

## ROANOKE RIVER BASIN

02077670 MAYO CREEK NEAR BETHEL HILL, NC

LOCATION--Lat 36°32'27", long 78°52'19" 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 mi<sup>2</sup>.

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.--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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 4, 1974, reached a stage of 11.11 ft, from floodmarks; discharge, 4,300  $\text{ft}^3/\text{s}$ .

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	e6.2	74	29	49	69	113	27	3.9	e4.9	e11	e5.3
2	13	e4.7	66	27	46	68	115	27	4.6	e3.8	e7.9	e5.2
3	11	e3.2	60	27	51	64	113	25	8.9	e3.2	e5.5	e6.3
4	10	e26	56	26	60	61	102	22	12	e2.9	e3.5	e6.5
5	7.9	e29	50	25	61	59	90	19	10	e2.7	e2.4	e5.4
6	6.0	e22	47	25	60	57	82	19	9.6	e2.5	e1.5	e4.8
7	4.9	e16	50	23	58	55	74	19	10	e2.9	e1.1	e4.4
8	4.2	e12	45	23	56	56	70	18	17	e6.5	e1.2	e4.3
9	3.6	e8.7	44	23	54	55	64	17	15	e6.8	e5.0	e4.2
10	3.4	e6.6	328	22	54	51	61	16	14	e5.5	e6.8	e4.3
11	e3.1	e5.5	393	21	49	48	57	15	12	e4.0	e6.0	e4.4
12	e2.2	17	313	21	45	47	52	13	9.6	e2.9	e4.8	e4.5
13	e31	78	246	24	42	43	50	12	8.3	e2.5	e3.7	e4.3
14	e33	86	195	172	43	42	47	12	7.6	e2.2	e5.4	e4.3
15	e26	80	156	221	43	39	41	10	6.1	e2.0	e7.6	e4.3
16	e19	74	130	191	42	41	36	8.3	4.3	e1.9	e5.2	e4.5
17	e14	68	110	161	39	67	34	6.8	e3.3	e1.7	e3.7	e4.4
18	e11	64	95	134	36	88	32	6.3	e2.6	e1.5	e6.4	e4.3
19	e8.3	60	84	119	32	90	30	5.6	e2.1	e1.3	e6.7	e3.9
20	e21	57	74	101	30	86	28	5.7	e1.7	e1.7	e5.3	e3.6
21	e23	54	67	91	31	79	26	4.0	e1.6	e1.2	e4.6	e3.0
22	e17	50	61	82	29	72	25	3.8	e1.7	e1.9	e4.3	e4.1
23	e11	52	60	75	28	72	30	3.5	e2.8	e2.4	e4.0	e3.7
24	e9.3	60	58	69	29	78	28	3.9	e3.1	e2.0	e3.6	e3.3
25	e7.8	73	54	64	30	75	26	4.6	e3.5	e1.8	e3.7	e3.0
26	e7.2	71	48	58	29	70	24	4.3	e3.3	e1.5	e3.8	e2.3
27	e6.7	67	43	54	28	66	21	3.8	e3.3	e1.5	e4.0	e1.9
28	e18	86	39	48	49	115	20	3.5	e3.7	e1.4	e4.1	e1.6
29	e11	86	35	44	---	147	21	3.3	e4.3	e2.3	e3.9	e1.2
30	e8.8	80	32	49	---	138	23	3.1	e5.3	e4.7	e4.3	e1.1
31	e7.8	---	31	51	---	126	---	3.1	---	e11	e4.8	---
TOTAL	375.2	1,402.9	3,144	2,100	1,203	2,224	1,535	344.6	195.2	95.1	145.8	118.4
MEAN	12.1	46.8	101	67.7	43.0	71.7	51.2	11.1	6.51	3.07	4.70	3.95
MAX	33	86	393	221	61	147	115	27	17	11	11	6.5
MIN	2.2	3.2	31	21	28	39	20	3.1	1.6	1.2	1.1	1.1

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2005, BY WATER YEAR (WY)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR	FOR 2005 WATER YEAR	WATER YEARS 1977 - 2005
ANNUAL TOTAL	14,430.7	12,883.2	40.3
ANNUAL MEAN	39.4	35.3	111
HIGHEST ANNUAL MEAN			2003
LOWEST ANNUAL MEAN			0.11
HIGHEST DAILY MEAN	600	Aug 31	2,260
LOWEST DAILY MEAN	2.2	Oct 12	Sep 7, 1996
ANNUAL SEVEN-DAY MINIMUM	2.7	Jul 19	0.00
MAXIMUM PEAK FLOW			Jul 31, 1977
MAXIMUM PEAK STAGE			0.00
INSTANTANEOUS LOW FLOW			Jul 31, 1977
10 PERCENT EXCEEDS	71	80	3,950
50 PERCENT EXCEEDS	25	19	Apr 26, 1978
90 PERCENT EXCEEDS	3.1	2.9	10.83
			Apr 26, 1978
			0.00*
			Jul 31, 1977
			102
			9.1
			1.7

\* See REMARKS.

e Estimated.

