

Water-Data Report 2008

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, NC

Upper Pee Dee Basin
South Yadkin Subbasin

LOCATION.--Lat 35°50'42", long 80°39'32" referenced to North American Datum of 1983, Rowan County, NC, Hydrologic Unit 03040102, on right bank 90 ft downstream of bridge on Secondary Road 1972, 1 mi upstream from Little Creek, 4 mi downstream of Fifth Creek, 4.5 mi upstream from Hunting Creek, and 6.5 mi southwest of Mocksville.

DRAINAGE AREA.--306 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1938 to current year.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 663.62 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. The City of Statesville diverted an average of 1.2 ft³/s, for water supply and waste treatment dilution. Minimum discharge for period of record also occurred August 15, 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of October 3, 1929, reached a stage of 22.6 ft, from floodmark established by local resident (discharge, about 22,000 ft³/s).

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	43	96	91	442	271	160	209	199	97	106	56	123
2	51	90	94	276	404	157	196	177	90	74	53	104
3	51	85	95	212	283	152	190	167	88	60	54	92
4	52	84	93	174	250	192	332	162	137	55	64	84
5	50	83	93	160	407	350	976	155	126	61	53	72
6	51	76	92	160	440	262	798	146	96	62	43	65
7	54	73	87	150	320	374	723	139	83	65	40	69
8	53	76	82	143	266	603	462	135	78	62	37	66
9	51	75	90	138	228	439	356	140	73	66	34	81
10	48	75	93	135	205	328	305	163	70	90	32	246
11	45	80	93	131	181	279	267	148	66	171	33	171
12	41	80	93	137	170	251	246	147	61	129	30	148
13	39	82	93	130	183	230	244	135	57	91	172	130
14	43	83	88	123	224	214	222	125	59	83	85	105
15	45	97	88	117	203	206	212	122	72	87	60	89
16	46	95	142	112	188	244	202	126	75	73	56	96
17	46	80	145	113	179	232	194	137	69	64	304	176
18	47	86	120	153	186	195	188	127	61	54	102	144
19	50	86	106	156	187	197	183	125	54	51	64	107
20	55	86	102	151	170	257	200	120	49	50	53	93
21	54	87	104	135	161	271	238	112	51	47	46	86
22	53	88	110	122	155	239	209	105	52	44	41	83
23	51	98	122	137	156	220	193	102	63	96	33	73
24	53	94	153	129	157	204	183	98	66	94	36	71
25	106	90	165	113	155	189	175	96	58	60	42	70
26	373	94	145	112	170	184	164	94	51	51	47	70
27	502	103	148	117	203	173	185	91	46	49	1,360	122
28	267	105	138	116	184	175	255	96	46	48	1,410	145
29	154	101	254	113	158	176	286	123	59	45	427	128
30	115	90	427	117	---	186	229	117	143	41	227	106
31	102	---	715	115	---	194	---	101	---	42	156	---
Total	2,791	2,618	4,461	4,639	6,444	7,533	8,822	4,030	2,196	2,171	5,250	3,215
Mean	90.0	87.3	144	150	222	243	294	130	73.2	70.0	169	107
Max	502	105	715	442	440	603	976	199	143	171	1,410	246
Min	39	73	82	112	155	152	164	91	46	41	30	65
Cfsm	0.29	0.29	0.47	0.49	0.73	0.79	0.96	0.42	0.24	0.23	0.55	0.35
In.	0.34	0.32	0.54	0.56	0.78	0.92	1.07	0.49	0.27	0.26	0.64	0.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2008, BY WATER YEAR (WY)

