



Water-Data Report 2010

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC

Upper Pee Dee Basin
Upper Yadkin Subbasin

LOCATION.--Lat 35°51'24", long 80°23'13" referenced to North American Datum of 1983, Davie County, NC, Hydrologic Unit 03040101, on right bank downstream of bridge on U.S. Highway 64, 1.5 mi south of Yadkin College, 6.2 mi downstream of Reedy Creek, and 295 mi upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--2,280 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1928 to current year.

REVISED RECORDS.--WSP 822: Drainage area. WSP 852: 1935-37, minimum discharges.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 638.45 ft above NGVD of 1929. Prior to July 26, 1957, at site on left bank 100 ft downstream at same datum. July 27, 1957, to Sept. 19, 1984, at site 20 ft downstream on bridge pier near left bank, at same datum. U.S. Army Corps of Engineers satellite telemetry at streamgage.

REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuation and occasional regulation during low flow caused by small hydroelectric plant 10 mi upstream with little storage capacity. Since August 1962, some regulation by W. Kerr Scott Reservoir (station 02111391). Prior to regulation, maximum discharge: 80,200 ft³/s, August 15, 1940; gage height: 33.75 ft; minimum observed discharge: 177 ft³/s, October 12, 1954; gage height: -0.42 ft. Minimum discharge for period of record, and current water year, result of regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916, reached a stage of 36.3 ft, from floodmarks; discharge, 94,300 ft³/s.

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,220	6,190	1,890	4,200	4,780	3,340	4,910	2,510	2,350	1,480	1,570	1,250
2	1,940	5,650	2,070	3,060	4,220	3,310	4,480	2,380	2,170	1,470	1,990	1,210
3	1,340	3,120	9,210	2,850	7,790	3,710	3,790	2,420	4,410	1,430	1,680	1,170
4	1,190	2,440	6,180	2,650	7,780	3,390	3,660	2,790	2,880	1,310	1,580	1,120
5	1,170	2,150	4,710	2,570	8,940	3,270	3,560	2,820	2,300	1,280	1,540	1,090
6	1,210	1,820	4,900	2,840	25,200	3,630	3,470	2,700	2,270	1,190	1,700	1,060
7	1,270	1,690	4,020	2,750	19,100	3,620	3,380	2,560	2,010	1,120	1,860	1,060
8	1,660	1,650	2,740	2,630	8,900	3,590	3,330	2,040	2,010	1,080	1,460	1,090
9	1,460	1,620	9,290	2,450	7,390	3,360	6,930	2,020	1,960	1,090	1,550	1,110
10	1,420	1,630	13,400	2,320	6,670	2,790	4,900	2,230	2,000	1,190	1,570	1,130
11	1,440	8,760	5,410	2,310	4,830	3,110	4,040	2,060	1,880	1,370	1,610	1,100
12	1,190	20,600	5,110	2,330	4,020	3,430	3,680	2,110	1,740	1,230	2,930	1,110
13	1,160	13,100	4,990	2,270	3,940	6,730	3,230	2,160	2,340	1,600	2,160	1,190
14	1,160	5,270	6,430	2,190	4,440	8,320	3,110	2,090	3,230	3,410	1,450	1,110
15	1,250	4,870	4,380	2,190	4,210	5,030	3,030	2,290	3,480	2,930	1,680	1,020
16	1,390	4,170	4,020	2,180	4,030	4,200	3,180	2,750	2,410	2,060	3,020	978
17	1,280	3,530	3,550	5,330	3,780	4,480	3,060	5,220	2,180	2,040	2,110	947
18	1,240	2,430	3,090	9,670	3,690	3,030	2,870	7,270	2,070	3,100	3,330	915
19	1,220	2,310	3,350	4,860	3,690	3,170	2,790	4,390	1,870	2,280	3,460	902
20	1,170	2,590	3,390	4,120	3,500	3,960	2,770	3,580	1,900	2,010	3,750	881
21	1,160	2,330	3,090	5,090	3,480	3,880	2,860	3,060	1,780	1,860	2,730	887
22	1,170	2,370	3,000	4,910	3,620	4,340	3,140	2,350	1,680	1,650	2,230	858
23	1,170	2,880	2,700	4,310	3,840	7,230	2,850	3,270	1,760	1,600	2,250	853
24	1,240	2,900	2,610	4,200	3,870	5,130	2,830	2,840	1,730	1,580	2,090	858
25	1,350	2,560	5,770	24,700	3,910	4,510	3,070	2,690	1,710	1,400	2,620	878
26	1,490	2,280	23,800	42,900	3,790	4,550	3,130	2,610	1,560	1,290	1,800	943
27	1,300	2,480	11,500	17,600	3,920	5,190	2,810	2,290	1,520	1,740	1,560	2,390
28	2,430	2,370	6,570	9,440	3,440	4,880	2,780	2,190	1,450	2,090	1,520	4,050
29	2,540	1,900	6,590	8,530	---	13,900	2,740	3,450	1,590	2,140	1,440	3,160
30	2,000	1,880	5,970	6,620	---	8,360	2,550	2,740	1,540	1,720	1,530	3,320
31	1,960	---	5,540	5,620	---	5,600	---	2,270	---	1,460	1,390	---
Total	45,190	119,540	179,270	199,690	170,770	147,040	102,930	88,150	63,780	53,200	63,160	39,640
Mean	1,458	3,985	5,783	6,442	6,099	4,743	3,431	2,844	2,126	1,716	2,037	1,321
Max	2,540	20,600	23,800	42,900	25,200	13,900	6,930	7,270	4,410	3,410	3,750	4,050
Min	1,160	1,620	1,890	2,180	3,440	2,790	2,550	2,020	1,450	1,080	1,390	853

