

Water-Data Report 2008

02111000 YADKIN RIVER AT PATTERSON, NC

Upper Pee Dee Basin
Upper Yadkin Subbasin

LOCATION.--Lat 35°59'27", long 81°33'30" referenced to North American Datum of 1983, Caldwell County, NC, Hydrologic Unit 03040101, on left bank 200 ft upstream from bridge on Secondary Highway 268, 0.4 mi upstream from Warrior Creek, 0.5 mi south of Patterson, 2.0 mi downstream of Walnut Branch, and at river mile 416.

DRAINAGE AREA.--28.8 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1303: 1940(m), 1947-48(M). WSP 1553: 1948(P). WDR NC-80-1: 1975(P), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,211.47 ft above NGVD of 1929. Prior to Feb. 9, 1940, nonrecording gage at present site, at datum 1,212.47 ft. Feb. 9, 1940, to Oct. 20, 1970, recording gage at present site, at datum 1,212.47 ft. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge, for period of record, from rating curve extended above 1,400 ft³/s on basis of computation of peak flow over dam 1 mi upstream at gage heights 4.58, 6.60, 7.70, and 12.70 ft.

02111000 YADKIN RIVER AT PATTERSON, NC—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	8.3	12	11	27	49	20	27	38	13	9.7	8.4	24
2	8.4	12	11	22	40	19	26	34	13	8.5	7.2	20
3	8.4	12	11	e19	29	19	27	31	13	8.1	6.8	18
4	9.0	11	11	e18	39	94	32	29	13	8.2	6.3	16
5	19	11	11	18	51	145	37	27	12	11	5.9	15
6	12	11	11	17	44	72	128	25	11	21	5.9	14
7	10	11	11	16	49	87	72	24	11	28	5.6	13
8	9.4	11	11	15	38	92	55	26	11	25	5.6	13
9	9.2	11	11	15	32	72	47	29	10	33	5.3	141
10	11	11	12	17	28	57	43	22	12	43	5.2	103
11	8.7	11	11	27	25	48	39	22	11	34	4.8	64
12	8.1	11	11	21	23	42	39	22	10	19	4.6	50
13	8.6	11	11	19	25	37	34	20	10	19	8.2	38
14	8.8	11	10	18	22	34	32	19	10	20	22	31
15	8.9	15	11	17	21	40	30	19	12	14	10	26
16	8.8	12	22	16	20	41	29	25	9.9	13	7.2	34
17	8.9	11	14	18	20	33	27	19	9.1	12	13	27
18	8.7	11	12	19	42	32	26	18	8.7	11	7.7	23
19	10	11	12	19	29	62	28	18	8.5	10	6.9	21
20	14	11	12	e17	27	93	36	17	8.7	10	6.3	20
21	9.8	11	16	e16	25	63	28	17	8.8	9.5	6.0	19
22	10	12	15	e16	24	52	26	16	9.5	9.1	6.0	18
23	14	11	51	16	23	45	25	15	11	8.8	5.7	17
24	31	11	32	16	21	40	24	15	8.7	8.7	5.7	16
25	64	11	21	e14	21	36	22	15	8.0	8.2	7.2	15
26	34	17	18	e14	27	34	27	14	e9.0	8.5	30	23
27	25	17	17	15	24	32	27	14	e13	8.7	426	56
28	18	13	24	14	21	30	80	17	12	7.9	141	35
29	15	12	38	14	20	32	58	19	12	9.6	59	27
30	14	12	35	15	---	29	44	15	13	8.0	35	27
31	13	---	36	14	---	28	---	15	---	7.6	27	---
Total	446.0	355	540	539	859	1,560	1,175	656	321.9	452.1	901.5	964
Mean	14.4	11.8	17.4	17.4	29.6	50.3	39.2	21.2	10.7	14.6	29.1	32.1
Max	64	17	51	27	51	145	128	38	13	43	426	141
Min	8.1	11	10	14	20	19	22	14	8.0	7.6	4.6	13
Cfsm	0.50	0.41	0.60	0.60	1.03	1.75	1.36	0.73	0.37	0.51	1.01	1.12
In.	0.58	0.46	0.70	0.70	1.11	2.02	1.52	0.85	0.42	0.58	1.16	1.25

