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^2.

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^3/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 Aug. 15, 24, 25, Sept. 11, 12, 13, 14, 2002. Minimum discharge for current water year also occurred June 22, 23, 24.

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

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	66	77	190	125	136	102	90	92	59	107	53	98
2	64	77	152	154	135	102	87	88	59	93	53	72
3	64	75	134	258	146	99	99	85	65	82	53	64
4	62	76	139	185	141	96	91	81	54	75	66	269
5	62	77	201	162	137	95	84	87	52	81	54	338
6	93	77	194	145	129	100	83	100	51	299	51	147
7	262	76	151	135	126	100	85	91	49	118	61	98
8	1,130	75	136	129	122	95	89	107	48	88	89	87
9	181	76	203	125	121	95	86	92	48	80	61	78
10	132	80	175	120	117	97	82	88	46	77	62	202
11	122	74	153	183	129	93	82	86	80	73	70	156
12	110	74	139	167	129	94	80	83	89	80	161	95
13	104	75	129	185	118	95	80	78	61	74	100	278
14	96	75	121	542	115	94	80	83	54	84	71	345
15	90	77	182	258	115	87	79	96	50	105	70	161
16	86	88	257	210	114	88	77	83	46	86	79	118
17	84	89	211	197	114	90	82	78	44	66	63	101
18	85	76	178	360	115	89	88	77	43	62	57	90
19	85	75	160	274	112	87	88	78	42	59	55	85
20	85	75	146	229	112	92	93	82	41	95	59	78
21	85	98	136	234	111	121	84	79	40	74	63	71
22	86	174	132	206	110	113	203	70	39	66	61	72
23	84	99	131	199	112	97	136	67	39	63	58	75
24	82	87	121	185	106	95	108	65	41	59	53	76
25	80	80	144	169	104	94	98	64	53	102	57	81
26	79	77	141	158	103	91	106	65	473	196	51	69
27	78	79	126	151	100	90	169	65	1,580	81	48	65
28	79	102	127	148	102	90	127	60	349	70	46	67
29	77	856	169	153	---	89	105	59	188	63	107	84
30	77	318	140	151	---	88	97	57	129	60	277	66
31	77	---	132	145	---	88	---	57	---	56	120	---
Total	3,947	3,514	4,850	6,042	3,331	2,946	2,938	2,443	4,012	2,774	2,329	3,686
Mean	127	117	156	195	119	95.0	97.9	78.8	134	89.5	75.1	123
Max	1,130	856	257	542	146	121	203	107	1,580	299	277	345
Min	62	74	121	120	100	87	77	57	39	56	46	64
Cfsm	0.99	0.92	1.22	1.52	0.93	0.74	0.77	0.62	1.04	0.70	0.59	0.96
In.	1.15	1.02	1.41	1.76	0.97	0.86	0.85	0.71	1.17	0.81	0.68	1.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	147	158	172	197	214	251	247	201	188	153	144	143
Max	422	426	389	406	413	610	637	430	453	349	461	449
(WY)	(1977)	(1978)	(1997)	(1996)	(1990)	(1993)	(1980)	(1991)	(2003)	(1989)	(1994)	(2004)
Min	42.0	46.9	59.2	70.2	67.4	95.0	97.9	66.2	39.5	48.3	23.6	48.2
(WY)	(2001)	(2002)	(2001)	(2001)	(2001)	(2006)	(2006)	(2002)	(2002)	(2002)	(2002)	(2001)

