



Water-Data Report 2011

0210166029 ROCKY RIVER AT SECONDARY ROAD 1300 NEAR CRUTCHFIELD CROSSROADS, NC

Cape Fear Basin
Deep Subbasin

LOCATION.--Lat 35°48'25", long 79°31'39" referenced to North American Datum of 1983, Chatham County, NC, Hydrologic Unit 03030003, on right bank, downstream of culvert on Secondary Road 1300, and 5.5 mi west of Crutchfield Crossroads.

DRAINAGE AREA.--7.42 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1988 to current year.

REVISED RECORDS.--WDR NC-98-1: 1996(annual maximum discharge), 1997(annual maximum discharge).

GAGE.--Water-stage recorder. Datum of gage is 611.09 ft above North American Vertical Datum of 1988. Satellite telemetry at streamgage.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No flow occurs at times most years.

0210166029 ROCKY RIVER AT SECONDARY ROAD 1300 NEAR CRUTCHFIELD CROSSROADS, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	14	0.42	e4.1	1.4	0.66	17	8.3	0.98	0.67	0.35	0.05	0.02
2	5.6	0.53	3.0	4.1	1.8	4.3	4.9	0.88	0.64	0.22	0.06	0.01
3	3.1	0.46	1.2	5.0	1.2	2.6	3.5	0.80	0.59	0.18	0.05	0.02
4	1.2	0.86	1.1	2.5	1.6	1.9	2.8	21	0.52	0.15	0.05	0.02
5	0.66	2.1	0.90	1.9	36	1.6	6.8	7.2	0.51	0.53	0.04	0.00
6	0.43	1.0	0.91	2.0	13	24	4.3	3.4	0.47	0.93	0.07	0.07
7	0.36	0.75	0.78	1.8	5.3	21	2.8	2.7	0.46	2.4	0.08	0.12
8	0.29	0.69	0.75	1.5	3.6	7.0	2.3	2.1	0.46	0.79	0.07	0.08
9	0.26	0.74	0.76	1.1	2.4	4.3	9.2	1.9	e0.44	36	0.06	0.04
10	0.25	0.74	0.66	0.99	2.0	23	25	1.8	e0.42	3.1	0.05	0.03
11	0.22	0.67	0.66	1.3	1.6	18	7.7	1.6	e0.44	0.79	0.04	0.01
12	0.22	0.63	0.95	1.6	1.4	6.9	4.4	1.7	e0.61	0.44	0.03	0.00
13	0.21	0.57	2.1	1.3	1.2	4.5	3.0	2.0	e0.57	0.31	0.05	0.00
14	0.25	0.68	0.99	0.94	1.2	3.4	2.1	3.2	e0.39	0.23	0.10	0.00
15	0.49	0.67	0.71	0.89	1.1	2.7	1.7	3.3	e0.25	0.17	0.13	0.00
16	0.36	0.75	1.1	1.0	1.1	7.4	2.8	3.5	0.23	0.13	0.08	0.00
17	0.33	2.0	4.7	0.92	1.0	4.3	4.6	2.9	0.22	0.11	0.06	0.00
18	0.35	1.4	2.4	0.96	0.96	3.1	2.3	3.4	0.22	0.10	0.04	0.00
19	0.34	0.92	1.8	0.96	0.91	2.6	1.6	2.1	0.20	0.10	0.04	0.00
20	0.36	0.92	1.4	0.84	0.84	2.1	1.3	1.7	0.21	0.10	0.03	0.00
21	0.43	0.89	1.1	0.70	0.88	1.9	1.1	1.5	0.20	0.10	0.03	0.02
22	0.44	e0.82	1.1	0.68	0.89	1.9	2.4	1.4	2.6	0.09	0.02	0.17
23	0.40	e0.78	0.95	0.61	0.94	1.7	5.0	1.3	0.80	0.08	0.01	2.2
24	0.39	e0.72	0.92	0.52	1.0	3.4	3.0	1.2	0.41	0.06	0.00	13
25	0.40	e0.72	1.1	0.55	1.2	2.2	1.9	1.1	0.25	0.09	0.00	6.4
26	2.9	e0.82	1.4	1.1	1.2	1.7	1.5	2.5	0.20	0.53	0.00	1.4
27	1.1	e0.82	1.8	2.4	1.1	6.5	3.8	2.2	0.19	0.13	0.00	0.52
28	0.94	e0.81	1.4	1.3	2.9	4.0	2.6	1.7	0.18	0.09	0.00	11
29	0.74	e0.68	1.4	0.94	---	2.8	1.9	1.3	2.0	0.08	0.00	1.8
30	0.59	e0.71	1.4	1.0	---	35	1.2	0.97	0.88	0.06	0.05	0.53
31	0.50	---	1.3	0.67	---	18	---	0.81	---	0.05	0.06	---
Total	38.11	25.27	44.84	43.47	88.98	240.8	125.8	84.14	16.23	48.49	1.35	37.46
Mean	1.23	0.84	1.45	1.40	3.18	7.77	4.19	2.71	0.54	1.56	0.04	1.25
Max	14	2.1	4.7	5.0	36	35	25	21	2.6	36	0.13	13
Min	0.21	0.42	0.66	0.52	0.66	1.6	1.1	0.80	0.18	0.05	0.00	0.00
Cfsm	0.17	0.11	0.19	0.19	0.43	1.05	0.57	0.37	0.07	0.21	0.01	0.17
In.	0.19	0.13	0.22	0.22	0.45	1.21	0.63	0.42	0.08	0.24	0.01	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	4.85	6.18	6.83	10.7	11.4	15.3	9.35	4.54	3.26	2.92	2.81	4.56
Max	18.7	26.0	25.3	37.3	32.9	42.4	36.9	19.2	20.5	14.8	28.7	23.7
(WY) (2003)	(2007)	(2003)	(1998)	(1998)	(2003)	(2003)	(2003)	(1990)	(1995)	(1989)	(2003)	(1996)
Min	0.28	0.17	0.46	1.40	2.24	2.58	1.80	0.54	0.37	0.10	0.04	0.25
(WY)	(1999)	(2002)	(2002)	(2011)	(2009)	(2006)	(2002)	(2002)	(2002)	(2002)	(2011)	(2001)

0210166029 ROCKY RIVER AT SECONDARY ROAD 1300 NEAR CRUTCHFIELD CROSSROADS, NC—Continued**SUMMARY STATISTICS**

	Calendar Year 2010	Water Year 2011	Water Years 1988 - 2011	
Annual total	1,977.01	794.94		
Annual mean	5.42	2.18	6.91	
Highest annual mean			20.5	2003
Lowest annual mean			2.06	2002
Highest daily mean	201 Feb 5	36 Feb 5	531 Sep 6	1996
Lowest daily mean	0.19 Aug 24	0.00 Aug 24	0.00 Aug 20	1988
Annual seven-day minimum	0.20 Aug 24	0.00 Sep 12	0.00 Jul 17	2002
Maximum peak flow		144 Jul 9	1,670 Sep 6	1996
Maximum peak stage		4.21 Jul 9	11.91 Sep 6	1996
Instantaneous low flow		^a 0.00 Aug 23	^a 0.00 Aug 19	1988
Annual runoff (cfsm)	0.730	0.294	0.931	
Annual runoff (inches)	9.91	3.99	12.65	
10 percent exceeds	8.7	4.3	13	
50 percent exceeds	1.0	0.92	2.0	
90 percent exceeds	0.25	0.05	0.29	

^a See Remarks.

