

CHOWAN RIVER BASIN

02046000 STONY CREEK NEAR DINWIDDIE, VA

LOCATION.--Lat 37°04'01", long 77°36'10", Dinwiddie County, Hydrologic Unit 03010201, on right bank at upstream side of upstream bridge on U.S. Highway 1, 1.2 mi southwest of Dinwiddie, 1.7 mi downstream from Chamberlains Bed Creek, and 5.7 mi downstream from confluence of White Oak and Butterwood Creeks.

DRAINAGE AREA.--112 mi².

PERIOD OF RECORD.--September 1946 to current year. Published as "at Dinwiddie" September 1946 to September 1947 and October 1949 to September 1950.

REVISED RECORDS.--WSP 1303: 1947(M). WSP 1433: 1951(M). WSP 2104: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 129.94 ft above sea level. Prior to June 12, 1957, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records good except those for periods of doubtful gage-height record, Dec. 13-17, Mar. 15, Apr. 11, 12, May 14-16, Jul. 14, 15, 25, and Sep. 5-8, 15-17, which are fair. Maximum discharge, 11,400 ft³/s, from rating curve extended above 5,800 ft³/s on basis of contracted-opening measurement of peak flow. No flow part of Oct. 13, 1954. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

COOPERATION.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 17	Unknown	*7,150	a*17.24	No other peak greater than base discharge.			
Minimum discharge, 0.79 ft ³ /s, Aug 24.							

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	2.0	2.1	4.7	29	51	36	50	52	9.0	18	2.4	1.2
2	1.9	2.1	4.3	20	67	35	89	45	8.4	17	3.9	1.1
3	1.8	2.2	4.4	605	92	36	89	40	8.0	13	3.7	.98
4	2.0	2.5	4.4	885	79	92	72	37	7.5	10	3.1	2.9
5	2.2	2.6	4.5	548	64	53	61	34	7.3	8.6	2.8	e640
6	2.0	3.0	4.4	188	52	43	53	32	7.0	7.8	2.5	e910
7	2.1	3.8	4.4	94	46	40	50	31	6.7	7.5	2.2	e400
8	2.5	3.9	4.5	66	45	34	45	29	6.6	7.6	2.1	e250
9	3.4	3.8	6.2	54	42	31	43	27	6.3	7.0	1.9	86
10	2.7	3.8	9.7	45	39	34	52	25	6.0	6.4	1.7	58
11	2.4	4.3	9.6	37	36	34	e320	23	5.9	6.0	1.6	38
12	2.1	4.7	9.4	33	34	32	e920	21	5.8	5.8	1.5	17
13	1.8	4.7	e40	31	38	29	528	21	6.1	7.1	1.4	9.0
14	1.6	4.8	e145	28	36	40	212	e84	6.2	e35	1.3	6.5
15	1.4	5.2	e100	55	34	e550	131	e180	7.5	e50	1.3	e10
16	1.5	5.0	e44	130	32	465	319	e150	10	18	1.3	e110
17	1.4	4.9	e33	105	31	253	256	70	12	13	1.2	e4050
18	1.3	5.0	22	83	39	151	157	41	11	10	1.1	1210
19	1.6	4.9	16	109	69	98	106	30	9.8	8.6	1.1	360
20	1.9	4.8	13	88	64	73	83	23	9.1	7.6	1.0	162
21	1.9	4.7	11	72	51	93	69	19	11	6.8	1.1	122
22	1.9	4.5	10	57	41	416	61	16	12	6.4	1.1	754
23	2.3	4.9	9.3	48	35	349	54	16	11	5.9	1.0	364
24	2.4	4.4	15	342	32	194	48	18	9.6	7.7	.89	193
25	2.5	4.1	38	727	32	124	42	16	8.8	e32	.90	121
26	2.6	4.6	30	485	33	92	39	15	8.3	15	1.3	84
27	2.6	5.1	24	239	32	75	37	14	7.8	6.9	2.4	71
28	2.5	5.1	29	140	32	65	37	12	7.5	4.4	2.5	109
29	2.1	4.7	38	99	---	57	45	11	7.4	3.5	2.1	106
30	2.2	4.7	43	75	---	51	56	10	8.3	2.9	1.5	146
31	2.2	---	34	60	---	45	---	9.6	---	2.6	1.3	---
TOTAL	64.8	124.9	764.8	5577	1278	3720	4124	1151.6	247.9	358.1	55.19	10392.68
MEAN	2.09	4.16	24.7	180	45.6	120	137	37.1	8.26	11.6	1.78	346
MAX	3.4	5.2	145	885	92	550	920	180	12	50	3.9	4050
MIN	1.3	2.1	4.3	20	31	29	37	9.6	5.8	2.6	.89	.98
CFSM	.02	.04	.22	1.61	.41	1.07	1.23	.33	.07	.10	.02	3.09
IN.	.02	.04	.25	1.85	.42	1.24	1.37	.38	.08	.12	.02	3.45

02046000 STONY CREEK NEAR DINWIDDIE, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	68.4	87.0	106	168	197	218	164	95.2	58.7	47.2	45.2	58.4
MAX	554	510	426	549	541	551	377	351	156	560	288	774
(WY)	1973	1986	1958	1978	1979	1998	1952	1958	1981	1975	1955	1979
MIN	.12	2.99	5.68	15.5	37.5	27.7	27.0	20.9	8.26	2.62	.97	.18
(WY)	1955	1966	1966	1966	1968	1981	1966	1991	1999	1986	1963	1954

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1947 - 1999

ANNUAL TOTAL	50397.33		27858.97									
ANNUAL MEAN	138		76.3						109			
HIGHEST ANNUAL MEAN									231		1979	
LOWEST ANNUAL MEAN									34.1		1981	
HIGHEST DAILY MEAN	e3700		Mar 20		e4050		Sep 17		7050		Oct 6 1972	
LOWEST DAILY MEAN	.80		Sep 17		.89		Aug 24		e.04		bOct 7 1993	
ANNUAL SEVEN-DAY MINIMUM	1.0		Sep 14		1.0		Aug 19		e.05		cOct 6 1993	
INSTANTANEOUS PEAK FLOW					7150		Sep 17		11400		Oct 6 1972	
INSTANTANEOUS PEAK STAGE					a17.24		Sep 17		20.84		Oct 6 1972	
INSTANTANEOUS LOW FLOW					.79		Aug 24		d.00		Oct 13 1954	
ANNUAL RUNOFF (CFSM)	1.23				.68				.97			
ANNUAL RUNOFF (INCHES)	16.74				9.25				13.23			
10 PERCENT EXCEEDS	351				145				242			
50 PERCENT EXCEEDS	29				17				48			
90 PERCENT EXCEEDS	1.9				2.0				5.1			

- a From high-water mark in well.
- b Also Oct 8, 9, 1993.
- c Also Oct 7, 8, 1998.
- d Observed.
- e Estimated.

