

ROANOKE RIVER BASIN

02077303 HYCO RIVER BELOW AFTERBAY DAM NEAR MCGEHEES MILL, NC

LOCATION.--Lat 36°31'24", long 78°59'48", Person County, Hydrologic Unit 03010104, on left bank 200 ft downstream from Afterbay Reservoir dam of Carolina Power and Light Company, 1.2 mi upstream from Ghent Creek, and 1.8 mi east-northeast of McGehees Mill.

DRAINAGE AREA.--202 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 342.98 ft above NGVD of 1929 (levels by Carolina Power and Light Company). From August 1964 to September 1973, records published as "Hyco River at McGehees Mill, NC" at site 2.8 mi upstream, at datum 349.78 ft. Water-temperature recorder operated at site 600 ft downstream on right bank from June 1974 to Sept. 1995. Satellite telemetry at station.

REMARKS.-- Records good except those for estimated daily discharges, which are poor. Flow regulated by Roxboro Steam-Electric Generating Plant Afterbay Reservoir. Minimum discharge for current water year also occurred Sept. 4, 5, 10, 11, 16.

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	18	4.2	4.9	4.3	3.7	5.1	5.6	4.2	4.1	6.2	6.1	1.9
2	14	4.0	5.4	4.2	4.2	4.9	6.0	4.2	4.2	6.2	6.2	1.7
3	13	4.5	5.8	4.1	4.5	5.3	5.3	4.1	5.1	6.1	6.1	1.8
4	13	5.6	5.5	4.1	4.3	7.7	6.4	4.1	e6.7	6.1	6.5	1.6
5	13	5.9	5.2	4.1	4.3	7.7	6.7	5.4	e5.5	6.1	6.8	1.8
6	12	6.3	5.0	4.1	4.2	6.4	6.7	5.5	6.3	6.6	6.4	e1.8
7	13	6.0	4.7	4.1	4.2	6.1	7.3	4.2	6.8	6.6	6.9	e1.8
8	13	5.8	4.7	4.1	4.3	6.1	6.1	4.1	6.9	6.3	e6.9	e1.8
9	13	5.6	4.7	4.1	4.3	5.5	5.4	3.9	6.7	6.2	e6.3	e1.8
10	12	5.8	4.7	4.0	4.4	5.8	5.1	3.8	6.3	6.1	6.5	1.8
11	12	5.5	4.7	3.8	4.3	6.7	5.7	3.9	6.1	6.3	6.0	1.8
12	12	6.0	4.5	4.2	4.7	6.5	5.3	3.8	6.0	6.4	5.7	2.3
13	12	6.1	4.5	3.8	4.6	6.1	5.1	3.5	6.0	6.2	5.5	2.3
14	11	5.8	4.5	4.0	4.7	5.7	5.0	4.0	6.1	6.2	5.6	1.9
15	11	5.5	4.5	3.9	4.8	5.1	4.9	4.1	6.0	6.2	5.5	1.7
16	9.8	5.4	4.5	3.9	4.3	5.0	5.1	4.2	6.3	6.1	e5.7	1.7
17	4.7	5.3	4.5	3.8	4.3	6.4	5.0	3.8	6.2	e6.0	5.6	1.7
18	4.9	5.7	4.5	3.9	4.4	6.9	5.0	3.8	6.4	e6.0	5.3	1.8
19	4.8	5.7	4.5	4.2	4.5	6.4	4.8	4.2	6.4	e6.0	e3.4	1.7
20	4.3	5.3	4.5	4.1	3.9	6.2	4.7	4.6	6.3	e6.0	1.9	1.8
21	4.5	6.5	4.5	4.0	4.0	5.7	4.5	4.4	6.4	e6.0	1.9	1.9
22	4.2	6.2	4.4	4.0	4.3	6.9	4.7	4.7	6.5	e6.0	1.9	2.0
23	4.3	6.0	4.3	4.0	4.3	6.8	4.8	4.8	6.8	6.1	1.8	1.8
24	4.2	5.3	4.3	3.7	4.5	5.9	5.2	4.4	7.2	6.0	1.9	2.2
25	4.1	4.9	4.3	3.8	4.5	5.4	4.5	4.2	7.0	6.1	e1.9	2.1
26	4.6	5.0	4.3	4.0	4.0	5.6	4.4	4.2	7.3	6.1	2.0	2.0
27	4.7	5.2	4.3	4.0	4.9	5.9	4.3	4.2	7.0	6.0	2.0	1.8
28	4.4	5.1	4.3	3.8	5.2	6.5	4.2	4.2	6.2	6.0	2.3	1.8
29	4.4	5.0	4.3	3.9	---	5.9	4.2	4.2	6.2	6.0	2.2	2.2
30	4.3	4.9	4.3	3.7	---	5.0	4.4	4.1	6.2	6.0	2.0	2.2
31	4.3	---	4.3	3.7	---	5.4	---	4.1	---	6.0	2.2	---
TOTAL	268.5	164.1	143.4	123.4	122.6	186.6	156.4	130.9	187.2	190.2	137.0	56.5
MEAN	8.661	5.470	4.626	3.981	4.379	6.019	5.213	4.223	6.240	6.135	4.419	1.883
MAX	18	6.5	5.8	4.3	5.2	7.7	7.3	5.5	7.3	6.6	6.9	2.3
MIN	4.1	4.0	4.3	3.7	3.7	4.9	4.2	3.5	4.1	6.0	1.8	1.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2002, BY WATER YEAR (WY)

	54.33	54.87	106.3	351.4	314.0	403.2	236.5	112.7	75.17	92.67	63.96	120.1
MEAN	54.33	54.87	106.3	351.4	314.0	403.2	236.5	112.7	75.17	92.67	63.96	120.1
MAX	351	334	361	1201	926	1165	692	864	456	1058	294	675
(WY)	1996	1986	1983	1978	1979	1993	1983	1978	1982	1975	1982	1974
MIN	3.47	2.40	2.19	2.76	4.38	6.02	5.21	4.22	3.96	6.14	1.08	1.55
(WY)	1999	1998	1998	2001	2002	2002	2002	2002	1974	2002	1999	1977

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1974 - 2002

ANNUAL TOTAL	25570.9	1866.8										
ANNUAL MEAN	70.06	5.115								164.8		
HIGHEST ANNUAL MEAN										392		1975
LOWEST ANNUAL MEAN										5.11		2002
HIGHEST DAILY MEAN	2190	Mar 30					18	Oct 1	9280	Jul 14	1975	
LOWEST DAILY MEAN	2.5	Jan 1					1.6	Sep 4	0.27	Nov 2	1997	
ANNUAL SEVEN-DAY MINIMUM	2.5	Jan 1					1.8	Sep 2	0.45	Aug 3	1999	
MAXIMUM PEAK FLOW							27	Oct 4	11300	Jul 14	1975	
MAXIMUM PEAK STAGE							3.65	Oct 4	24.40	Jul 14	1975	
INSTANTANEOUS LOW FLOW							1.5*	Sep 3	0.00	Jun 26	1980	
10 PERCENT EXCEEDS	79						6.7		368			
50 PERCENT EXCEEDS	13						4.8		30			
90 PERCENT EXCEEDS	3.5						2.2		8.8			

e Estimated.

* See REMARKS.

02077303 HYCO RIVER BELOW AFTERBAY DAM NEAR MCGEHEES MILL, NC--Continued

