	0.00	0.00	0.02	0.00	0.00	0.00	0.24	0.00	0.00	0.01	0.04	0.00
27	1.12	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00
28	0.09	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.29	0.00	0.00	0.86	0.37	1.75	0.00
30	0.00	0.55	0.00	0.00	---	0.00	0.00	0.00	0.02	0.01	0.02	0.00
31	0.00	---	1.19	0.00	---	0.00	---	0.98	---	0.00	0.00	---
<b>Total</b>	3.47	5.13	4.28	3.57	1.86	4.29	2.46	1.23	3.21	3.51	2.30	2.06

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