

## 02152100 FIRST BROAD RIVER NEAR CASAR, NC

LOCATION.--Lat 35°29'35", long 81°40'55", Cleveland County, Hydrologic Unit 03050105, on right bank 570 ft upstream from bridge on Secondary Road 1530, 0.5 mi upstream from No Business Creek, and 4.0 mi southwest of Casar.

DRAINAGE AREA.--60.5 mi<sup>2</sup>.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-5. March 1959 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 899.87 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Minimum discharge for current water year also occurred Oct. 7, 8, 9, 10, 11.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 and August 1940 reached a stage of about 25 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	27	30	70	50	100	99	137	105	128	278	96
2	20	25	28	65	47	94	93	273	99	546	158	93
3	19	24	27	69	46	82	87	370	147	245	279	106
4	18	24	29	66	52	74	83	195	467	158	318	115
5	17	28	80	64	52	72	87	201	215	131	200	98
6	16	47	76	62	46	163	81	714	151	120	156	92
7	16	38	62	58	52	146	266	562	1,180	115	716	91
8	16	34	55	56	52	109	221	366	1,090	110	372	89
9	16	32	49	55	49	93	268	241	441	113	269	87
10	16	33	46	53	49	81	1,330	188	269	140	385	83
11	25	319	237	50	47	74	987	164	208	109	316	84
12	22	194	136	48	45	70	387	151	180	110	240	82
13	20	121	234	47	44	68	243	135	164	2,550	186	81
14	19	71	275	47	46	67	183	126	150	414	158	79
15	37	53	124	46	63	65	154	123	144	250	181	80
16	249	126	83	45	60	125	139	128	216	198	154	78
17	73	255	65	47	62	107	129	182	699	179	153	75
18	40	117	55	e38	60	115	1,810	147	242	157	134	75
19	31	74	50	e37	69	122	495	133	263	166	130	75
20	27	59	186	e36	67	1,310	289	123	188	168	126	72
21	26	52	129	43	64	488	230	118	154	142	126	72
22	30	46	85	41	575	231	193	315	138	137	121	76
23	26	41	67	44	384	158	163	416	128	134	116	129
24	24	38	367	e34	164	127	146	272	120	125	109	81
25	23	36	337	e34	113	111	141	200	115	117	107	78
26	27	34	150	e34	96	102	179	164	111	113	103	77
27	25	33	104	e33	114	93	152	147	109	111	101	80
28	25	32	85	e33	113	88	132	130	116	109	98	90
29	31	32	74	44	---	85	122	126	108	114	98	74
30	35	32	67	57	---	126	117	117	109	131	96	74
31	31	---	64	54	---	111	---	115	---	188	96	---
TOTAL	1,021	2,077	3,456	1,510	2,681	4,857	9,006	6,779	7,826	7,528	6,080	2,562
MEAN	32.9	69.2	111	48.7	95.8	157	300	219	261	243	196	85.4
MAX	249	319	367	70	575	1,310	1,810	714	1,180	2,550	716	129
MIN	16	24	27	33	44	65	81	115	99	109	96	72
CFSM	0.54	1.14	1.84	0.81	1.58	2.59	4.96	3.61	4.31	4.01	3.24	1.41
IN.	0.63	1.28	2.13	0.93	1.65	2.99	5.54	4.17	4.81	4.63	3.74	1.58

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2003, BY WATER YEAR (WY)

MEAN	71.7	66.7	82.2	102	120	137	126	97.2	80.4	64.1	67.8	53.8
MAX	318	191	185	273	286	386	300	254	261	243	262	132
(WY)	(1965)	(1978)	(1962)	(1995)	(1960)	(1975)	(2003)	(1975)	(2003)	(2003)	(1970)	(1959)
MIN	17.4	17.2	22.7	30.9	37.8	44.6	36.1	18.3	14.9	11.4	8.09	21.0
(WY)	(2002)	(2002)	(2002)	(2001)	(2001)	(1988)	(2002)	(2001)	(2002)	(2002)	(2002)	(2002)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1959 - 2003	
ANNUAL TOTAL	14,565.1		55,383		89.0	
ANNUAL MEAN	39.9		152		152	
HIGHEST ANNUAL MEAN					26.8	2003
LOWEST ANNUAL MEAN					3.9	2002
HIGHEST DAILY MEAN	367	Dec 24	2,550	Jul 13	3,130	Mar 14, 1975
LOWEST DAILY MEAN	3.9	Aug 15	16	Oct 6	3.9	Aug 15, 2002
ANNUAL SEVEN-DAY MINIMUM	4.1	Aug 9	16	Oct 4	4.1	Aug 9, 2002
MAXIMUM PEAK FLOW			6,670	Jul 13	7,790	Jan 14, 1995
MAXIMUM PEAK STAGE			14.32	Jul 13	16.70	Oct 17, 1975
INSTANTANEOUS LOW FLOW			16*	Oct 6	3.6	Aug 15, 2002
ANNUAL RUNOFF (CFSM)	0.66		2.51		1.47	
ANNUAL RUNOFF (INCHES)	8.96		34.05		20.00	
10 PERCENT EXCEEDS	74		272		148	
50 PERCENT EXCEEDS	27		103		63	
90 PERCENT EXCEEDS	9.1		32		31	

e Estimated.  
 \* See REMARKS.