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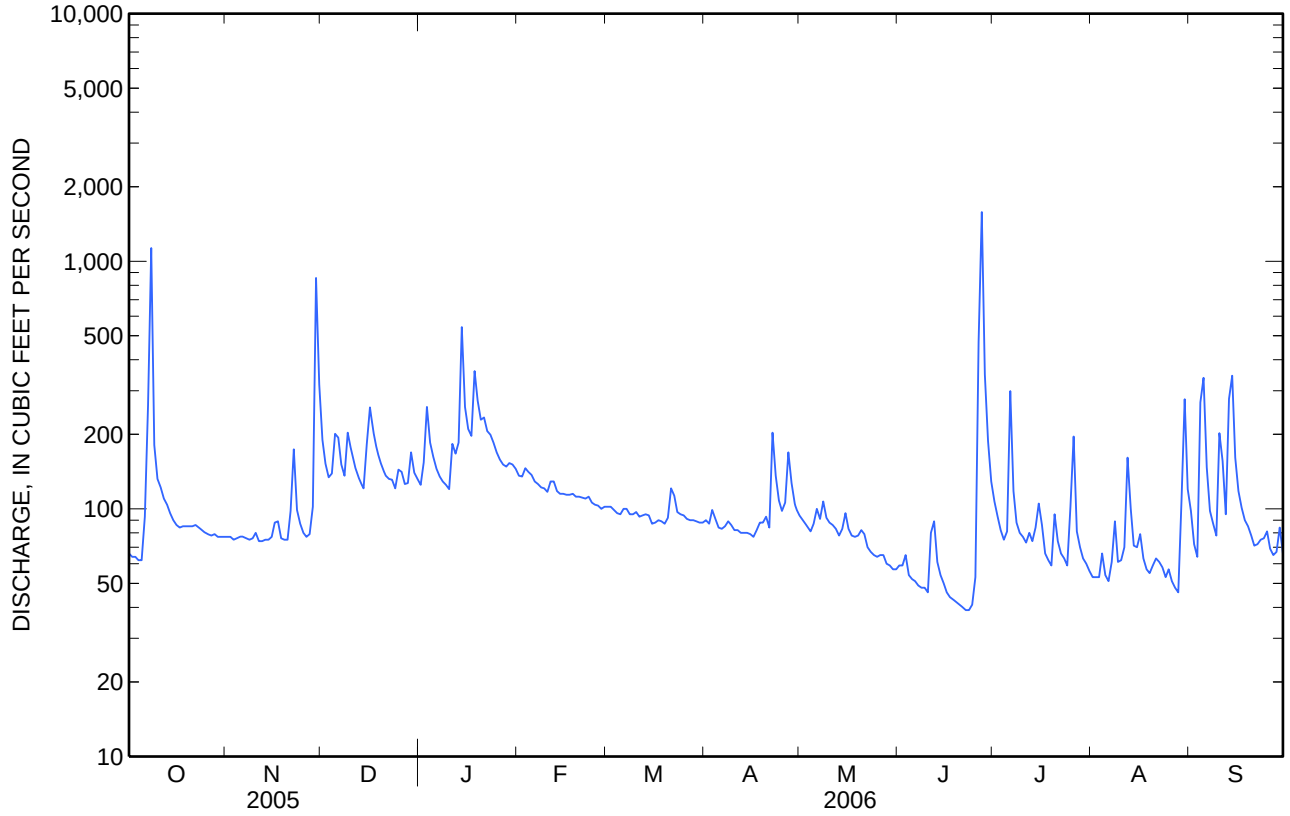
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1964 - 2006	
Annual total	60,485		42,812			
Annual mean	166		117		185	
Highest annual mean					269	1993
Lowest annual mean					69.8	2002
Highest daily mean	1,270	Jan 14	1,580	Jun 27	7,460	Aug 17, 1994
Lowest daily mean	62	Sep 24	39	Jun 22	14	Aug 15, 2002
Annual seven-day minimum	63	Sep 19	41	Jun 18	16	Aug 9, 2002
Maximum peak flow			[a]5,060	Jun 27	[a]26,600	Oct 17, 1975
Maximum peak stage			8.71	Jun 27	22.54	Oct 17, 1975
Instantaneous low flow			[a]38	Jun 21	[a]14	Aug 14, 2002
Annual runoff (cfsm)	1.29		0.916		1.44	
Annual runoff (inches)	17.58		12.44		19.61	
10 percent exceeds	240		185		304	
50 percent exceeds	153		89		141	
90 percent exceeds	76		59		73	

[a] See Remarks.



