

ROANOKE RIVER BASIN

02074500 SANDY RIVER NEAR DANVILLE, VA

LOCATION.--Lat 36°37'10", long 79°30'16", Pittsylvania County, Hydrologic Unit 03010103, on right bank 200 ft downstream from Hickory Forest Creek, 400 ft upstream from bridge on State Highway 863 between Callahans Store and Mount Cross, 5.5 mi northwest of western city limits of Danville, and 5.8 mi upstream from mouth.

DRAINAGE AREA.--112 mi².

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 972: 1930-41. WSP 2104: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 460.38 ft above sea level. Prior to June 26, 1942, at site 1,200 ft downstream at datum 5.57 ft lower.

REMARKS.--Records good except those for periods of doubtful or no gage-height record, Oct. 4 to Dec. 15 and Aug. 17-19, which are fair. Diurnal fluctuation at low flow caused by small mill upstream from station. Maximum discharge, 23,000 ft³/s, from rating curve extended above 11,000 ft³/s. Minimum gage height, 0.40 ft, Sep. 29, 1930. 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 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 24	1300	1,810	4.87	Sep 30	0230	*3,210	*5.97
Sep 28	1430	2,070	5.12				

Minimum discharge, 14 ft³/s, Aug 19-20.

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	36	e45	e46	59	93	86	122	76	38	31	28	19
2	34	e44	e45	58	178	75	126	65	36	34	27	19
3	33	e43	e45	256	147	77	94	60	36	31	24	18
4	e37	e47	e44	222	112	92	86	58	35	31	23	18
5	e40	e52	e45	120	95	79	80	58	35	28	23	266
6	e43	e48	e46	118	89	78	76	58	35	25	22	514
7	e46	e46	e47	104	88	76	73	57	34	41	21	145
8	e49	e45	e63	76	90	73	71	55	34	49	20	60
9	e84	e45	e84	78	83	74	71	52	32	34	21	52
10	e60	e48	e87	79	81	76	70	50	30	28	21	45
11	e48	e58	e68	71	77	73	80	48	29	32	20	36
12	e45	e67	e62	69	78	70	85	48	30	35	19	33
13	e43	e63	e170	67	78	68	70	50	29	63	18	31
14	e43	e54	e220	65	75	83	68	94	29	51	17	29
15	e41	e49	e74	87	73	151	71	93	30	46	17	45
16	e40	e48	65	86	72	142	74	61	32	36	16	241
17	e41	e47	60	74	73	105	67	55	40	32	e15	92
18	e41	e46	57	180	123	91	64	52	37	37	e15	52
19	e40	e45	56	186	118	82	64	53	31	39	e14	43
20	e40	e46	57	108	95	76	65	50	34	33	16	39
21	e39	e48	56	89	85	135	63	47	43	33	20	40
22	e39	e47	57	81	80	151	63	46	38	338	18	77
23	e38	e46	55	94	76	104	61	46	35	60	16	44
24	e39	e45	94	991	77	93	59	46	32	40	16	38
25	e42	e47	104	375	78	91	57	44	31	34	22	35
26	e42	e49	75	175	75	83	57	44	33	31	45	33
27	e43	e51	70	128	73	79	59	44	33	28	175	35
28	e43	e48	68	109	80	77	67	43	37	28	34	934
29	e42	e47	66	99	---	75	80	41	31	41	25	1450
30	e41	e46	63	90	---	73	110	39	29	38	22	1520
31	e44	---	60	86	---	70	---	38	---	29	20	---
TOTAL	1336	1460	2209	4480	2542	2758	2253	1671	1008	1436	810	6003
MEAN	43.1	48.7	71.3	145	90.8	89.0	75.1	53.9	33.6	46.3	26.1	200
MAX	84	67	220	991	178	151	126	94	43	338	175	1520
MIN	33	43	44	58	72	68	57	38	29	25	14	18
CFSM	.38	.43	.64	1.29	.81	.79	.67	.48	.30	.41	.23	1.79
IN.	.44	.48	.73	1.49	.84	.92	.75	.56	.33	.48	.27	1.99

02074500 SANDY RIVER NEAR DANVILLE, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	83.4	84.0	107	142	149	175	148	109	87.8	75.5	82.7	87.0
MAX	366	281	249	409	369	738	591	279	376	265	556	739
(WY)	1938	1958	1974	1936	1979	1975	1987	1971	1972	1989	1940	1996
MIN	22.6	32.2	35.2	31.5	40.2	63.9	53.1	52.8	33.6	26.0	17.0	14.2
(WY)	1932	1932	1934	1934	1934	1967	1967	1986	1999	1986	1932	1930

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1930 - 1999

ANNUAL TOTAL		54255		27966								
ANNUAL MEAN		149		76.6						111		
HIGHEST ANNUAL MEAN										191		1996
LOWEST ANNUAL MEAN										58.5		1981
HIGHEST DAILY MEAN			2990	Jan 28		1520	Sep 30		8340		Sep 6	1996
LOWEST DAILY MEAN			33	Oct 3		e14	Aug 19		8.0		aAug 29	1932
ANNUAL SEVEN-DAY MINIMUM			36	Sep 28		16	Aug 14		8.6		Aug 27	1932
INSTANTANEOUS PEAK FLOW						3210	Sep 30		23000		Aug 14	1940
INSTANTANEOUS PEAK STAGE						5.97	Sep 30		b14.80		Aug 14	1940
INSTANTANEOUS LOW FLOW						14	cAug 19		3.0		Sep 29	1930
ANNUAL RUNOFF (CFSM)		1.33				.68			.99			
ANNUAL RUNOFF (INCHES)		18.02				9.29			13.42			
10 PERCENT EXCEEDS			213			104			166			
50 PERCENT EXCEEDS			77			51			72			
90 PERCENT EXCEEDS			42			28			35			

- a Also Aug 31 to Sep 2, 1932.
- b From floodmarks, present datum.
- c Also Aug 20, 1999.
- e Estimated.

