

BIG SANDY RIVER BASIN

03208950 CRANES NEST RIVER NEAR CLINTWOOD, VA

LOCATION.--Lat 37°07'26", long 82°26'20", Dickenson County, Hydrologic Unit 05070202, on left bank on State Highway 649, 500 ft downstream from Clinchfield Railway bridge, 1,000 ft downstream from Rush Creek, and 2.1 mi southeast of Clintwood.

DRAINAGE AREA.--66.5 mi².

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR VA-77-1: 1967(M). WDR VA-92-1: 1991(P).

GAGE.--Water-stage recorder. Datum of gage is 1,440.30 ft above sea level.

REMARKS.--Records good except those for period with ice effect Jan. 6, and period of no gage-height record, Apr. 2-5, which are fair. U.S. Army Corps of Engineers satellite precipitation and gage-height telemeter at station. Maximum discharge, 18,000 ft³/s, from rating curve extended above 3,100 ft³/s on basis of slope-area measurement of peak flow. Minimum gage height, 0.91 ft, Sep. 28, 1964. Several measurements of water temperature were made during the year. Water-quality record for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 29, 1957, reached a stage of about 20.0 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 24	0830	*909	*6.55	No peak greater than base discharge.			

Minimum discharge, 3.8 ft³/s, Sep 19, gage height, 1.40 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	13	10	7.7	29	68	301	48	96	23	19	7.9	4.8
2	13	9.8	7.6	28	68	182	e45	81	22	17	9.1	4.9
3	10	11	7.5	200	65	243	e43	69	21	16	7.8	4.6
4	10	13	7.8	102	60	286	e41	61	21	14	6.9	4.6
5	9.8	11	9.8	56	53	210	e38	55	19	13	6.8	4.8
6	9.0	9.7	14	e52	51	185	37	94	19	12	6.3	8.0
7	8.6	9.0	11	40	52	145	36	86	18	11	6.2	8.8
8	18	9.0	116	39	49	117	35	75	17	11	6.1	6.5
9	17	9.5	117	262	44	122	37	62	16	9.8	7.9	5.7
10	11	12	44	174	42	141	35	53	16	36	6.9	5.6
11	9.7	31	30	96	39	130	96	47	15	45	6.1	5.2
12	8.8	15	25	70	40	116	99	42	15	19	6.0	4.8
13	8.2	9.4	148	56	40	103	79	44	14	17	5.9	4.7
14	8.2	8.6	110	51	35	111	69	84	14	14	5.8	4.7
15	8.0	8.4	52	204	35	258	79	55	15	12	5.6	5.0
16	7.7	8.4	36	146	35	271	89	45	14	11	5.8	4.9
17	7.4	8.0	30	99	38	315	81	40	14	10	5.4	4.3
18	7.1	8.5	24	206	46	236	73	39	13	10	5.4	4.1
19	7.3	7.5	21	205	47	165	66	64	12	16	5.3	4.1
20	7.7	7.7	20	129	52	132	63	47	12	11	9.9	4.5
21	7.2	8.4	18	94	49	117	56	40	12	12	8.8	4.5
22	7.2	7.9	22	74	46	98	51	40	11	11	6.4	4.7
23	7.7	7.5	25	108	45	83	49	37	11	9.0	5.9	4.7
24	7.8	7.6	31	601	45	78	62	74	12	19	5.7	4.4
25	8.3	7.8	27	269	48	69	52	54	15	18	10	4.5
26	8.5	10	26	156	52	64	59	43	14	13	9.5	4.3
27	8.6	10	24	114	54	60	71	36	13	9.7	6.9	4.8
28	9.0	8.4	26	91	402	55	129	32	19	9.5	6.0	7.2
29	13	7.9	30	73	---	51	151	28	27	14	5.8	11
30	10	8.0	36	62	---	48	119	26	35	10	5.6	17
31	9.8	---	32	55	---	45	---	25	---	8.6	5.2	---
TOTAL	296.6	300.0	1135.4	3941	1700	4537	1988	1674	499	457.6	208.9	171.7
MEAN	9.57	10.0	36.6	127	60.7	146	66.3	54.0	16.6	14.8	6.74	5.72
MAX	18	31	148	601	402	315	151	96	35	45	10	17
MIN	7.1	7.5	7.5	28	35	45	35	25	11	8.6	5.2	4.1
CFSM	.14	.15	.55	1.91	.91	2.20	1.00	.81	.25	.22	.10	.09
IN.	.17	.17	.64	2.20	.95	2.54	1.11	.94	.28	.26	.12	.10

03208950 CRANES NEST RIVER NEAR CLINTWOOD, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	29.9	46.9	83.1	119	144	168	137	97.2	52.0	31.1	30.9	23.3
MAX	191	164	228	338	367	434	498	262	236	75.7	142	116
(WY)	1990	1978	1992	1972	1994	1975	1977	1984	1989	1991	1966	1982
MIN	1.67	6.33	4.41	5.98	36.6	37.8	28.1	21.2	7.40	5.50	6.74	3.95
(WY)	1964	1966	1966	1966	1968	1988	1986	1976	1966	1970	1999	1965

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1964 - 1999
ANNUAL TOTAL	34417.6	16909.2	
ANNUAL MEAN	94.3	46.3	79.9
HIGHEST ANNUAL MEAN			126 1994
LOWEST ANNUAL MEAN			34.7 1988
HIGHEST DAILY MEAN	1860	Apr 17	601 Jan 24
LOWEST DAILY MEAN	7.1	Oct 18	4.1 aSep 18
ANNUAL SEVEN-DAY MINIMUM	7.4	Oct 16	4.4 Sep 17
INSTANTANEOUS PEAK FLOW			909 Jan 24
INSTANTANEOUS PEAK STAGE			6.55 Jan 24
INSTANTANEOUS LOW FLOW			3.8 Sep 19
ANNUAL RUNOFF (CFSM)	1.42		.70
ANNUAL RUNOFF (INCHES)	19.25		9.46
10 PERCENT EXCEEDS	226		116
50 PERCENT EXCEEDS	44		20
90 PERCENT EXCEEDS	8.4		6.0

a Also Sep 19, 1999.
 b From floodmark.
 e Estimated.

