

02140991 JOHNS RIVER AT ARNEYS STORE, NC

LOCATION.--Lat 35°50'01", long 81°42'42", Burke County, Hydrologic Unit 03050101, on right bank 12 ft downstream of bridge on Secondary Road 1438, 0.2 mi downstream of Sims Branch, and 0.8 mi northeast of Arneys Store.

DRAINAGE AREA.--201 mi².

PERIOD OF RECORD.--Occasional discharge measurements, water years 1974-84. May 1985 to current year.

REVISED RECORDS.--WDR NC-87-1: 1985-86 (P).

GAGE.--Water-stage recorder. Datum of gage is 1,001.74 ft above NGVD of 1929. Satellite and telephone telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record and current water year from rating curve extended above 12,500 ft³/s on basis of slope-area measurement; maximum gage height from high-water mark. Minimum discharge for period of record also occurred Sept. 14, 2002.

EXTREMES FOR CURRENT YEAR.--Peak discharges associated with the remnants of Hurricanes Frances and Ivan:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 8	unknown	39,000	28.60	Sep 17	1445	12,000	16.53

REVISIONS.--The maximum discharge for the water years 1994 and 1995 have been revised to 29,000 ft³/s, Aug. 17, 1994, gage height, 25.23 ft and 25,700 ft³/s, Jan. 15, 1995, gage height, 23.98 ft superseding figures published in reports for 1994 and 1995.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	304	235	522	370	237	348	382	288	301	276	275	188
2	285	229	482	361	234	347	323	303	242	290	330	2,840
3	273	225	449	356	412	362	302	295	230	320	234	1,560
4	269	224	433	352	390	351	290	273	312	338	197	654
5	264	263	476	357	326	347	278	267	371	420	179	466
6	254	427	453	349	1,060	373	270	255	265	288	177	379
7	249	415	420	319	1,410	367	267	241	255	254	158	1,330
8	250	313	393	311	733	345	266	231	249	236	150	e19,400
9	318	273	374	314	568	326	264	297	252	219	145	e6,210
10	339	259	551	310	501	322	254	372	241	207	141	2,310
11	303	253	1,250	296	466	310	254	267	234	e225	140	1,350
12	285	249	752	294	457	307	509	260	212	e270	272	988
13	263	243	609	294	452	297	1,260	395	444	e240	299	798
14	262	226	592	289	425	289	1,090	338	411	e210	189	697
15	292	228	573	287	422	292	681	285	480	e180	169	630
16	257	229	532	278	427	356	549	282	1,070	176	162	572
17	249	226	617	273	390	335	482	454	865	e160	158	6,750
18	245	226	590	322	383	331	443	381	557	e520	168	4,280
19	240	7,520	547	295	378	356	412	410	436	e240	153	1,700
20	235	2,390	502	267	374	313	387	378	376	e200	184	1,120
21	233	1,170	463	258	377	313	369	342	364	176	155	896
22	230	1,000	442	257	372	297	348	451	722	166	142	760
23	221	895	429	254	358	288	332	593	461	165	151	668
24	220	817	543	251	358	283	321	667	376	157	350	601
25	217	763	484	263	354	279	304	444	365	194	250	556
26	230	686	445	274	351	274	366	366	541	213	189	516
27	530	629	427	256	364	272	402	362	388	236	169	504
28	326	610	413	248	358	272	314	308	350	375	282	2,030
29	272	644	399	236	355	267	294	280	329	237	299	1,070
30	250	572	413	255	---	278	281	264	297	262	218	791
31	239	---	386	249	---	389	---	305	---	445	195	---
TOTAL	8,404	22,439	15,961	9,095	13,292	9,886	12,294	10,654	11,996	7,895	6,280	62,614
MEAN	271	748	515	293	458	319	410	344	400	255	203	2,087
MAX	530	7,520	1,250	370	1,410	389	1,260	667	1,070	520	350	19,400
MIN	217	224	374	236	234	267	254	231	212	157	140	188
CFSM	1.35	3.72	2.56	1.46	2.28	1.59	2.04	1.71	1.99	1.27	1.01	10.4
IN.	1.56	4.15	2.95	1.68	2.46	1.83	2.28	1.97	2.22	1.46	1.16	11.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2004, BY WATER YEAR (WY)

MEAN	255	335	319	419	408	529	465	340	330	255	294	324
MAX	890	938	602	1,388	838	1,151	883	595	963	662	1,070	2,087
(WY)	(1991)	(1993)	(1997)	(1995)	(1990)	(1993)	(1987)	(1993)	(1992)	(2003)	(1994)	(2004)
MIN	79.1	104	113	170	138	179	206	128	94.5	75.5	42.6	88.7
(WY)	(2001)	(2002)	(1989)	(2001)	(2001)	(1988)	(1986)	(2001)	(2002)	(1988)	(2002)	(1999)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1985 - 2004	
ANNUAL TOTAL	196,842		190,810		357	
ANNUAL MEAN	539		521		521	
HIGHEST ANNUAL MEAN					164	2004
LOWEST ANNUAL MEAN					19	2002
HIGHEST DAILY MEAN	7,520	Nov 19	19,400	Sep 8	19,400	Sep 8, 2004
LOWEST DAILY MEAN	168	Jan 27	140	Aug 11	19	Sep 13, 2002
ANNUAL SEVEN-DAY MINIMUM	178	Jan 23	156	Aug 5	24	Sep 8, 2002
MAXIMUM PEAK FLOW			39000*	Sep 8	39000*	Sep 8, 2004
MAXIMUM PEAK STAGE			28.60*	Sep 8	28.60*	Sep 8, 2004
INSTANTANEOUS LOW FLOW			136	Aug 11	19*	Sep 13, 2002
ANNUAL RUNOFF (CFSM)	2.68		2.59		1.78	
ANNUAL RUNOFF (INCHES)	36.43		35.31		24.12	
10 PERCENT EXCEEDS	842		689		624	
50 PERCENT EXCEEDS	440		320		254	
90 PERCENT EXCEEDS	226		218		102	

* See REMARKS.
e Estimated.

