

ROANOKE RIVER BASIN

02077500 HYCO RIVER NEAR DENNISTON, VA

LOCATION.--Lat 36°35'16", long 78°53'56", Halifax County, Hydrologic Unit 03010104, on left bank 60 ft upstream from bridge on U.S. Highway 501, 0.8 mi upstream from Mayo Creek, 2.5 mi northeast of Denniston, and 7.3 mi south of South Boston.

DRAINAGE AREA.--289 mi².

PERIOD OF RECORD.--October 1928 to September 1934, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1383: Drainage area, 1930. WSP 1503: 1930(M). WSP 1723: 1930(m). WDR VA-75-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 315.24 ft above sea level. Jul. 10, 1929, to Mar. 14, 1934, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Small diurnal fluctuation at low flow in some years caused by mill upstream from station. Since September 1964, flow regulated by Hyco Lake 15.7 mi upstream, capacity 75,480 acre-ft, and since Apr. 26, 1974, by Roxboro Steam-Electric Generating Plant Afterbay Reservoir, capacity 12,000 acre-ft. Statistics of monthly mean data and summary statistics for water years 1929 - 1934, 1951 - 1964 (unregulated flow) are available in previous data books, water years 1991 - 1998. Maximum discharge, 10,800 ft³/s, from rating curve extended above 8,200 ft³/s. Minimum gage height, 3.58 ft, Sep. 14, 1932. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods in August 1928 and September 1945 reached stages of 26.4 ft and 25.6 ft, respectively, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,530 ft³/s, Sep 17, gage height, 18.31 ft; minimum discharge, 2.1 ft³/s, Aug 24, gage height, 3.93 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	7.4	9.0	26	132	107	256	1480	27	26	6.7	6.9
2	7.3	7.2	9.8	22	457	103	330	1080	27	31	6.9	6.2
3	7.4	7.5	10	852	424	101	241	472	26	30	5.7	5.8
4	9.1	14	9.7	405	374	111	848	125	26	26	5.3	7.4
5	9.6	11	10	110	352	107	712	112	26	24	4.9	184
6	9.6	8.6	9.9	79	337	104	150	107	25	23	5.1	564
7	8.9	8.4	11	63	310	101	131	104	24	24	4.0	305
8	11	9.2	9.4	54	135	99	124	100	25	23	4.5	107
9	24	8.3	30	49	123	105	121	96	24	23	4.2	143
10	16	7.4	48	40	117	107	121	93	24	23	4.0	95
11	9.5	8.9	22	32	113	105	158	93	23	23	4.9	86
12	8.5	11	16	31	111	103	184	92	22	25	4.6	81
13	8.2	12	110	28	116	101	138	91	23	32	3.8	78
14	8.6	9.1	163	32	110	111	126	191	23	48	3.6	345
15	8.7	8.8	57	84	107	420	124	137	24	48	6.1	852
16	8.9	8.7	48	117	106	241	152	109	30	26	5.6	3410
17	8.5	8.6	67	76	104	164	127	100	38	23	4.7	5270
18	8.3	8.5	34	79	123	141	117	96	33	22	4.0	4600
19	7.5	9.1	24	112	141	128	114	53	30	20	3.9	1600
20	7.2	8.8	20	81	121	121	112	41	27	19	3.6	187
21	7.7	9.9	17	68	112	395	110	38	29	18	4.0	318
22	7.6	10	16	99	108	1150	108	36	30	18	3.6	1340
23	7.5	9.9	15	143	105	742	106	33	29	14	3.1	602
24	7.9	9.4	55	1330	105	184	103	32	28	9.2	2.5	470
25	8.4	9.7	168	3480	104	160	101	31	27	5.9	3.3	217
26	7.8	11	73	4140	103	147	102	31	27	4.8	6.9	110
27	7.4	10	51	1920	101	138	104	31	27	4.2	67	111
28	8.0	9.8	49	213	102	132	109	30	26	4.9	23	240
29	8.0	9.4	50	160	---	128	121	29	26	6.0	9.5	437
30	7.7	9.2	43	142	---	125	756	28	26	6.3	6.9	457
31	8.0	---	32	131	---	123	---	27	---	5.3	6.2	---
TOTAL	280.2	280.8	1286.8	14198	4753	6104	6106	5118	802	635.6	232.1	22235.3
MEAN	9.04	9.36	41.5	458	170	197	204	165	26.7	20.5	7.49	741
MAX	24	14	168	4140	457	1150	848	1480	38	48	67	5270
MIN	7.2	7.2	9.0	22	101	99	101	27	22	4.2	2.5	5.8
CFSM	.03	.03	.14	1.58	.59	.68	.70	.57	.09	.07	.03	2.56
IN.	.04	.04	.17	1.83	.61	.79	.79	.66	.10	.08	.03	2.86

02077500 HYCO RIVER NEAR DENNISTON, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY) [REGULATED, UNADJUSTED]

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	115	125	202	484	510	600	368	217	112	131	103	167
MAX	805	786	815	1692	1364	1683	1048	1332	647	1492	420	1341
(WY)	1972	1973	1973	1978	1998	1993	1983	1978	1982	1975	1995	1996
MIN	9.04	9.36	21.1	28.5	62.1	44.6	38.7	26.2	17.2	15.8	7.49	11.1
(WY)	1999	1999	1966	1966	1991	1981	1981	1986	1986	1966	1999	1998

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1965 - 1999
ANNUAL TOTAL	142724.8	62031.8	
ANNUAL MEAN	391	170	260
HIGHEST ANNUAL MEAN			536
LOWEST ANNUAL MEAN			37.1
HIGHEST DAILY MEAN	8370	Mar 21	5270
LOWEST DAILY MEAN	6.6	Sep 29	2.5
ANNUAL SEVEN-DAY MINIMUM	7.2	Sep 27	3.4
INSTANTANEOUS PEAK FLOW			5530
INSTANTANEOUS PEAK STAGE			18.31
INSTANTANEOUS LOW FLOW			2.1
ANNUAL RUNOFF (CFSM)	1.35	.59	.90
ANNUAL RUNOFF (INCHES)	18.37	7.98	12.22
10 PERCENT EXCEEDS	1450	307	613
50 PERCENT EXCEEDS	48	32	73
90 PERCENT EXCEEDS	8.3	6.9	20

