

Water-Data Report 2008

02112360 MITCHELL RIVER NEAR STATE ROAD, NC

Upper Pee Dee Basin
Upper Yadkin Subbasin

LOCATION.--Lat 36°18'41", long 80°48'26" referenced to North American Datum of 1983, Surry County, NC, Hydrologic Unit 03040101, on right bank 280 ft upstream from bridge on Secondary Road 1001, 1.8 mi upstream from Grass Creek, and 3.3 mi east of State Road.

DRAINAGE AREA.--78.8 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1964 to current year. Occasional low-flow measurements, water years 1952-58, 1963.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 927.12 ft above NGVD of 1929. Prior to August 29, 1964, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Minimum discharge for current water year affected by regulation of unknown origin. Minimum discharge for current water year also occurred August 23-25, September 7.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1900, about 18 ft in August 1940, from information by local resident; estimated discharge, 9,000 ft³/s. A discharge of 16 ft³/s was measured on September 19, 1956.

02112360 MITCHELL RIVER NEAR STATE ROAD, 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	27	64	44	106	96	52	61	108	53	37	44	42
2	27	59	44	88	94	50	58	98	50	31	31	39
3	27	57	44	78	72	50	58	91	49	30	27	34
4	27	54	44	79	76	56	82	88	50	31	25	31
5	29	53	43	86	81	85	84	87	47	34	23	29
6	28	52	43	66	79	63	479	86	44	53	22	28
7	28	49	42	64	102	88	193	83	42	52	23	22
8	26	49	43	62	83	114	140	87	43	47	25	26
9	25	49	43	61	75	92	120	118	40	43	21	39
10	27	48	43	63	68	79	108	88	41	47	19	40
11	24	47	43	71	63	73	100	90	39	44	18	49
12	23	47	42	64	62	69	98	100	38	37	17	41
13	24	48	42	60	72	64	91	86	42	76	17	38
14	24	50	42	58	66	63	86	83	52	106	18	33
15	24	52	43	56	61	65	84	84	66	50	18	30
16	24	48	76	55	60	72	80	92	44	41	22	54
17	24	46	57	61	58	61	79	84	38	37	19	49
18	25	46	49	64	65	59	77	80	34	34	16	37
19	26	45	47	63	60	67	77	82	34	33	16	33
20	31	45	46	59	57	133	115	77	33	32	15	32
21	27	45	55	58	55	86	115	75	33	29	14	30
22	26	45	53	69	55	77	95	72	33	27	14	29
23	28	43	91	55	55	71	89	69	38	32	14	28
24	53	43	102	55	53	68	84	71	34	43	14	27
25	453	44	71	52	53	64	81	69	30	30	14	26
26	954	51	68	52	58	62	78	66	29	28	18	74
27	300	60	66	52	60	61	91	65	30	27	494	631
28	124	49	78	50	53	59	199	68	40	25	153	171
29	91	47	146	50	51	60	162	74	33	26	84	96
30	77	45	134	52	---	60	122	62	52	27	58	75
31	69	---	158	49	---	60	---	58	---	55	47	---
Total	2,722	1,480	1,942	1,958	1,943	2,183	3,386	2,541	1,231	1,244	1,360	1,913
Mean	87.8	49.3	62.6	63.2	67.0	70.4	113	82.0	41.0	40.1	43.9	63.8
Max	954	64	158	106	102	133	479	118	66	106	494	631
Min	23	43	42	49	51	50	58	58	29	25	14	22
Cfsm	1.11	0.63	0.79	0.80	0.85	0.89	1.43	1.04	0.52	0.51	0.56	0.81
In.	1.29	0.70	0.92	0.92	0.92	1.03	1.60	1.20	0.58	0.59	0.64	0.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	105	105	115	128	139	164	165	139	123	107	101	103
Max	248	211	230	232	258	373	426	264	280	260	247	313
(WY)	(1991)	(1980)	(1974)	(1998)	(1966)	(1993)	(1983)	(1973)	(2003)	(2003)	(1970)	(1979)
Min	32.7	32.0	47.0	48.3	54.2	70.4	69.1	52.0	31.0	35.9	24.6	37.9
(WY)	(2002)	(2002)	(1989)	(1981)	(2002)	(2008)	(1981)	(2002)	(2002)	(1986)	(2002)	(2007)

02112360 MITCHELL RIVER NEAR STATE ROAD, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1964 - 2008	
Annual total	31,849		23,903			
Annual mean	87.3		65.3		124	
Highest annual mean					182	2003
Lowest annual mean					51.5	2002
Highest daily mean	954	Oct 26	954	Oct 26	3,260	Aug 10, 1970
Lowest daily mean	23	Aug 19	14	Aug 21	14	Aug 21, 2008
Annual seven-day minimum	24	Oct 11	14	Aug 19	14	Aug 19, 2008
Maximum peak flow			1,430	Oct 26	7,470	Sep 22, 1979
Maximum peak stage			4.73	Oct 26	16.42	Sep 22, 1979
Instantaneous low flow			^a 13	Aug 21	12	Aug 15, 2002
Annual runoff (cfs)	1.11		0.829		1.58	
Annual runoff (inches)	15.04		11.28		21.44	
10 percent exceeds	134		94		199	
50 percent exceeds	70		53		100	
90 percent exceeds	29		26		52	

^aSee Remarks.