

PEE DEE RIVER BASIN

02111180 ELK CREEK AT ELKVILLE, NC

LOCATION.--Lat 36°04'16", long 81°24'13", Wilkes County, Hydrologic Unit 03040101, on left bank 700 ft upstream from bridge on State Highway 268 in Elkville, and 3,400 ft upstream from mouth.

DRAINAGE AREA.--48.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year.

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

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,082.40 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS --Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record, from rating curve extended above 3,200 ft³/s on basis of contracted-opening computation. Minimum discharge for period of record and current water year also occurred Sept. 14.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 13, 1940, reached a stage of about 22 ft; discharge, about 70,000 ft³/s, on basis of several contracted-opening and slope-area measurements. A discharge of 6.0 ft³/s was measured Sept. 19, 1956.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	21	32	26	52	36	83	40	19	18	14	16
2	18	21	26	e25	49	46	77	37	19	17	14	15
3	17	21	25	e25	47	83	72	42	19	55	14	13
4	17	21	24	e24	45	56	64	41	18	54	13	14
5	16	20	24	e24	43	50	61	41	46	27	12	12
6	16	20	23	e24	43	49	58	36	34	20	12	11
7	16	19	23	e23	68	48	54	35	31	18	11	10
8	16	19	23	e24	75	47	53	38	24	17	11	9.3
9	16	19	22	25	60	46	63	32	22	15	10	8.7
10	16	19	30	26	61	45	109	32	20	15	9.9	8.2
11	17	19	127	28	60	42	86	31	19	14	10	7.7
12	18	18	64	27	56	45	78	29	18	14	10	7.3
13	21	18	e70	26	54	97	88	35	19	14	9.2	7.0
14	68	18	65	25	52	98	82	46	33	18	8.1	7.9
15	58	17	51	24	50	79	78	32	23	53	8.0	28
16	30	17	43	24	49	70	74	28	19	20	17	44
17	25	17	44	24	47	216	75	27	19	16	63	19
18	24	17	78	24	45	258	73	44	17	15	44	15
19	23	17	57	39	44	175	67	29	16	14	17	23
20	23	18	48	66	44	140	63	26	17	14	14	19
21	22	17	43	54	46	115	59	26	15	13	12	17
22	22	17	38	48	44	94	55	25	15	14	11	19
23	21	17	36	106	41	81	50	24	15	25	10	25
24	20	31	47	151	40	74	48	24	15	19	9.7	19
25	21	55	38	142	39	67	53	23	15	18	10	17
26	20	41	34	114	38	69	50	22	16	92	16	129
27	20	28	32	90	37	81	47	27	22	27	19	586
28	20	25	31	75	36	67	45	24	44	20	19	190
29	21	24	29	66	---	63	44	23	22	17	16	81
30	21	28	28	59	---	65	40	21	19	15	15	54
31	21	---	27	55	---	76	---	21	---	14	14	---
TOTAL	703	659	1282	1513	1365	2578	1949	961	650	722	472.9	1432.1
MEAN	22.68	21.97	41.35	48.81	48.75	83.16	64.97	31.00	21.67	23.29	15.25	47.74
MAX	68	55	127	151	75	258	109	46	46	92	63	586
MIN	16	17	22	23	36	36	40	21	15	13	8.0	7.0
CFSM	0.47	0.46	0.86	1.01	1.01	1.73	1.35	0.64	0.45	0.48	0.32	0.99
IN.	0.54	0.51	0.99	1.17	1.06	1.99	1.51	0.74	0.50	0.56	0.37	1.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

MEAN	73.37	86.45	84.92	103.2	118.4	147.1	139.2	108.3	96.50	67.55	77.19	62.13
MAX	298	365	193	323	250	317	379	291	226	185	384	257
(WY)	1991	1978	1974	1995	1966	1993	1980	1973	1992	1989	1994	1979
MIN	13.7	19.8	19.1	22.5	25.0	47.9	49.9	31.0	21.7	17.6	15.3	21.0
(WY)	2001	1982	2001	1981	2001	1988	2001	2002	1988	1988	2002	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1966 - 2002
ANNUAL TOTAL	14023	14287.0	
ANNUAL MEAN	38.42	39.14	96.87
HIGHEST ANNUAL MEAN			154
LOWEST ANNUAL MEAN			35.7
HIGHEST DAILY MEAN	401	Mar 30	5890
LOWEST DAILY MEAN	13	Jan 6	7.0
ANNUAL SEVEN-DAY MINIMUM	13	Jan 6	8.0
MAXIMUM PEAK FLOW		1850	18700*
MAXIMUM PEAK STAGE		3.92	12.02
INSTANTANEOUS LOW FLOW		6.8*	6.8*
ANNUAL RUNOFF (CFSM)	0.80	0.81	2.01
ANNUAL RUNOFF (INCHES)	10.85	11.05	27.36
10 PERCENT EXCEEDS	63	74	168
50 PERCENT EXCEEDS	28	25	67
90 PERCENT EXCEEDS	18	14	27

e Estimated.
* See REMARKS.

02111180 ELK CREEK AT ELKVILLE, NC--Continued

