

Water-Data Report 2007

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

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.

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 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	52	73	132	876	98	111	97	102	73	78	52	51
2	49	79	112	312	98	891	96	99	68	66	47	40
3	48	71	101	222	95	231	92	99	151	62	43	33
4	47	67	96	186	92	162	91	102	123	60	42	32
5	92	67	92	205	91	138	88	103	82	59	40	29
6	184	66	89	192	92	125	87	102	75	62	41	28
7	78	100	88	198	93	117	87	96	71	56	46	26
8	84	296	84	555	90	112	86	95	68	54	53	25
9	74	157	83	259	89	107	85	95	66	52	41	24
10	66	117	82	203	87	102	85	94	62	90	38	24
11	63	103	81	178	84	99	93	93	61	103	36	24
12	64	127	80	165	85	96	121	99	71	66	34	24
13	58	102	82	156	95	95	93	93	63	59	34	23
14	56	96	80	147	200	93	90	88	69	59	31	176
15	56	92	79	140	112	92	153	87	79	55	30	90
16	56	894	77	134	101	371	212	86	79	54	30	44
17	90	270	76	125	97	233	146	87	70	60	32	38
18	95	172	74	123	95	158	132	84	64	64	31	35
19	73	140	73	122	90	135	129	82	63	55	23	34
20	85	122	74	117	90	126	133	80	83	50	26	33
21	75	110	73	119	95	122	122	78	61	48	28	33
22	70	134	317	132	91	115	118	77	57	45	31	35
23	67	152	339	120	85	111	114	77	55	43	30	33
24	63	118	167	112	84	107	112	77	55	54	31	31
25	62	108	287	109	103	104	111	74	75	76	30	31
26	62	102	270	105	105	101	109	74	69	62	31	30
27	72	97	180	105	94	102	127	75	63	58	31	30
28	158	94	151	104	90	99	112	70	87	57	31	28
29	94	91	137	100	---	107	107	69	148	57	30	26
30	81	91	127	100	---	100	104	67	100	55	29	26
31	76	---	138	98	---	97	---	66	---	52	34	---
Total	2,350	4,308	3,921	5,819	2,721	4,759	3,332	2,670	2,311	1,871	1,086	1,136
Mean	75.8	144	126	188	97.2	154	111	86.1	77.0	60.4	35.0	37.9
Max	184	894	339	876	200	891	212	103	151	103	53	176
Min	47	66	73	98	84	92	85	66	55	43	23	23
Cfsm	0.96	1.82	1.61	2.38	1.23	1.95	1.41	1.09	0.98	0.77	0.44	0.48
In.	1.11	2.03	1.85	2.75	1.28	2.25	1.57	1.26	1.09	0.88	0.51	0.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	106	106	116	130	140	166	166	140	125	108	103	104
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	72.8	69.1	52.0	31.0	35.9	24.6	37.9
(WY)	(2002)	(2002)	(1989)	(1981)	(2002)	(1981)	(1981)	(2002)	(2002)	(1986)	(2002)	(2007)

02112360 MITCHELL RIVER NEAR STATE ROAD, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1964 - 2007	
Annual total	32,689		36,284			
Annual mean	89.6		99.4		126	
Highest annual mean					182	2003
Lowest annual mean					51.5	2002
Highest daily mean	894	Nov 16	894	Nov 16	3,260	Aug 10, 1970
Lowest daily mean	34	Aug 28	23	Aug 19	15	Sep 12, 2002
Annual seven-day minimum	39	Aug 23	24	Sep 7	17	Sep 7, 2002
Maximum peak flow			2,170	Mar 2	7,470	Sep 22, 1979
Maximum peak stage			5.78	Mar 2	16.42	Sep 22, 1979
Instantaneous low flow			^a 14	Aug 19	12	Aug 15, 2002
Annual runoff (cfsm)	1.14		1.26		1.60	
Annual runoff (inches)	15.43		17.13		21.68	
10 percent exceeds	131		152		200	
50 percent exceeds	77		87		101	
90 percent exceeds	47		33		54	

^a See Remarks.

