

SOUTH ATLANTIC SLOPE BASINS

JAMES RIVER BASIN

02011400 JACKSON RIVER NEAR BACOVA, VA

LOCATION.--Lat 38°02'32", long 79°52'54", Bath County, Hydrologic Unit 02080201, on left bank 0.1 mi downstream from ford, 1.8 mi upstream from Back Creek, and 2.2 mi southwest of Bacova.

DRAINAGE AREA.--158 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,639.20 ft above sea level.

REMARKS.--Records good except for period with ice effect, Jan. 5-8, which is fair. U.S. Army Corps of Engineers satellite water temperature, precipitation and gage-height telemeter at station. Maximum discharge, 30,000 ft³/s, from rating curve extended above 1,300 ft³/s on basis of slope-area measurements at gage heights 8.88 ft, 11.40 ft, 13.88 ft, and 22.25 ft. Minimum gage height, 2.42 ft, Aug. 18, 19, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 21, 1972, reached a stage of 11.40 ft, discharge, 4,800 ft³/s, and flood of Dec. 26, 1973, reached a stage of 13.88 ft, discharge, 7,560 ft³/s, from rating curve extended as explained above.

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	1200	*1,190	*6.81	No peak greater than base discharge.			

Minimum discharge, 13 ft³/s, Aug 4, 6-8, 11-13, Sep 25-27, gage height, 2.61 ft, Aug 7, 11, 12-13.

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	19	20	21	27	89	82	118	55	36	22	17	18
2	18	20	20	37	228	78	119	51	35	22	16	17
3	18	25	20	79	222	85	106	49	35	21	15	16
4	19	27	21	103	183	186	98	47	33	19	15	16
5	21	24	21	e70	154	172	92	46	31	19	14	39
6	20	22	21	e52	129	173	84	45	30	18	14	134
7	20	22	22	e45	131	185	79	43	29	18	14	98
8	33	22	30	e43	177	163	74	51	28	18	14	56
9	34	22	40	117	157	157	73	47	27	16	17	36
10	25	22	33	184	138	149	74	41	26	17	16	28
11	22	28	26	158	120	133	73	38	33	17	14	23
12	21	27	24	113	112	126	72	36	35	17	14	20
13	20	24	31	74	109	117	65	41	29	20	13	18
14	20	23	39	127	93	125	60	74	28	19	24	17
15	20	23	32	485	84	183	60	85	27	18	25	17
16	21	23	27	245	79	195	67	70	26	18	19	17
17	21	22	25	151	76	368	61	62	27	17	17	17
18	20	22	23	165	121	643	56	57	28	18	15	15
19	20	21	23	244	123	580	54	77	25	21	14	14
20	20	22	22	157	106	400	53	66	26	19	26	14
21	20	22	22	122	94	362	53	56	26	17	25	16
22	20	21	22	117	83	385	56	52	25	18	19	17
23	20	21	22	177	74	309	52	55	24	20	17	15
24	20	21	23	924	69	274	53	62	23	18	16	14
25	21	21	23	555	67	238	52	66	23	25	53	14
26	21	24	23	312	65	206	49	55	23	18	84	13
27	21	23	26	224	61	182	49	50	23	15	38	14
28	21	22	21	176	69	161	72	46	23	16	27	18
29	21	21	22	139	---	143	73	42	23	28	23	19
30	21	21	23	112	---	126	61	39	22	25	20	44
31	22	---	40	93	---	112	---	37	---	19	18	---
TOTAL	660	678	788	5627	3213	6798	2108	1641	829	593	673	814
MEAN	21.3	22.6	25.4	182	115	219	70.3	52.9	27.6	19.1	21.7	27.1
MAX	34	28	40	924	228	643	119	85	36	28	84	134
MIN	18	20	20	27	61	78	49	36	22	15	13	13
CFSM	.13	.14	.16	1.15	.73	1.39	.44	.34	.17	.12	.14	.17
IN.	.16	.16	.19	1.32	.76	1.60	.50	.39	.20	.14	.16	.19

JAMES RIVER BASIN

02011400 JACKSON RIVER NEAR BACOVA, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	84.5	125	162	249	258	371	276	225	132	60.1	56.9	64.0
MAX	367	762	419	703	604	767	814	508	388	130	282	342
(WY)	1980	1986	1997	1996	1998	1993	1987	1989	1982	1989	1984	1979
MIN	19.7	22.6	25.4	31.6	101	68.0	70.3	52.9	27.6	19.1	20.6	20.1
(WY)	1989	1999	1999	1981	1978	1981	1999	1999	1999	1999	1988	1998

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1975 - 1999

ANNUAL TOTAL		73798		24422								
ANNUAL MEAN		202		66.9						172		
HIGHEST ANNUAL MEAN										244		1996
LOWEST ANNUAL MEAN										66.9		1999
HIGHEST DAILY MEAN			2930	Mar 21		924	Jan 24		8820	Jan 19		1996
LOWEST DAILY MEAN			18	aSep 25		13	bAug 13		13	bAug 13		1999
ANNUAL SEVEN-DAY MINIMUM			19	Sep 27		15	Aug 2		15	Aug 2		1999
INSTANTANEOUS PEAK FLOW						1190	Jan 24		30000	Nov 4		1985
INSTANTANEOUS PEAK STAGE						6.81	Jan 24		c22.25	Nov 4		1985
INSTANTANEOUS LOW FLOW						13	dAug 4		13	dAug 4		1999
ANNUAL RUNOFF (CFSM)		1.28				.42			1.09			
ANNUAL RUNOFF (INCHES)		17.38				5.75			14.77			
10 PERCENT EXCEEDS		484				157			365			
50 PERCENT EXCEEDS		57				28			88			
90 PERCENT EXCEEDS		20				17			28			

- a Also Sep 28, and Oct 2-3, 1998.
- b Also Sep 26, 1999.
- c From floodmark.
- d Also Aug 6-8, 11-13, and Sep 25-27, 1999.
- e Estimated.