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2010 ^a, BY WATER YEAR (WY)

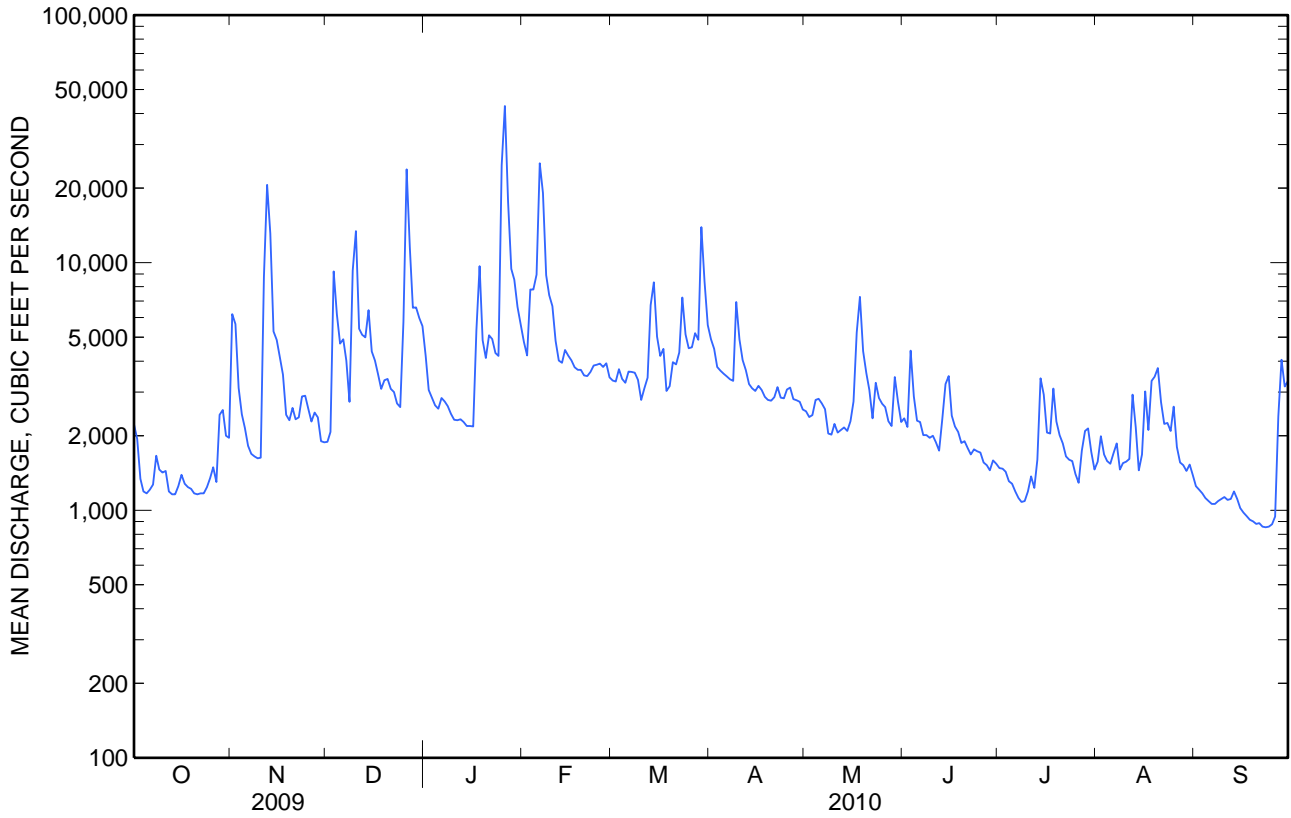
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,338	2,458	2,896	3,513	3,605	4,365	3,895	3,201	2,851	2,260	2,192	2,093
Max	7,491	5,844	5,784	7,580	7,632	10,380	9,419	6,276	7,755	5,158	7,191	7,314
(WY)	(1991)	(1993)	(1974)	(1978)	(1990)	(1975)	(1987)	(1984)	(1972)	(2003)	(1970)	(1979)
Min	747	792	1,160	1,354	1,444	1,798	1,519	1,053	581	703	445	867
(WY)	(2002)	(2002)	(2001)	(1981)	(2001)	(1981)	(2002)	(2002)	(2002)	(2008)	(2002)	(2001)