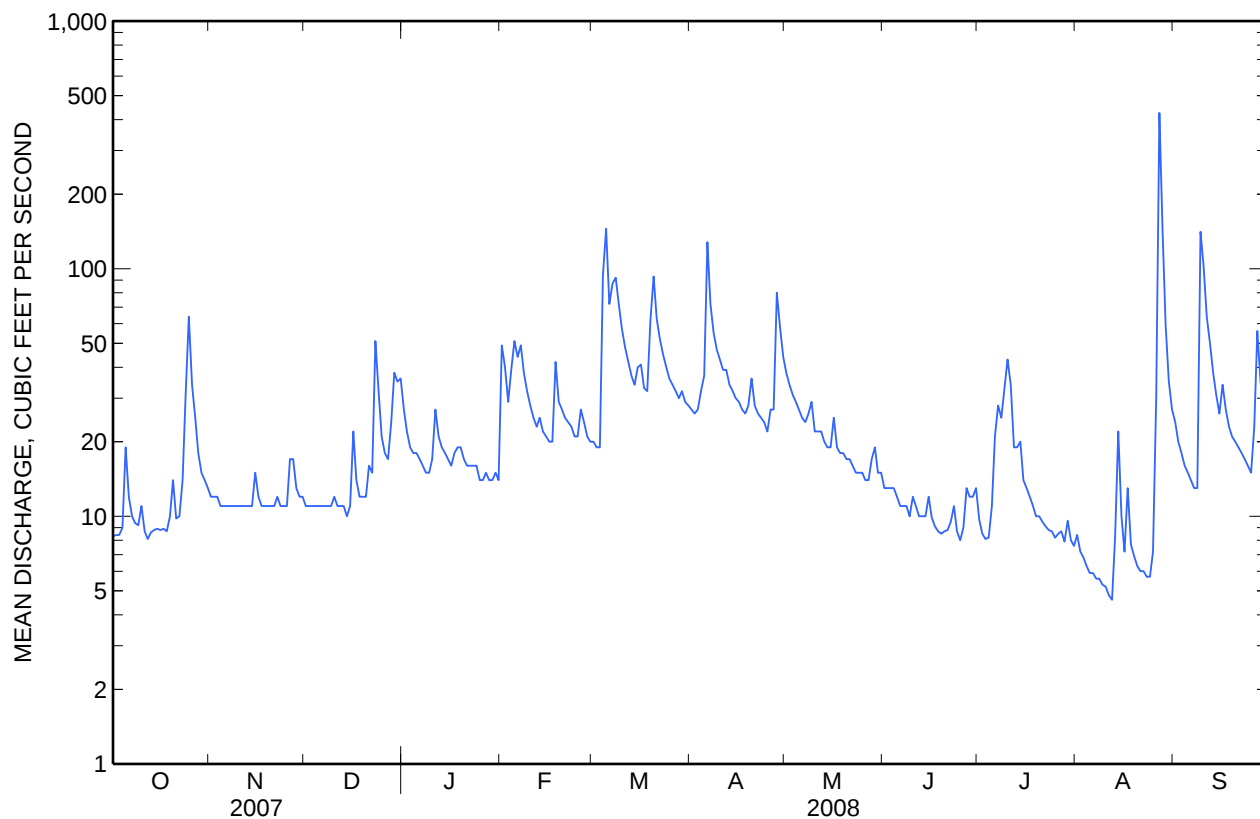
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	35.4	41.0	45.5	50.9	59.5	71.0	67.6	52.3	48.0	39.9	43.3	36.9
Max	149	140	98.8	132	143	160	164	125	132	122	194	168
(WY)	(1991)	(1978)	(1974)	(1946)	(1960)	(1993)	(1980)	(1973)	(2003)	(2003)	(1940)	(2004)
Min	8.45	9.07	11.8	11.4	17.4	23.7	26.5	16.5	10.7	9.04	6.69	6.95
(WY)	(1955)	(1982)	(1956)	(1956)	(2001)	(1988)	(1981)	(2001)	(2008)	(1988)	(2002)	(1954)

