

02077670 MAYO CREEK NEAR BETHEL HILL, NC

LOCATION.--Lat 36°32'27", long 78°52'20" Person County, Hydrologic Unit 03010104, on right bank 0.1 mi upstream from Virginia state line, 0.3 mi downstream of Mayo Steam Electric Generating Plant dam, 2.9 mi northeast of Bethel Hill, and 4.8 mi downstream of Spoonwater Creek.

DRAINAGE AREA.--53.5 mi².

PERIOD OF RECORD.--August 1977 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area. WDR NC-02-1A: 2001.

GAGE.--Water-stage recorder. Datum of gage is 338.84 ft above NGVD of 1929 (levels by Carolina Power & Light Company). Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records poor. Flow regulated by Mayo Steam Electric Generating Plant. Minimum discharge for period of record, no flow, occurred periodically in 1977, 1980, 1981, and 1982 as a result of regulation. Minimum discharge for current water year also occurred Oct. 19, 24.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 4, 1974, reached a stage of 11.11 ft, from floodmarks; discharge, 4,300 ft³/s.

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	3.6	3.4	29	84	44	234	229	93	216	51	32	23
2	3.4	3.3	26	83	44	317	188	84	175	108	30	21
3	3.8	3.3	21	81	43	315	156	82	146	253	65	19
4	3.7	3.5	19	76	45	265	132	80	133	238	142	43
5	3.3	3.8	34	71	42	225	115	75	122	202	117	59
6	3.5	6.7	36	67	40	222	100	72	105	166	98	55
7	3.2	4.4	37	62	61	213	275	69	147	138	96	48
8	3.5	4.9	36	58	70	184	398	64	258	114	80	42
9	3.8	5.5	36	54	70	156	689	60	462	98	92	36
10	3.4	6.5	35	49	69	131	839	60	404	89	188	30
11	22	11	54	44	69	114	945	69	322	79	165	26
12	3.5	41	73	39	65	101	717	64	266	70	139	21
13	3.2	75	118	36	61	91	544	55	241	66	118	20
14	3.2	74	194	31	58	86	419	48	199	64	105	20
15	3.1	69	174	29	58	79	331	47	163	60	89	18
16	4.8	68	149	26	64	76	266	56	154	57	76	15
17	3.5	114	126	25	68	76	213	52	180	55	66	12
18	3.2	141	109	23	68	73	172	61	170	50	58	35
19	3.2	130	96	21	73	70	149	135	155	42	56	144
20	3.2	114	92	19	76	507	129	136	132	36	51	133
21	3.3	102	85	17	76	783	113	132	111	32	44	115
22	3.4	91	77	16	92	599	98	229	95	42	38	101
23	3.3	79	70	16	129	462	85	412	84	83	32	221
24	3.2	70	82	15	124	360	76	407	75	75	27	226
25	3.2	64	158	14	110	288	71	384	69	68	24	188
26	3.2	58	165	14	100	233	73	776	63	62	20	156
27	3.3	54	143	12	120	187	134	654	57	57	17	131
28	4.2	47	125	12	200	154	132	511	52	49	14	110
29	5.7	42	110	12	---	139	116	397	48	40	12	90
30	6.1	35	97	20	---	193	101	320	43	38	11	76
31	3.7	---	86	38	---	255	---	264	---	34	18	---
TOTAL	130.7	1,524.3	2,692	1,164	2,139	7,188	8,005	5,948	4,847	2,616	2,120	2,234
MEAN	4.22	50.8	86.8	37.5	76.4	232	267	192	162	84.4	68.4	74.5
MAX	22	141	194	84	200	783	945	776	462	253	188	226
MIN	3.1	3.3	19	12	40	70	71	47	43	32	11	12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2003, BY WATER YEAR (WY)

MEAN	11.3	15.9	23.0	61.5	69.6	102	77.5	42.7	25.3	19.3	13.0	27.4
MAX	62.2	76.0	86.8	254	301	260	267	210	162	118	68.4	350
(WY)	(1990)	(1980)	(2003)	(1978)	(1998)	(1998)	(2003)	(1978)	(2003)	(1995)	(2003)	(1996)
MIN	0.011	0.011	0.016	0.003	0.28	0.14	0.20	0.12	0.075	0.24	0.038	0.000
(WY)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(1980)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1977 - 2003

ANNUAL TOTAL	5,327.5	40,608.0	
ANNUAL MEAN	14.6	111	40.6
HIGHEST ANNUAL MEAN			111
LOWEST ANNUAL MEAN			0.11
HIGHEST DAILY MEAN	194	Dec 14	945
LOWEST DAILY MEAN	2.8	May 20	3.1
ANNUAL SEVEN-DAY MINIMUM	2.9	May 20	3.3
MAXIMUM PEAK FLOW			1,020
MAXIMUM PEAK STAGE			8.05
INSTANTANEOUS LOW FLOW			2.9*
10 PERCENT EXCEEDS	50		239
50 PERCENT EXCEEDS	3.5		71
90 PERCENT EXCEEDS	3.1		5.6

* See REMARKS.

02077670 MAYO CREEK NEAR BETHEL HILL, NC—Continued