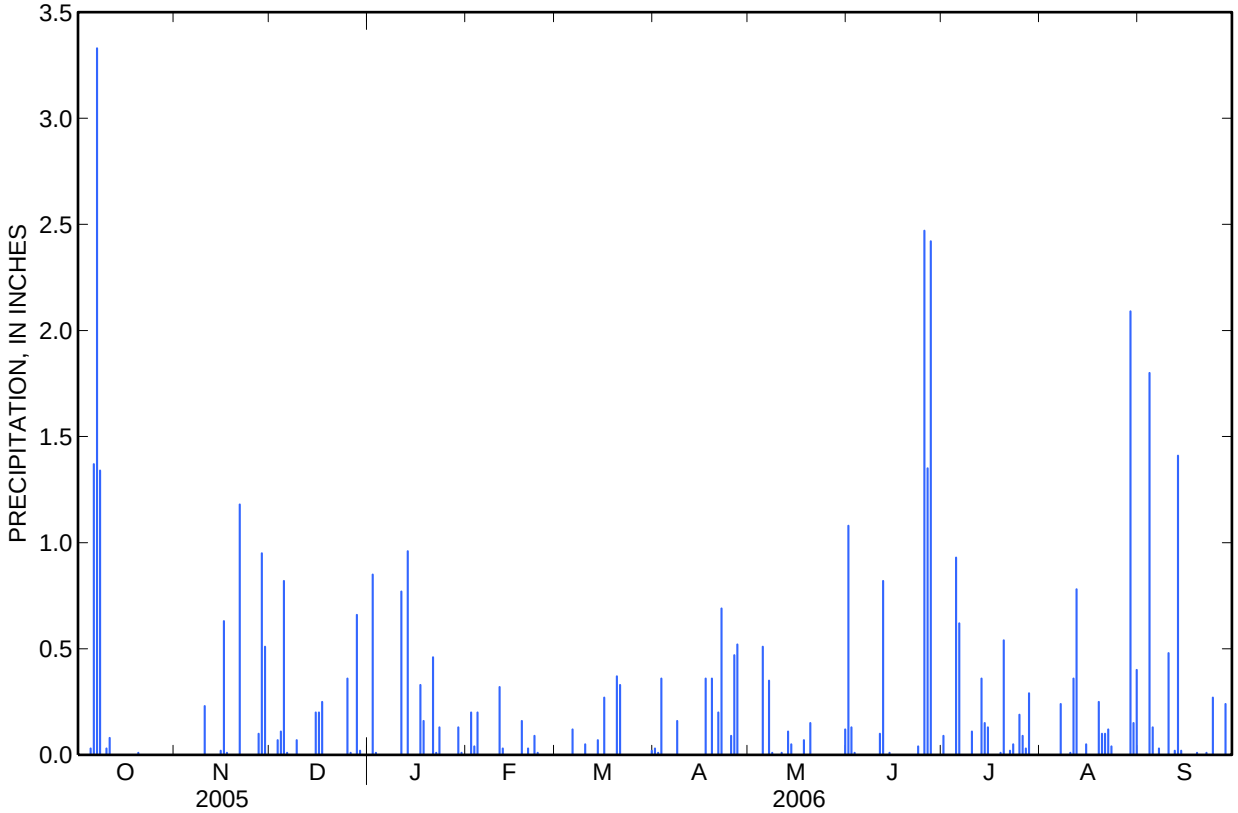
CLIMATOLOGICAL RECORDS

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 2005 TO SEPTEMBER 2006
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	1.08	0.09	0.00	0.00
2	0.00	0.00	0.00	0.85	0.20	0.00	0.01	0.00	0.13	0.00	0.00	0.00
3	0.00	0.00	0.07	0.01	0.04	0.00	0.36	0.00	0.01	0.00	0.00	0.00
4	0.00	0.00	0.11	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	1.80
5	0.03	0.00	0.82	0.00	0.00	0.00	0.00	0.51	0.00	0.93	0.00	0.13
6	1.37	0.00	0.01	0.00	0.00	0.12	0.00	0.00	0.00	0.62	0.00	0.00
7	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.24	0.03
8	1.34	0.00	0.00	0.00	0.00	0.00	0.16	0.01	0.00	0.00	0.00	0.00
9	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.03	0.23	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.11	0.01	0.48
11	0.08	0.00	0.00	0.77	0.32	0.00	0.00	0.01	0.10	0.00	0.36	0.00
12	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.82	0.00	0.78	0.02
13	0.00	0.00	0.00	0.96	0.00	0.00	0.00	0.11	0.00	0.36	0.00	1.41
14	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.05	0.01	0.15	0.00	0.02
15	0.00	0.02	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.05	0.00
16	0.00	0.63	0.20	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.01	0.25	0.33	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.16	0.16	0.00	0.00	0.07	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.01	0.25	0.01
20	0.01	0.00	0.00	0.00	0.03	0.37	0.00	0.15	0.00	0.54	0.10	0.00
21	0.00	1.18	0.00	0.46	0.00	0.33	0.20	0.00	0.00	0.00	0.10	0.00
22	0.00	0.00	0.00	0.01	0.09	0.00	0.69	0.00	0.00	0.02	0.12	0.01
23	0.00	0.00	0.00	0.13	0.01	0.00	0.00	0.00	0.04	0.05	0.04	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
25	0.00	0.00	0.36	0.00	0.00	0.00	0.09	0.00	2.47	0.19	0.00	0.00
26	0.00	0.00	0.01	0.00	0.00	0.00	0.47	0.00	1.35	0.09	0.00	0.00
27	0.00	0.10	0.00	0.00	0.00	0.00	0.52	0.00	2.42	0.03	0.00	0.00
28	0.00	0.95	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.24
29	0.00	0.51	0.02	0.13	---	0.00	0.00	0.00	0.00	0.00	2.09	0.00
30	0.00	0.00	0.00	0.01	---	0.00	0.00	0.00	0.00	0.00	0.15	0.00
31	0.00	---	0.00	0.00	---	0.02	---	0.12	---	0.00	0.40	---
Total	6.19	3.63	2.78	3.82	1.08	1.23	3.25	1.38	8.43	3.61	4.69	4.42

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