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1963 - 2010 ^a	
Annual total	1,033,937		1,272,360			
Annual mean	2,833		3,486		2,969	
Highest annual mean					4,524	1973
Lowest annual mean					1,116	2002
Highest daily mean	23,800	Dec 26	42,900	Jan 26	66,000	Jun 22, 1972
Lowest daily mean	938	Sep 9	853	Sep 23	236	Aug 12, 2002
Annual seven-day minimum	1,010	Sep 3	874	Sep 19	261	Aug 9, 2002
Maximum peak flow			46,600	Jan 26	^a 75,200	Jun 22, 1972
Maximum peak stage			25.84	Jan 26	^a 32.81	Jun 22, 1972
Instantaneous low flow			^a 620	Jul 9	^a 110	Aug 28, 1988
10 percent exceeds	5,550		5,850		5,100	
50 percent exceeds	1,930		2,610		2,230	
90 percent exceeds	1,250		1,190		1,150	

^a Regulated period only (1963-2010). See Remarks.



02116500 YADKIN RIVER AT YADKIN COLLEGE, NC—Continued

CLIMATOLOGICAL RECORDS

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

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

REMARKS.--Frozen precipitation collected in December, January, February and March is not reflected in daily or monthly totals.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	1.35	0.00	0.00	---	0.00	0.00	0.00	0.11	0.00	0.18	0.00
2	0.00	0.00	1.19	0.00	---	---	0.00	0.00	0.34	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	---	---	0.00	0.24	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.18	0.00	0.21	0.00	---	0.00	0.00	0.00	0.01	0.00	1.05	0.00
6	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
7	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.51	0.02	0.00	0.00	1.29	0.00	0.00	0.00	0.00	0.03
9	0.00	0.00	0.71	0.00	0.18	0.00	0.00	0.00	0.00	0.08	0.00	0.00
10	0.17	0.79	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01
11	0.00	2.29	0.00	0.00	0.00	0.21	0.00	0.04	0.00	0.00	0.04	0.09
12	0.32	0.56	0.00	0.00	0.12	0.78	0.00	0.00	0.19	0.48	0.04	0.01
13	0.00	0.01	0.40	0.00	0.00	0.37	0.00	0.00	0.45	2.54	0.00	0.00
14	0.42	0.00	0.02	0.00	0.00	0.05	0.00	0.00	1.11	0.01	0.00	0.00
15	0.04	0.00	0.02	0.00	0.11	0.00	0.00	0.02	0.02	0.00	0.60	0.00
16	0.00	0.00	0.00	0.01	0.00	0.00	0.00	2.31	0.15	0.33	0.00	0.00
17	0.03	0.00	0.00	1.47	0.00	0.00	0.00	0.70	0.00	0.52	0.00	0.00
18	0.00	0.24	---	0.00	0.00	0.00	0.00	0.46	0.00	0.04	0.10	0.00
19	0.00	0.01	---	0.00	0.00	0.00	0.00	0.31	0.00	0.00	1.42	0.00
20	0.00	0.00	---	0.00	0.00	0.00	0.16	0.00	0.00	0.33	0.00	0.00
21	0.00	0.00	---	0.40	0.00	0.13	0.05	0.00	0.00	0.00	0.00	0.00
22	0.00	0.14	0.00	0.01	0.43	0.12	0.00	0.61	0.00	0.00	0.00	0.00
23	0.00	0.61	0.00	0.00	0.06	0.01	0.00	0.00	0.22	0.00	0.00	0.00
24	0.51	0.00	0.00	2.14	0.23	0.00	0.14	0.02	0.00	0.00	0.05	0.00
25	0.00	0.00	1.62	0.59	0.01	---	0.34	0.00	0.00	0.47	0.00	0.69
26	0.00	0.03	0.01	0.00	0.00	---	0.00	0.00	0.00	0.26	0.00	1.26
27	1.29	0.00	0.00	0.00	0.00	---	0.01	0.00	0.00	1.52	0.00	0.92
28	0.11	0.00	0.00	0.00	0.00	---	0.00	0.20	0.00	0.00	0.00	0.01
29	0.00	0.00	0.00	---	---	---	0.00	0.01	0.00	0.00	0.00	0.34
30	0.00	0.06	0.05	---	---	---	0.00	0.00	0.00	0.00	0.00	0.94
31	0.90	---	0.15	---	---	0.00	---	0.81	---	0.00	0.00	---
Total	3.98	6.09	---	---	---	---	1.99	5.73	2.60	6.58	3.49	4.30

02116500 YADKIN RIVER AT YADKIN COLLEGE, NC—Continued