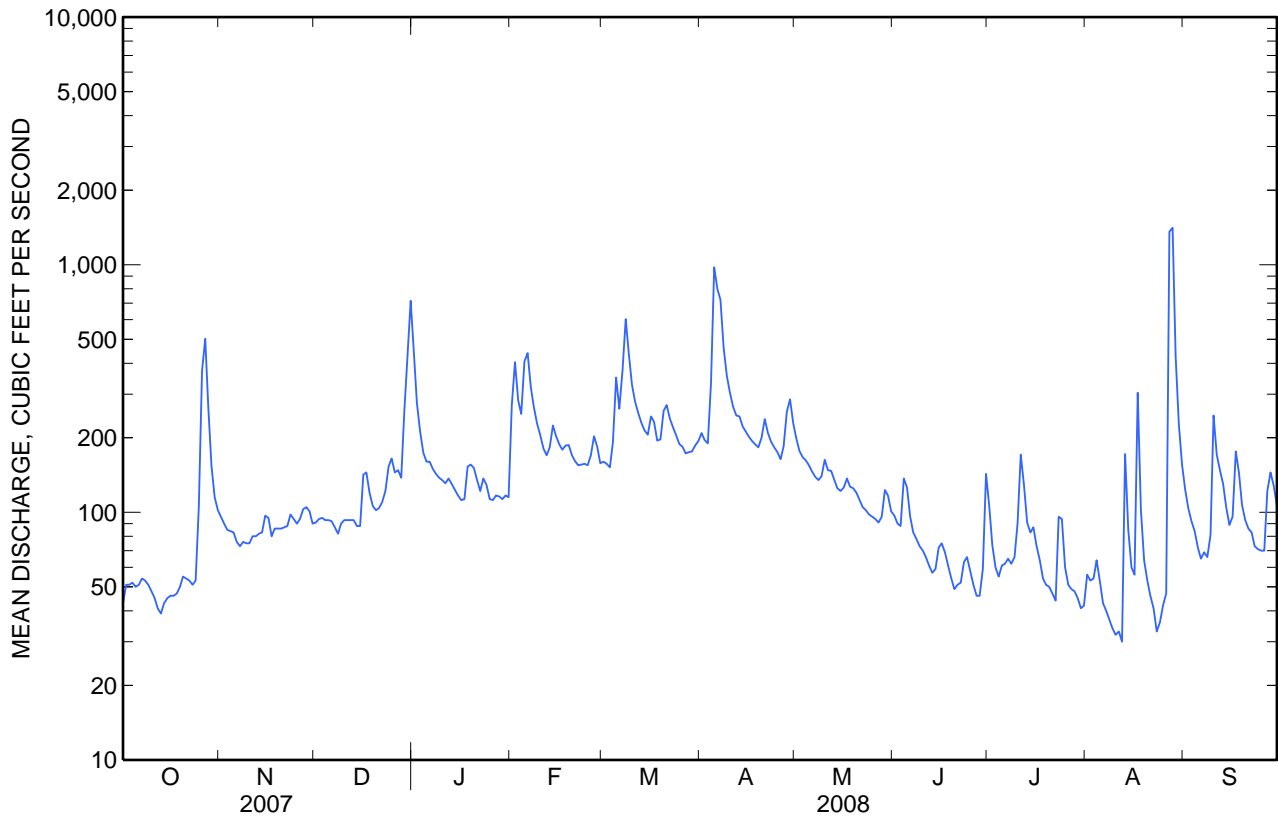
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	242	255	331	412	475	532	460	348	287	224	218	226
Max	1,246	791	738	1,088	1,458	1,485	1,110	885	889	628	706	880
(WY)	(1965)	(1958)	(1962)	(1978)	(1960)	(1975)	(1958)	(1984)	(2003)	(1941)	(1970)	(1979)
Min	41.0	63.2	102	97.7	141	167	114	91.4	37.6	24.6	14.8	34.5
(WY)	(2002)	(2002)	(1956)	(1956)	(2001)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1939 - 2008	
Annual total	77,915		54,170			
Annual mean	213		148		333	
Highest annual mean					592	1960
Lowest annual mean					87.0	2002
Highest daily mean	3,720	Jan 2	1,410	Aug 28	11,800	Mar 21, 2003
Lowest daily mean	23	Sep 12	30	Aug 12	3.0	Aug 13, 2002
Annual seven-day minimum	25	Sep 7	36	Aug 6	3.3	Aug 9, 2002
Maximum peak flow			1,910	Aug 28	14,900	Mar 21, 2003
Maximum peak stage			7.43	Aug 28	20.28	Mar 21, 2003
Instantaneous low flow			28	Aug 13	^a 2.8	Aug 14, 2002
Annual runoff (cfsm)	0.698		0.484		1.09	
Annual runoff (inches)	9.47		6.59		14.78	
10 percent exceeds	354		256		574	
50 percent exceeds	116		111		230	
90 percent exceeds	45		51		108	

^aSee Remarks.



02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, NC—Continued**CLIMATOLOGICAL RECORDS**

PERIOD OF RECORD.--October 2001 to current year.

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

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record may be poor.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
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	1.15	0.00	0.14	0.00	0.00	0.00	0.11	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00
3	0.00	0.00	0.00	0.00	0.16	0.00	0.72	0.00	0.40	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.32	1.22	0.79	0.00	0.00	0.24	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.09	0.00	0.04
6	0.00	0.00	0.00	0.00	0.02	0.00	0.06	0.00	0.00	0.03	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.05	0.00	0.00	0.00	0.12
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	1.26	0.00	0.08
10	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.20	0.04	0.45
11	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.77
12	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.01	1.16	0.00
14	0.00	0.01	0.00	0.00	0.06	0.00	0.00	0.00	0.31	0.00	0.00	0.00
15	0.00	0.63	0.51	0.00	0.00	0.56	0.00	0.00	0.01	0.00	0.19	0.00
16	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.83
17	0.00	0.00	0.00	0.42	0.14	0.00	0.00	0.00	0.00	0.00	0.18	0.00
18	0.00	0.00	0.00	0.21	0.03	0.00	0.00	0.28	0.00	0.00	0.00	0.00
19	0.49	0.00	0.00	0.04	0.00	0.51	0.42	0.01	0.00	0.00	0.00	0.00
20	0.00	0.00	0.03	0.00	0.00	0.07	0.01	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.20	0.00	0.01	0.00	0.07	0.00	0.00	0.00	0.00	0.00
22	0.00	0.27	0.00	0.03	0.05	0.00	0.00	0.00	0.22	0.69	0.00	0.00
23	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.13	---	0.00	0.00
24	0.38	0.00	0.00	0.01	0.06	0.00	0.00	0.00	0.00	0.01	0.00	0.00
25	1.68	0.17	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.26	0.01
26	0.57	0.10	0.43	0.00	0.40	0.00	0.14	0.00	0.00	0.00	1.07	0.79
27	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.04	0.17	0.00	2.96	0.60
28	0.00	0.00	0.53	0.00	0.00	0.00	0.43	0.33	0.07	0.00	0.00	0.13
29	0.00	0.00	0.06	0.02	0.00	0.17	0.00	0.00	1.62	0.00	0.00	0.00
30	0.00	0.00	1.17	0.06	---	0.02	0.00	0.00	0.01	0.04	0.00	0.75
31	0.00	---	0.01	0.00	---	0.38	---	0.00	---	0.30	0.00	---
Total	3.12	1.18	3.47	1.03	2.91	3.94	3.85	1.10	2.94	---	6.09	4.57

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, NC—Continued