02111000 YADKIN RIVER AT PATTERSON, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1940 - 2008	
Annual total	10,446.4		8,769.5			
Annual mean	28.6		24.0		49.2	
Highest annual mean					78.6	2003
Lowest annual mean					21.0	2001
Highest daily mean	336	Jan 1	426	Aug 27	2,130	Aug 13, 1940
Lowest daily mean	7.6	Aug 23	4.6	Aug 12	3.6	Sep 12, 2002
Annual seven-day minimum	8.0	Aug 17	5.3	Aug 6	4.1	Sep 7, 2002
Maximum peak flow			1,340	Aug 27	^a 16,200	Aug 13, 1940
Maximum peak stage			5.23	Aug 27	12.70	Aug 13, 1940
Instantaneous low flow			4.3	Aug 11	3.0	May 15, 1940
Annual runoff (cfsm)	0.994		0.832		1.71	
Annual runoff (inches)	13.49		11.33		23.22	
10 percent exceeds	48		42		87	
50 percent exceeds	19		17		37	
90 percent exceeds	9.3		8.6		16	

^aSee Remarks.

02111000 YADKIN RIVER AT PATTERSON, NC—Continued**CLIMATOLOGICAL RECORDS**

PERIOD OF RECORD.--October 1999 to current year.

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

REMARKS.--Gage is operated in cooperation with 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 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	1.32	0.00	0.01	0.00	0.00	0.00	0.01	0.01
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.01	0.00	0.21	0.00	0.54	0.00	0.00	0.00	0.00	0.00
4	0.41	0.00	0.00	0.00	0.75	1.29	0.25	0.00	0.00	0.03	0.00	0.00
5	0.23	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.21	0.00	0.00
6	0.00	0.00	0.00	0.00	0.42	0.00	0.15	0.00	0.00	0.87	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.32	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.96	0.01	0.06	0.00	0.67
9	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.26	0.93	0.00	2.49
10	0.01	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.05	1.05	0.00	1.74
11	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.15	0.01	0.01	0.00	0.31
12	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.05
13	0.00	0.02	0.00	0.00	0.14	0.00	0.00	0.00	0.00	1.47	0.77	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.81	0.00
15	0.00	0.34	0.67	0.00	0.00	0.74	0.00	0.04	0.00	0.00	0.11	0.00
16	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.45	0.03	0.00	0.00	1.21
17	0.02	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.01	0.00	0.81	0.00
18	0.00	0.00	0.00	0.47	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.01
19	0.10	0.00	0.00	0.00	0.00	1.02	0.34	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.05	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00
21	0.00	0.00	0.35	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
22	0.25	0.09	0.16	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.12	0.00	1.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
24	1.20	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.00	0.00
25	0.76	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00
26	0.29	0.58	0.06	0.00	0.60	0.00	0.86	0.00	1.27	0.03	2.30	1.13
27	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	4.93	0.46
28	0.00	0.00	1.01	0.00	0.00	0.00	0.38	0.51	0.00	0.19	0.23	0.00
29	0.00	0.00	0.02	0.02	0.00	0.29	0.00	0.00	0.95	0.00	0.00	0.00
30	0.00	0.00	0.79	0.05	---	0.04	0.00	0.00	0.00	0.00	0.00	0.01
31	0.00	---	0.00	0.10	---	0.01	---	0.39	---	0.24	0.22	---
Total	3.41	1.11	4.19	1.18	4.03	4.46	3.53	2.62	2.94	5.11	10.65	8.09

02111000 YADKIN RIVER AT PATTERSON, NC—Continued

